



**Mid-Sized Businesses and the challenges of growth: Implications for the Theory of
Administrative Behaviour and management education**

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Sally, Aaron, Hannah & Lottie are my world and my inspiration in challenging times and this work is dedicated to you.

Abstract

This thesis is a theory-driven exploration of Mid-Sized Businesses (MSBs), developed at the intersection of the challenges that are constricting organisational growth and the management education tools that may enable them to be overcome. The analysis is focused on MSBs in England, during the period 2014 to 2018.

MSBs have long been a cornerstone of the UK economy, spanning a variety of different industries and contributing an amount to UK GDP that is disproportionate to both their size and number.

The study is concerned with how decision-making, along with other essential management activities, is affected by the dynamics of an organisation and what makes a high-growth MSB successful. It draws upon the Theory of Administrative Behaviour to construct a performance analysis model that can explain the differences between high-growth and low-growth organisations, providing a platform from which to forecast the likelihood of future growth.

In the first part of the study, the context and requirements for the research are outlined and a conceptual model is introduced. Latterly, an analytical framework is developed that conceptualises the dynamics of decision-making in MSBs. Finally, an assessment is made of the contribution to theory that a deeper understanding of the behavioural dynamics in MSBs will make. The implications for management education, specifically the Master of Business Administration (MBA) programme, are examined.

The thesis was finalised during the Covid 19 outbreak. Whilst the global pandemic will (naturally) affect MSB performance, it is not reflected (due to timing) in the study.

Glossary

A.A.C.S.B: A global non-profit association, connecting educators, students and business to achieve a common goal: to create the next generation of great leaders.

A.B.S: The Chartered Association of Business Schools. The ABS represent UK business and the management education sector, supporting members to maintain world-class standards of teaching and research, and help shape policy and create opportunities through dialogue with business and government.

B.E.I.S: The Department for Business, Energy and Industrial Strategy was created on the 14th July 2016 through a merger between the Department for Business, Innovation and Skills and the Department of Energy and Climate Change.

B.I.S: The Department for Business, Innovation and Skills was a ministerial department of the UK Government that was created on 5th June 2009 by the merger of the Department for Innovation, Universities and Skills and the Department for Business, Enterprise and Regulatory reform.

Bourdesian: Refers to Pierre Bourdieu, a renowned sociologist responsible for making important contributions to the sociology of culture.

CBI: The Confederation of British Industry.

CIPD: The Chartered Institute of Personnel and Development.

Management Education: Management education refers to a formal process of knowledge transfer within an MSB. This study captures this process of knowledge transfer in the format of an MBA programme.

MBA: A Master of Business Administration Programme. This post-graduate degree originated in the United States in the early 20th century and comprises a broad selection of management-orientated modules. The term “MBA” is used interchangeably to describe a programme that is delivered by numerous providers across the world, whilst the core modules

are similar (including accounting, marketing strategy and organisational behaviour), the quality, cost and relevance of the programme can differ substantially.

MSB: A Mid-Sized Business. The definition of an MSB is primarily one of turnover, in the range of £25m-£500m a year. £25m meets the upper boundaries of an SME, based on the Companies' Act (2006) SME definition.

SME: A Small-Medium Enterprise. The usual definition of small and medium sized enterprises (SMEs) is any business with fewer than 250 employees. There were 5.2 million SMEs in the UK in 2017, which was over 99% of all business (House of Commons, 2017).

Table of Contents

Number	Page	Content
Chapter 1	1	Introduction and background to the study.
1.1	1	The significance of MSBs and why the research is required.
1.2	3	Situating Management Science research themes around MSBs.
1.3	6	Situating “management education”.
1.3.1	8	Situating MSBs.
1.4	10	A 21st Century overview of the MSB landscape.
1.5	11	Outlining the complexity of the economic landscape.
1.6	13	UK MSBs: Structure and orientation.
1.7	15	UK MSBs in comparison with European counterparts.
1.8	16	Management skills, Business Schools and the MBA.
1.9	19	Development of the research questions.
1.9.1	19	Research Questions.
1.10	21	Summary: Positioning the author.
1.10.1	21	Ontology, epistemology and the author.
1.11	23	The direction of future chapters.
Chapter 2	25	Review of literature.
2.1	25	Developing the exploratory review.
2.1.1	25	Exploratory review of literature: The UK economic landscape.
2.2	28	Talent development and organisations.
2.3	30	MBA programmes.

2.4	36	Dynamic Capabilities.
2.4.1	39	The logic of Dynamic Capabilities.
2.4.2	40	Dynamic Capabilities and strategic decisions.
2.4.3	41	Dynamic Capabilities summary.
2.5	42	Decision-making.
2.5.1	43	Decision-making and “big-data”.
2.5.2	45	Decision-making and the availability of information.
2.5.3	47	Emotion and decision-making.
2.6	50	Innovation.
2.7	52	Time.
2.8	54	Strategic Management.
2.9	58	Strategy as Practice.
2.10	59	The Theory of Administrative Behaviour.
2.11	62	Developing a systematic review of the literature.
2.12	63	Systematic literature review design process.
2.12.1	63	Systematic literature review criteria.
2.12.2	64	Search terms.
2.13	65	Management skills.
2.14	66	MBA skills.
2.15	67	Criticisms of MBA programmes.
2.16	70	Adaptability and flexibility.
2.17	72	MBA curricula.
2.18	73	Summary of the systematic literature review.
2.19	75	Contextualising how MSBs and MBA programmes intersect.

2.20	76	Evolution of strategic thinking.
2.21	79	The emergence of ‘strategy as practice’.
2.22	80	Evolution of the MSB landscape.
Chapter 3	82	The development of a theoretical framework.
3.1	82	The applicability of the Theory of Administrative Behaviour.
3.2	84	Considering alternative theoretical frameworks – Personality and Organisation Theory.
3.2.1	84	Considering alternative theoretical frameworks – Structural Contingency Theory.
3.2.2	85	Considering alternative theoretical frameworks – Systems Theory.
3.3	86	From the Theory of Conflict to the Theory of Administrative Behaviour.
3.4	92	Criticisms of the Theory of Administrative Behaviour.
3.5	93	Utilising the Theory of Administrative Behaviour.
3.6	97	The application of theory to practice.
Chapter 4	99	Research Methodology.
4.1	99	Establishing a research methodology.
4.1.1	100	Situating the research.
4.2	101	The adoption of a multiple-methods approach.
4.3	103	Multi-Methods research components – Case Study Research (CSR).
4.4	107	The consideration of Grounded Theory (Summary).
4.4.1	108	Potential data collection and data analysis issues using Grounded Theory.
4.5	110	Expanding on the research philosophy.
4.5.1	111	Connecting epistemology and methodology.
4.6	114	Qualitative data and research.
4.7	117	The development of the research journey.

4.7.1	118	Initial case study organisations.
4.7.2	121	Case study amendment.
4.8	123	Utilisation of content analysis.
4.8.1	124	Amending the methodology.
4.9	127	Developing key informant interviews with the extended sample.
4.10	134	Key informant interviews.
4.10.1	137	Limitations of unstructured, qualitative interviews.
4.11	138	Use of NVivo.
4.12	140	Observations.
4.12.1	141	Critical steps taken in the process of observation.
4.12.2	143	Advantages and disadvantages of participant observation.
4.13	145	Secondary sources of information.
4.13.1	145	Annual reports.
4.14	146	The 5-level Qualitative Data Analysis Method.
4.15	147	Ethical considerations.
4.16	148	Summary.
Chapter 5	150	Analysis of Data.
5.1	150	Relating data analysis to the research questions.
5.1.1	152	Reducing “emotional noise”.
5.2	153	Data-cleansing and process of transcription.
5.2.1	153	Allocating units of meaning.
5.2.2	153	Meaning units and the development of codes.
5.2.3	154	The coding of data within NVivo.
5.3	155	Emergent themes and the subsequent categorisation of data.

5.3.1	155	The development of a thematical template.
5.4	157	How language types affect decision-making and organisational performance.
5.4.1	157	The “language” of growth (Encompassing “Energy”, “Enterprise”, “Denial” and “Defeat”).
5.4.2	161	Associated categories.
5.5	164	How language drives the decision to join a specific MSB.
5.5.1	164	Key Informant insight sample- Retail South.
5.5.2	167	Key Informant insight sample – Energy Reseller South West.
5.5.3	169	Key informant insight sample: Automotive South.
5.5.4	171	Key Informant insight sample- Insurance West Midlands.
5.6	174	Management decision-making at low-growth MSBs.
5.6.1	174	Key Informant insight sample- Industrial West Midlands.
5.6.2	175	Key Informant insight sample – Logistics.
5.6.3	177	Key Informant insight sample- Creative Agency West Midlands.
5.7	180	The analysis of emotional sentiment, language and MSB characteristics found within the Key Informant interviews.
5.7.1	181	The refinement of sentiment analysis to establish clear language categories.
5.8	184	The critical gaps that exist between high-performing and low-performing MSBs Change Management, Communication, Critical Thinking, Emotional Resilience).
5.9	185	Change Management.
5.9.1	186	Communication.
5.9.2	186	Critical Thinking.
5.9.3	187	Emotional resilience.
5.10	188	Conclusion to Chapter 5.

Chapter 6	190	Evaluation of management education and relevant grey literature.
6.1	190	Introduction.
6.2	193	Management education as a facilitator of performance management for MSBs.
6.3	202	Grey literature – MBA.
6.4	203	Grey literature – Business School development.
6.4.1	204	Grey literature – Management education.
6.5	205	Grey literature – Changes to teaching approaches.
6.6	207	Grey literature – Decision-making and leadership.
6.7	209	Grey literature – Emotion.
6.8	212	Grey literature – Language and business.
6.9	213	Corporate communications by type.
6.9.1	214	MSB website communication – personalities.
Chapter 7	216	Conclusions and implications for Administrative Behaviour Theory.
7.1	216	Introduction.
7.2	219	Research conclusions.
7.2.1	219	Growth Achievers.
7.2.2	220	Growth Strivers.
7.2.3	220	Growth Restrictors.
7.2.4	221	Growth Agnostics.
7.3	223	Considering the Theory of Administrative Behaviour.
7.3.1	223	Shifting from a rational behaviour perspective.
7.3.2	224	Emotion and bounded behaviour.
7.4	227	The implications for management education.

7.5	229	Proposed enhancement of Administrative Behaviour Theory: Bounded Performance Theory.
7.6	231	Study limitations and directions for future research.
7.7	232	Ethical considerations.
7.8	233	Reflections on the study.
7.9	234	Chapter summary.

Tables

Table	Page	Summary
1	15	UK MSB sector vs European comparison 2011.
2	73	Thematical summary of key literature.
3	76	Evolution of strategic thinking.
4	80	Economic Engine.
5	90	Taylor's Principles.
6	162	Associated Categories.
7	163	Mapping Language, Concepts and MSBs.
8	184	Impacts of language
9	196	Content analysis of MBA provider comparison.
10	199	Existing MBA recruitment.

Figures

Figure	Page	Summary
1	125	The initial research process.
2	126	Revised research process.
3	126	Conceptual model.
4	146	Project summary of 5-level qualitative data analysis method.
5	154	Meaning unit reduction process example.
6	191	Three horizons framework.
7	230	Bounded Performance Theory model.

Appendix

Appendix	Page	Summary
1	285	Exploratory Literature Review
1.1	289	Research overview
1.2	290	ABS Journal Guide Summary
2	291	Quality checklists
2.1	294	MBA Curricula summary
2.2	295	Weighted averages content analysis summary
2.3	423	Nodes coded
3	424	External MSB Reports

Chapter 1

Introduction and background to the study

1.1 The significance of MSBs and why the research is required.

This thesis represents the realisation of an enquiry into the fundamental aspects of management decision-making culture, situated within the unique mid-sized business (MSB) sector of the UK. The analysis focuses on MSBs that are headquartered in England, during the period of 2014 to 2018.

The motivation for exploring this category of business stems from the impact that they have on business and society; they are a cornerstone of the UK economy and span a number of different industries, contributing an amount to UK GDP that is disproportionate to both their size and their number. At the outset of this study, 34,100 MSBs had a total annual turnover of £712 billion (Grant Thornton, 2015).

It has been recognised that UK MSBs often fall “under the radar” of policymakers and providers of finance, failing to keep pace with their international counterparts (CBI, 2011). This thesis focuses on MSB growth and performance. An evaluation of the link between *effective* decision-making and the growth levels of MSBs addresses an important gap that exists in the literature, notably, insights concerning organisational performance that are specific to MSBs. Increasing what is known about this complex relationship may lead researchers and practitioners alike to become more cognizant regarding whether an organisation is either “bound” or empowered by the management expertise that it has at its disposal.

When initially considering anecdotal evidence regarding the sector, it became apparent that MSBs might be under-researched when compared with Small-Medium Enterprises (SMEs) and larger (more “corporate”) bodies. A subsequent, systematic search of the Web of Science database returned significantly more results for SMEs than for MSBs. An evaluation of the results revealed that a large proportion of the studies covering “MSBs” are actually focusing on “SMEs” (Appendix 1: Exploratory literature search). MSBs have characteristics and challenges that are unique to them, yet feature less in contemporary management literature.

The disparity in research levels may be due to the high volume of SMEs operating in the UK, when compared to MSBs (BIS, 2018), along with the high levels of brand recognition that

corporate organisations can command (Keller, 2009). Over 98% of all UK businesses are SMEs, whilst MSBs represent just 1% of the total business population; MSBs contribute more than 20% of overall UK GDP (BIS, 2018).

The vital economic role played by UK MSBs, along with the opportunity to gain greater insights into the unique challenges faced by managers, compelled the author to explore approaches to problem solving and decision-making within this unique business area.

A novel approach to assessing managerial behaviour has been undertaken. One of the seminal theoretical frameworks, Administrative Behaviour Theory, is used to evaluate decision-making and organisational characteristics. The use of emotion, as both a component of decision-making and in the “language” used by MSBs, helps to address historical gaps in the framework and may also provide a platform from which to better predict future performance.

1.2 Situating Management Science research themes around MSBs.

An initial analysis of research into management shows that there is a greater volume of SME and corporate-orientated literature when compared to MSBs (Appendix 1.1: Research overview). These studies have not been excluded from deliberations and the themes that emerge from international, top-ranked Journals (Appendix 1.2: ABS Journal Guide Summary) lend themselves well to the exploration of business performance from an MSB perspective.

The Strategic Management Journal, for example, demonstrates how the *speed* and *accuracy* of strategic responses are the key factors that can shape the performance and reputation of an organisation (Ody-Brasier & Sharkey, 2019). This potential link resonated with the author; anecdotal evidence (which was received prior to the study) had indicated that high-performing MSBs made *strategic* decisions more effectively (*quicker* and with a greater *understanding* of risk) than their under-performing counterparts. There was not, however, a noticeable difference between “non-strategic” decision-making abilities.

The decision-making capabilities of management teams, along with the tools and processes that support them, can have a significant bearing on the success of an organisation; it is the level of *flexibility* and *adaptability* in the decision-making processes that can have a major impact on future performance (Bennett & Chatterji, 2019).

Flexibility and adaptability can be achieved through the *effective* adoption of new technologies, though adoption is not a guarantee of success and business leaders must fully understand the “meaningfulness” of any technology before it can become something that will enhance performance in “a manner more akin to revolution than evolution” (Lamberg & Peltoniemi, 2019).

The pursuit of “being adaptable” can often have negative consequences for organisations that wish to grow; *wanting* to have the correct culture and organisational framework for growth may not be enough, it is an organisation’s *capacity* to be adaptable when dealing with the full spectrum of business challenges that will have a significant bearing on its capacity to manage problems and achieve growth (Reeves, 2011).

Having sufficient scope to change how managers *react* to and *anticipate* change will depend on the culture of the organisation. The personalities and characteristics of a Board of Directors (BOD) may affect organisational culture and, ultimately, affect and shape performance (Denison & Mishra, 1995). Due to their size and structure, MSBs will rarely have an expansive and diverse BOD and this signals that the methods by which an MSB obtains the skills required on order to adapt to change are very important.

There exists a large body of work in contemporary management literature, covering insights into business performance and strategy. It is noticeable, particularly when focusing on UK MSBs, that contemporary studies are predominantly concentrated on organisations situated in the USA and continental Europe (Belenzon, Hashai & Pataconi, 2019; Ethiraj & Zhou, 2019; Kavusan & Frankort, 2019; Oder-Brasier & Sharkey, 2019; Ridge, 2019). There is also a significant focus on large-scale corporate entities or SMEs (Bennett & Chatterji, 2019; Krause, 2019; Ridge, 2019).

When reviewing studies that were conducted within a comparable timeframe to this thesis, Thakur-Wernz (2019, Page 380) offered a valuable insight into how knowledge gained through conducting business internationally can be both a “positive experience” and one that then translates into “overall improvements in innovation performance”. Learning lessons from international trade should be a goal of most UK MSBs (Surugiu & Surugiu, 2015), certainly one for decision-makers who are seeking to increase the competitiveness of their organisations. It is conspicuous that these insights into business performance (in the context of multi-national organisations dealing with emerging economies) come solely from Indian organisations. Brandl (2019) makes a similarly important contribution by highlighting that the process of offshoring impacts on certain activities and structures within a production environment, ultimately making knowledge-intensive services modular and generic. This highly cited work, again, focuses on organisations located in India.

A number of publications showing the impact of developments in decision-making are centred around Indian enterprises (Chittoor , 2019; Kano, 2019; Matusik, 2019; Nuruzzaman , 2019; Thakur-Wernz, 2019) and are solely focused on growth strategies in SMEs (Asakawa, 2019; Biesenthal, Gudergan & Ambrosini, 2019). This “gap” provided some additional impetus to consider business growth with respect to the nuances of the UK MSB market.

Kano & Verbeke (2018) analysed international business strategy frameworks, an important area for a growth-orientated MSB, through the lenses of bounded “rationality” and bounded “reliability”. Although the author identified with such an approach, other recent studies in the *Global Strategy Journal* are either predominantly theoretical in nature or focused upon SMEs and large corporates (Buchelli, Salvaj & Kim, 2019; Cuervo-Cazurra, 2019; Duran et al, 2019; Matusik, 2019; Parker , 2019; Thakur-Wernz, 2019).

In contrast with an examination of different organisational structures, Biesenthal, Gudergan and Ambrosini (2019) investigated how the Dynamic Capabilities (DC) model works in practice when modifying operational capabilities at different levels within an organisation. This emergent theme from the *Journal of Long-Range Planning* becomes more relevant in the wider review of literature; it will be shown that responding to Di Stefano, Peteraf and Verona’s (2010) call for a more comprehensive DC review is a pertinent one for the MSB sector.

The themes, context and insights that emerge from an initial review of contemporary management literature indicated that there was significant scope to examine organisational growth and decision-making from a UK MSB perspective. Through an increased level of understanding of the relationship between decision-making and business growth, both researchers and practitioners may be able to distinguish whether an organisation is either “bounded” or empowered by the management expertise that it has at its disposal.

1.3 Situating “management education”.

A natural output of this study will be a set of implications and considerations for management education, as both a field of practice and of scientific research. Insights and recommendations are presented for scrutiny later. When “management education” is made reference to in subsequent chapters, it is considered to be a “formal process of knowledge transfer” within an organisation, one that is captured here in the format of an MBA programme.

The field of management education is far-reaching and constantly evolving; this study approaches management education from the perspective of MBA programmes. MSBs have a history of engaging with MBA programmes, recruiting MBA graduates and utilising their knowledge as a basis for developing decision-making expertise.

When MSBs are considered, the relevance of the MBA is clear. MSBs often draw upon the knowledge and expertise that MBA programmes provide, routinely recruiting managers who have this qualification (Graduate Management Admission Council, 2018). Often, the term “management education” is used interchangeably with an “MBA” within the literature. The reciprocal nature of management (and / or executive) education and MBA programmes is evidenced from a significant return of “MBA-focused” studies, when “management education” is used as a search term (Appendix 1.2: Web of Science summary).

Management education and MBA programmes have great synergies in terms of cohort requirements and how they are structured (Stanton & Stanton, 2017). Stephen and Margey (2015) highlighted that “communication, commitment and trust” are the essential elements of successful action learning-oriented management education; their study delivers some relevant insights into the links between scientific knowledge and practical implementation.

“Management education” in their study, however, is synonymous with MBA programmes in Ireland and this “duality” of language is not a recent phenomenon; Latham, Lathan and Whyte (2004) challenged Business Schools to make wholesale changes in order to transition the MBA towards the structure of their non-accredited management education programmes, as they “typically emphasise the synergistic use of core competencies and delivery systems in a way that enables one to truly master business administration”.

Bickerstaffe and Ridgers (2007), in their key paper that approached the controversies surrounding Business School rankings, made no distinction at all between executive (management) education and MBA programmes. The MBA is firmly embedded as the “management education of choice” in the MSB sector.

Fougere, Solitander and Young (2014) situate “management education”, with its values and practices, alongside Mintzberg’s (2005) contention that management education should be “practical” in nature and allow students to engage reflectively within their own unique contexts. The perspective here is that the MBA is a “profits first” form of education and is lacking the depth and breadth of soft-skills development that the “real world” requires (Fougere, Solitander & Young 2014).

Vaara and Fay’s (2012) “Bourdesian” commentary regarding the pedagogical practices of management education programmes avoids direct reference to the MBA; however, it does draw heavily on management education literature that includes perspectives of MBA Programme Managers (those in charge of the strategy and day-to-day running of MBA programmes) and graduates (Ghoshal, 2005; Gosling, 2003; Pfeffer & Fong, 2002)

For some observers, management education is merely a “career development tool”, something that ultimately separates ineffective, unhappy managers from the “happy and successful” (Moyce, 2014).

When the United Nations presented their support for the principles of “responsible management education” it was a direct response to the global issues that are caused by corporate social responsibility (or lack of it), along with the well documented cases of leadership failings, corporate corruption and financial crisis (Haertle & Miura, 2014). The responsibility for these failings, as well as the subsequent damage that has been done to the global economy, have since been levelled at MBA programmes and Business schools (Rubin & Dierdorff, 2009). The narrative that MBA programmes favour financial performance over ethical decision-making is not new but has gained greater traction in recent years.

The UN initiative is notable because it focused on bringing together management education institutions into a culture of responsibility and best practice, although the interpretation of “management education institutions” actually referred to MBA programmes accredited by the

Association to Advance Collegiate Schools of Business (A.A.C.S.B) and the Association of MBAs (A.M.B.A). In this context, “management education” and the MBA are again descriptors that are used interchangeably (Godeman, 2014).

The narrative surrounding MSBs, along with their role in the UK economy, is also one of unfulfilled potential. The “language” that is used is one of “missed opportunities”; MSBs are the “forgotten heroes” of an economic structure that is facing an increasing level of complex challenges (Fairbairn, 2018). It is evident that MSBs create a significant number of jobs and have a major impact on regional and national economic performance (BDO, 2018).

The author acknowledges that much has been written about the importance, intricacies and value of MBA programmes. It is important to note that this study, from its design to completion, has never intended to offer a detailed critique of the broad *value* and *relevance* of an MBA.

The context for the line of enquiry is established in Chapter 1 and this frames the point at which the author’s historical interest in business excellence and strategic planning intersects with strategic decision-making and the tools and techniques utilised by high-performing MSBs.

1.3.1 Situating MSBs.

The aforementioned gap that exists within the Management Science literature (notably, the absence of detailed research into the dynamics of growth in this sector) compelled the author to question what enables only a small number of UK MSBs to achieve significant levels of growth (BIS, 2018), whilst a number of organisations fail to meet their stated performance targets.

The author has spent time working closely with high-growth organisations and the early insights gained from these interactions became the catalyst for wishing to understand the different characteristics at play within this unique sector. The motivation to undertake a deeper exploration of the intricacies of MSB decision-making behaviour, along with the different approaches that managers undertake to achieve (or miss) their growth targets, was fuelled further by the 2011 report into “unlocking the growth of the UK’s Medium-sized Businesses”, commissioned by the CBI.

As one of the UK's leading business advisory groups, the CBI succinctly outlined the importance of MSBs to the country: MSBs are resilient, contribute enormously to the economy but often fail to reach their full potential (CBI, 2011). There have been broad, yet inadequately supported, reasons given as to why this important sector has failed to take full advantage of its opportunities. Arguments about why this might be the case range from "a lack of internal resources, finances and innovation", to the "absence of strategic communication skills" (Fairbairn, 2018).

By way of clarity, and to offer as clear a distinction as possible between smaller and larger organisations, the author adopted HM Treasury's (2014) definition of MSBs: MSBs are "those businesses with a turnover of between £25m and £500m and (generally) have 49-499 employees". The opportunity to explore such an under-researched sector (e.g. relative to SMEs) was a major motivation for undertaking this work.

1.4 A 21st Century overview of the MSB landscape.

There are close to 5.7 million businesses operating in the UK (BIS, 2018). An initial review of the literature that covers UK business expansion confirms that high-growth organisations are critical for the long-term success of the UK economy (Du, 2015; Lee, 2014; Mawson & Brown, 2017). The business community has experienced lengthy periods of uncertainty throughout the duration of the study. Businesses have faced increasingly complex trading situations, with some facing major challenges with regulation, legislation (Lee, 2014, innovation (Audretsch, Coad & Seggara, 2014) and learning and development (Gray & Jones, 2016).

Numerous researchers have discussed business growth at length, though it has been noticeable to the author that a significant body of research has focused on the SME sector. This focus is, perhaps, understandable as over 99% of businesses that operate in the UK fulfil the criteria of an SME; BIS defines an SME to be an operation that has “less than 250 employees and a turnover of less than £25m (in the majority of cases this is £10m)”. The UK also has 5.4 million micro-businesses (that have 0-9 employees) that account for 96% of the business population (BIS, 2018).

Given their coverage, micro-businesses and SMEs will always attract a significant level of research and support. Large corporate organisations (those that turnover in excess of £500m) account for just 0.1% of the total population. Their impact on GDP, high levels of public recognition and global reach, garners a level of research investment that is similar to SMEs.

Over the course of previous two decades, the volume of businesses created in the UK has increased considerably. More than 2000 businesses have been added from the year 2000 to 2017; growth has largely been driven by the SME sector, whilst MSB growth levels have been relatively static in comparison (ONS, 2018).

The MSB sector still represents a significant part of the UK economy and it is the one that holds the author’s fascination; it represents a relatively underdeveloped area of research, allowing the exploration of the value it represents to the UK economy and also the wider implications for business and management research.

1.5 Outlining the complexity of the economic landscape.

This thesis is written a decade on from the global financial crisis of 2009. During this time, the UK economy has witnessed significant political upheaval, strengthening (in some areas) and lengthy periods of consistent change (Kara et al, 2018). The MSB sector has been in a relatively strong position and has made a positive contribution to the UK economy.

Despite this apparent level of strength, the author appreciates that incisive research questions are as valid in positive economic times as they are in times of distress. Growth, for some organisations, may be achieved by simply being in the “right market at the right time”.

In times of strength, therefore, it is prudent for a researcher to look past first impressions and to challenge the notion that the “stronger an entity is, the less problems it has” (Gardner, 1992). It was deemed both appropriate and essential to ask deep questions regarding MSB growth during this time, in order to challenge any assumptions that increases in organisational performance may merely be a by-product of wider economic improvements.

Following the global financial crisis, there have been periods of strong economic growth, although UK MSBs have faced some complex and deeply consuming challenges. Agricultural entities have been met with price volatility and have experienced issues with changes to legislation (Grant, 2016), whilst financial institutions have seen the introduction of regulatory frameworks that have served to restrict innovative practices and slow down decision-making processes (Rana, 2017). A decline in the effectiveness of “traditional” marketing strategies has been damaging to businesses that operate towards the lower end of the MSB turnover scale (Becherer & Helms, 2016).

To complicate matters further, these factors have been appearing against a backdrop of (in some cases, extreme levels) of uncertainty related to Brexit and the ongoing negotiations and discussions that surround it.

At the time of writing this thesis, it is unclear as to what trajectory the economy may take should the UK government deliver a full withdrawal from the European Union. Whilst some political commentators see positive benefits to the UK economy (post-withdrawal), economic performance (when contrasted with the assumed trajectory that it would have taken *without* a withdrawal referendum taking place) has been suppressed (Springford, 2018). Investment in

business infrastructure also appears to have been somewhat weakened because of ongoing negotiations between the UK and the European Union.

Compounding this level of complexity presented by Brexit, management teams are now faced with a larger volume of data than ever before, especially with the proliferation of social media (Aral, 2013) and the “Internet of Things” (Scuotto, Ferraris & Bresciani, 2016). A steep rise in the availability of data has increased the need for management teams to make both timely and accurate decisions. It should be noted, however, that the *quality* of data (which affects the accuracy of decision-making) is often overlooked.

Poor quality data can lead to a lethal combination of bad decisions that combine with decreases in levels of productivity ; the processes that organisations use to facilitate the translation of raw data into a format that helps management teams with their decision-making can also be problematic (Madnick et al, 2009).

Gaining a more complete understanding of how MSB leaders *think, act* and *behave* when faced with multiple layers of complexity, will enable better guidance for MSBs that *genuinely* wish to grow. The author holds a life-long, practitioner and scientific interest in the varying challenges that businesses face. This interest is further complemented by a desire to better understand the nature of the UK economy, the (often-neglected) world of MSBs and the vital role that management education can play in helping both to develop.

This thesis represents the intersection of these interest areas, examined against the backdrop of one of the most discussed theoretical frameworks in Management Science – Herbert Simon’s Theory of Administrative Behaviour. Simon’s contribution was to write about decisions and organisational dynamics in a creative and innovative way; the way that Simon positioned organisations, in order that they could be evaluated in terms of their decision-making processes, (Mitchell, 1988) is as relevant today as it was in 1947.

1.6 UK MSBs: Structure and orientation.

The Department for Business, Innovation and Skills (BIS) defines an MSB as “delivering a turnover of between £25m-£500m a year (BIS, 2012). The typical makeup of a UK MSB is that of a well-established enterprise that has traded for 20 years or more; nearly half of all MSBs are family-owned, presenting an organisational structure and culture that can differ noticeably from SMEs and large corporate organisations (BIS, 2011).

MSB leaders cite the problem solving capabilities and decision-making skills of their management teams as their main causes for concern; these concerns rank higher than fluctuating market complexities and access to finance (Fairbairn, 2018).

The majority (85%) of MSB leaders have publicly cited “growth” as being the main strategic aim for their business, although an earlier study into MSB growth (BIS, 2011a) highlighted that growth patterns often fluctuate dramatically. This indicates that forecasting and scenario planning techniques may be challenging to implement in this sector, thus making future development plans difficult to achieve.

The type of industry that an MSB operates in can play a key role in determining its growth prospects, however, it is the *way* in which it operates within that industry that draws the attention of this study. An analysis of family-owned enterprises, which make up over 30% of UK MSBs, shows that they are more likely to be at the mid-point of any performance curve than other ownership models (BIS, 2018). This is significant as there are characteristics that family-owned enterprises possess that are both restricting growth and mitigating against failure (something that extends beyond the industry “type”).

Only 0.6% of all UK businesses are MSBs, and this is a proportion that has remained relatively unaltered since 1980 (BIS, 2018). Despite representing less than 1% of the UK business population, however, it annually generates more than £700 billion - a significant 21% of private-sector turnover. This indicates that the sector is very resilient to market changes, extremely valuable to the UK economy, yet (somehow) restricted in its attempts to drive forwards to its full potential.

For UK MSBs, activities related to growth should not be focused solely on the UK. A large amount of value has been created by MSBs who extend their activities beyond the UK. It has been observed that MSB turnover is derived from both international and domestic sources, with MSBs growing internationally from £84 bn in 2011 to £127 bn in 2017 (BDO, 2018). This level of growth is in stark contrast with larger corporate entities, who have seen a reduction of 14% in the same period. It is possible that MSBs are, therefore, more likely to respond positively to the opportunities that emerge out of international trade developments.

It is London that houses the largest concentration of MSBs in the UK, followed by the South-East and the Midlands. The South-West and Wales host the smallest concentration (BIS, 2018). The top 100 MSBs are responsible for driving a significant proportion of this growth, indicating that there may be lessons to learn from these organisations; underlining a degree of fragility in the sector when one considers the sustainability of growth levels.

In 2016, the compound annual growth rate saw an increase of 21 percent on the previous year (Investec, 2016), with the report noting that property businesses and construction enterprises maintain a high level of stability (accounting for 20% of the best performing enterprises), whilst manufacturing and industrial businesses are also well represented.

The MSB sector has contributed the equivalent of the combined strength of the UK real estate market and financial services sector (House of Commons, 2011), with the potential to drive overall growth even higher. Underlining the importance of the sector further still, MSBs outpace large corporate organisations and SMEs in research and development and have seen a greater average salary growth (2.3% versus 2.1% for SMEs and 2% for large corporates) in recent times (CEBR, 2014). The MSB segment in the UK forms a critical part of the country's economic future, contributing economic output, employment and developing a strong position on both the European and World stages.

The sector does have some issues that are visible on the surface and these have helped to determine the direction of the study. Despite the positive contributions made by the sector, the Director General of the CBI (CBI, 2011) and the Work Foundation (Work Foundation, 2011) highlighted that a "skills shortage" has been a key barrier to growth. Increasing the decision-making skills of managers, and developing MSBs to their full potential, are both local and National priorities (CBI, 2011; CBI, 2018).

1.7 UK MSBs in comparison with European counterparts.

Whilst this investigation is concerned with the UK marketplace, there are potential lessons to learn from mid-market organisations operating outside of the UK. Managers should recognise that organisations that do not have obvious international operations are all “international”, to the extent that every organisation is affected some way in events that occur on the global stage (Kano, 2018).

A significant pan-European study into MSB activity (BIS, 2011) highlighted that the UK outperformed its European counterparts across several critical measurements, including “employee size” and “turnover”. When examining “turnover per employee” (which is the most comparable measurement of business productivity) the UK languishes in last place. This highlights the performance gap that exists between UK MSBs and their EU counterparts.

Table 1. UK MSB sector vs European comparison 2011.

	Employees/ Enterprise	Turnover/ Enterprise	Turnover/ Employee
UK (£)	443.1	85,159.9	192.2
UK (€)		98,061.6	221.3
Finland	290.1	84,188.0	290.2
France	269.3	78,125.3	290.1
Germany	302.4	81,165.2	268.4
Sweden	262.8	79,199.6	301.4

Source: Country comparison report, 2011.

There is a demonstrable difference between UK MSBs and their European counterparts, where the UK represented the lowest share of MSB employment in the manufacturing sectors and lower turnover generated per employee. This shows that there are significant opportunities to develop growth into underdeveloped markets and that there may be different dynamics at play in high-performing sectors that could be better understood and replicated elsewhere. These opportunities further support the need for an enquiry of this type.

1.8 Management skills, Business Schools and the MBA.

Recruiting a Business School-educated manager who has an MBA is standard practice for any MSB leader looking to import problem solving and decision-making skills into their organisation (Graduate Management Admission Council, 2018). After reflecting on historical interactions between Business Schools and businesses, the author noted that achieving knowledge transfer can be challenging and that being able to fully access the knowledge and technical insights of MBA programmes may be out of reach for some MSBs.

When evaluating potential difficulties from the perspective of an MSB leader, a key (2012) study into the divide between Business Schools and MSBs provides some illuminating insights. Barriers to knowledge transfer have been identified (Business School / MSB Task Force Report, 2012) and are summarised and adapted here:

1. Business Schools can be difficult to approach. MSBs may find “engagement” to be extremely complicated to achieve when trying to understand how best to approach a Business School, prompting challenging questions: Which contacts are the most appropriate? Which communication methods are the most effective?
2. Whilst some Business Schools have a management education function, the central unit that deals predominantly with businesses is often the Universities’ careers service, typically focusing on placements and student interaction. This may not be the best contact point for developing business relationships and identifying solutions to problems.
3. There is a perception from within MSB management teams that such an engagement will be very costly or, counterintuitively for the Business School, will have no value at all. This will often deter both parties from developing a relationship.
4. MSB management teams are concerned about the practical relevance of any intervention, citing a worry about courses and qualifications being “too theoretically-led and lacking practicality.”

5. The bureaucracy and formality of any interaction may be too time consuming and “resource heavy” for organisations that are under time pressures.
6. Business Schools often take a *reactive*, rather than *proactive* approach to dealing with shifts in the economic landscape and the nuances of business cycles.
7. MBA programmes are not tailored enough to deal with the complexities and ambiguities of family-owned organisations and enterprises that adopt a more creative and entrepreneurial approach (e.g. the creative and design industries).

There are, therefore, a number of characteristics that make an MSB distinctive when compared to other business types. The task force’s final barrier (Number 7 above) is notable because of the volume of either family owned MSBs or those that have recent or historic family connections (BIS, 2018). It is known that family-owned enterprises possess more “family-centric” characteristics than their non-family-owned / influenced counterparts (Carmon & Pearson, 2013).

Family-centric characteristics include a high-degree of senior involvement in decision-making and greater levels of emotional attachment to individuals, history and structure (Sharma, 2012). The importance of this distinction is clear when one considers a family-centric business to demonstrate a service-focused approach and encourage strong levels of innovation. These are characteristics that blend together to create a culture that encourages trust, openness and a desire to develop new ideas and challenge the validity of existing processes and products; this type of culture may represent a significant source of competitive advantage (Dibrell & Moeller, 2011).

It has been suggested that family-owned businesses will naturally have a greater need for innovation. A multi-generational management structure can lead to a decline in innovation (Chua, Chrisman & Sharma, 1999). It is also argued that a family-owned business can generate more innovation-led outputs (should structure and culture permit it) in certain circumstances, although this requires substantial levels of investment into innovation-focused activities (Kammerlander et al, 2015).

From the perspective of a Business School, there are similar barriers that relate to communication and the overall understanding of a marketplace. An earlier review by the author revealed that Business Schools can have difficulty in distinguishing an MSB from an SME (not all definitions of size are consistent with each other) and could, therefore, incorrectly deploy interventions that are designed for smaller enterprises.

Business School researchers may lack the necessary incentives and tools that are required to engage with corporate organisations in order to provide management education; reward structures for Business School staff are often centred on publications and research funding instead of engagement activities (Shapiro, 2018).

Business Schools may also find that it is difficult to get students and graduates to engage with MSBs, citing that students often prefer to work with blue-chip brands and organisations post-graduation (Graduate Management Admissions Council, 2018). Business Schools, therefore, will naturally place a greater level of emphasis on student employability and networking opportunities, rather than decision-making and managerial case studies that are of a *practical* nature (ABS, 2014).

Towards the beginning of the study, it was noted that the CEO of the CIPD (CIPD, 2013) acknowledged that there has been insufficient investment in problem solving and decision-making skills (at all levels) in MSBs. This recognition was made at a time that saw management being placed under increasing pressure to deliver credible, and sometimes immediate, results. Over 72% of businesses that were surveyed claimed that they had significant deficits in management and leadership skills, although it is interesting to note that 66% of them reported that they provided training and development for their managers.

Whilst the senior managers that were surveyed acknowledged that a variance in the quality of training provided does not explain the *degree* of such a mismatch, a key question remains: are we teaching the right people, the rights things at the right time?

1.9 Development of the research questions.

This thesis challenges whether enhancements can be made to Administrative Behaviour Theory, enabling the production of conceptual frameworks that can be applied to the development of MSBs in future studies and interventions. The framework has been developed from an exploratory review of the Management Science literature, leading to a more systematic review and synthesis that is drawn from a cross-section of disciplinary traditions.

The synthesis of literature and the iterative, multiple-method analysis of data are incorporated into an overarching framework that aims to facilitate the forecasting of MSB performance levels: based on the characteristics being observed of an MSB, can it be determined whether growth is likely?

In addition to an initial analysis of case study data, broad research questions emerged from both the scoping and systematic literature reviews. The critical questions posed by the study address the challenges faced by UK MSBs, along with how one might understand why essential management activity is either constrained (“bounded”) or enabled by the organisation itself.

1.9.1 Research Questions.

R1a. Do high-performing MSBs differ in the managerial thinking, outlook and attitudes, when compared to underperforming MSBs?

R1b. If so, in what ways do they differ?

R2. How effectively does the development of MBA curricula address the complex problems that MSBs face?

R3a. Are the decision-makers in MSBs “bounded” by the cultural and human dynamics of their organisation?

R4. If R1a is true, and R1b is known, and R2 is negative, and R3 can be influenced by MBA education, then:

Can shifts in MBA education, changes to teaching methods and accessing knowledge networks benefit MSBs in the future? In what ways?

There is evidence that, whilst MSBs make a significant contribution to the GDP of the UK, the volume of MSBs has not significantly increased in the last 20 years and few MSBs ever grow to reach the level of a large-scale organisation (BIS, 2018). The MBA qualification, on the other hand, has become a diverse, global and complex management education “tool”.

The content, structure and “worth” of different MBA programmes has become indistinguishable to many potential students; a notable “blurring” of a decision-making process given the wide variance in cost and quality that exists (Datar, Garvin & Cullen, 2010). Whilst it has historically been a wide-ranging qualification, strategy development and decision-making remain key themes of both global and UK MBA programmes (Belasen, 2019; Rubin & Dierdorff, 2009).

The study examines, through an extension of the research questions (above), whether the skills that they provide MSBs with are (broadly) what they *really* require in order to make effective decisions and grow accordingly.

The research questions have been developed to explore and evaluate some of the challenges that exist, often in parallel, in both applied business strategy and management education. A key aim was to understand how MSBs can be developed and whether an overarching framework for business growth could be produced.

1.10 Summary: Positioning the author.

The idea for the thesis arose in 2012 when the author had completed a structural review (ahead of an AMBA accreditation panel) of a global (ranked in world top 1%) MBA programme. It was a review process that created as many questions as it provided answers. The review, and subsequent development of strategy, drew heavily on the requirements of large corporates and SMEs who either contributed to case studies or who were actively involved in MBA recruitment campaigns.

It was evident from the outset that MSBs did not feature highly on the programme's knowledge transfer agenda. This led to an even greater interest in MSBs (including *why* they were not a major consideration for the programme), the dynamics of organisational decision-making and, ultimately, the Theory of Administrative Behaviour and Bounded Rationality.

This thesis is ultimately the result of multiple influences that are grounded in practical experience, moving to a theoretical and conceptual analysis of management education and its associated challenges. It leads to a synthesis of a range of management disciplines in order to construct an analytical framework that will aid MSB leaders, consultants and MBA Programme Directors alike.

1.10.1 Ontology, epistemology and the author.

Ontology is the branch of metaphysics that is concerned with the identification of what *exists* in the world or *what* constitutes reality? The author believes that social entities exist in parallel with the social actors that inhabit the same space, and that organisations and managers are inexorably linked together. The various actors operating within any situation in their respective organisations will view all business “performance”, “growth” and “efficiency” differently. This *subjective* view, or *interpretivism*, is recognised as an “ontological position which asserts that social phenomenon and their meanings are continually being accomplished by social actors” (Bryman & Bell, 2015).

Epistemology is the branch of philosophy that is concerned with *how* one understands the nature of knowledge, *what* can be done with that knowledge and, pertinently for this thesis, how one can determine what is “true” and what the optimal ways are for determining the “truth”

(Bryman & Bell, 2015). Through the adoption of these ontological and epistemological positions, the author understood that no two MSBs would view their situation and challenges as being directly comparable. This difference is clear in the field of Strategic Management, otherwise there would be no instances of opportunities being misinterpreted as threats (and vice-versa) in the history of business!

Through an increased level of understanding of how an organisation *thinks, acts* and *behaves*, the author believes that this will help to uncover the “truth” about business growth in MSBs and what characteristics a successful organisation possesses (ahead of those who either underperform or are completely unsuccessful).

An interpretivist perspective has been adopted from the outset, allowing human behaviour to be an integral part of this study. Consequently, it is assumed that “access to reality (either given or socially constructed) is only through social constructions such as language, consciousness, shared meanings and instruments” (Krzyzanowski & Wodak, 2008). This perspective naturally lends itself to a more qualitative approach to data collection.

1.11 The direction of future chapters.

Chapter 2 moves onto an exploratory and systematic review of the relevant literature. An expansive literature review of this type was undertaken in order to minimise, as much as possible, the risk of bias and subjectivity in the review process. An exploratory review was firstly undertaken in order to “frame” MSBs against the issues that they are facing, investigating topics and discussions that have appeared prominently in both scientific and practitioner communities. The review then advances to utilise a more systematic approach, building on themes that emerged from an initial case study analysis of MSBs and a synthesis of the initial, exploratory review.

In **Chapter 3**, there is a discussion regarding the theoretical framework that has been deployed. The relevance and applicability of the Theory of Administrative Behaviour and Bounded Rationality are considered in detail. Consideration is also given in this chapter to the pertinence of alternative theoretical constructs and concludes with an evaluation of how the theory connects with the challenges identified from a cross-section of MSBs.

In order to present a clear picture of the MSB operating environment, historical and recent paradigm shifts in Management Science are also evaluated. This chapter contextualises how the topics of MSB decision-making and MBA programmes converge. There is an examination of the role that strategy (in particular strategic management) plays in high-performing organisations.

It is recognised that MSBs routinely recruit MBA graduates, regardless of whether holding an MBA is the first priority in the recruitment process, as a method of importing decision making knowledge and techniques into the organisation. “Strategy” itself is a core element of most MBA programme curriculums, often encompassing decision-making topics that relate to achieving growth.

As was outlined earlier in the introduction, it has not been the intention for the study to set out to provide a critique of MBA programmes; moreover, it provides insights into how programmes might be adapted / refined in light of any sector specific requirements that MSBs may have.

Chapter 4 presents the methodological approach that is taken, discussing why it was adopted and a reflection is provided on alternative strategies that might be considered viable as part of any future research.

Research philosophy is rationalised in detail, appraising the author's interpretivist perspective and why qualitative approaches were adopted. The chapter covers the research strategy and techniques that are both utilised and excluded. A rationale is given for the selection of a multi-method approach and the use of qualitative content analysis.

Chapter 5 accommodates the collection analysis of key-informant interviews and intelligence from case studies. There is an examination of further qualitative insights that uncover the characteristics held by different MSBs. An explanation of the analytical framework that is used, along the processes of coding and synthesis, is given. A key part of this chapter is a detailed discussion of the emergent "language" types that are adopted by both high-performing and low-performing MSBs; there is a specific "cultural perspective" or pattern of language that has a tangible bearing on business performance.

Chapter 6 contains a broad analysis of management education (with a specific focus on MBA programmes) and appraises how this additional knowledge may impact on the MSBs that have been investigated. There is also an evaluation of the relevant "grey literature", along with an analysis of media and communications that relate to each category of MSB. This holistic assessment has enabled the author to explore the themes that emerged in the preceding chapters more fully, allowing them to be scrutinised from a different, and perhaps fuller, perspective.

The thesis concludes in **Chapter 7**, where proposals are submitted for the advancement of Administrative Behaviour Theory. Enhancements to this ground-breaking theoretical framework have only been proposed after a considered analysis and reflection about the unique characteristics possessed by MSBs. The revised theoretical framework facilitates the architecture of a forecasting model to determine the likelihood of growth within the sector.

Furthermore, recommendations for the adaptation and enhancement of MBA programme curricula are provided.

Chapter 2

Review of literature.

2.1 Developing the exploratory review.

In Chapter 1, an interest was declared in MSBs and the challenge of achieving growth. Within this chapter, both an exploratory and systematic review of literature have been conducted to further develop this portrait of MSBs.

The gaps that have been identified in Chapter 1 are established in more detail, facilitating the construction of a theoretical framework that has enabled the author to respond to the research questions. An exploratory literature review was conducted in the first instance, in order to develop a clearer understanding of the environment that MSBs operate in and establish whether any contemporary themes require further consideration and investigation.

2.1.1 Exploratory review of literature: The UK economic landscape.

It is understood that the economy of the UK is closely connected with the rest of the world; the interconnectedness of physical goods and financial services is evident to the majority of observers (OECD, 2017). This association means that global events will always have the potential to significantly impact on UK MSBs, and it is this connection that prompted the author to examine a wide range of management concepts within an exploratory review of relevant literature.

The issues facing MSB management teams are broad and complex, ranging from the accessing of finance to the understanding of the complexities that exist in international markets (Grant Thornton, 2015) and the breadth and depth of these issues are explored further within this chapter. Management Science is considered by the author to be the formal study of what is known about Management, in particular problem solving and decision-making, and not purely “operational research”.

From a financial perspective, global markets saw that “typical” financing routes diminished after the global crisis of 2008; many MSBs found that accessing non-bank finance, such as private equity funding, could be elusive and difficult (Paglia & Harjoto, 2014). The creative

and technology sectors were particularly affected. The crisis significantly reduced the amount of private equity funding made available to technology-focused businesses, which was due in part to the difficulties associated with valuing technology assets and accounting for the “currency” of innovation in such a turbulent time (Harrison & Baldock, 2015).

Whilst the availability of alternative forms of business financing have seen a resurgence in recent years, more “traditional” funds still dominate investments. Over the period of 2015 to 2018, nearly 60% of MSBs applied for bank finance; this statistic contrasts dramatically with the 19% of MSBs who had attempted to access private equity services (BLME Funding Mid-Market Report, 2018)

The lack of clarity surrounding the availability of funding would, naturally, be a major source of frustration for senior management teams, especially as venture capital financing has been shown to have a positive, long-term effect on both revenue and employment growth. The question of whether funding is a key challenge facing MSBs is addressed in subsequent chapters.

There is a connection between an organisation’s “type” and the level of funding opportunities that are available. Technology-focused businesses play a pivotal role in delivering high-levels of entrepreneurial thinking and innovative practices. These are the organisations that are most likely to experience some form of constraint, especially as they can suffer from “finance market imperfections”, with lenders often restricting funds to them in turbulent times due to increased levels of risk aversion (North, 2013).

Access to funding, should it be a significant factor that is affecting growth, is likely to fluctuate. The general stock of bank lending to MSBs did decline significantly after 2008, though the gross flow of lending actually increased by 11% in 2013 - 2014. This trend is likely to continue, mirroring improvements in market conditions and new market entrants that include specialist asset finance firms (British Banking Association, 2015).

Whilst there have been fluctuations in the availability of finance, it is notable that the UK MSB population did not alter significantly during the period of 2008 to 2018 (House of Commons, 2018). This level of stability highlights a high degree of resilience present within MSBs,

reinforcing that non-financial factors must be considered when examining the impacts on business growth.

It is clear that there are a number of elements that are affecting the ability of businesses to attract, develop and utilise effective decision-makers, though it would be wrong to assume that these factors are purely dominated by financial issues. To address the research questions highlighted earlier, businesses that have a strong *core of innovation* form a major part of this study. Against a backdrop of increasing complexity in the business environment, it also seemed imperative to explore the literature relating to problem solving and decision-making, in addition to the factors that contribute to the *creation* of competitive advantage.

Just about everything ever written about business and strategy has some application to the growth challenges faced by MSBs. Recognising this, the author was conscious of a need to effectively select and to prioritise, in order to shape the literature review from here on in. The review is kept within reasonable limits and starts by looking at the critical literature surrounding the presumptive relevance of the MBA. There are two reasons for this:

- Firstly, the recruitment of MBA graduates is an acknowledged tactic of MSBs that are seeking to achieve growth and who feel that they lack some of the human resources to be able to do so.
- Secondly, the controversies surrounding the relevance and value of MBA training are well documented; these controversies are worth exploring as they are pertinent to MSB growth (or lack of).

The review then moves on to the DC concept. This is emphasised, not only because of the relative recency of the concept, but because of its richness and that it has developed from the Resource Based View (RBV) and surpassed it, in respect of its relevance in a highly competitive and unpredictable market. There is then an exploration of decision-making literature, innovation, “time” and the review will conclude with a selective appraisal of Strategic Management and the seductive notion of Strategy as Practice (SAP).

2.2 Talent development and organisations.

It was during the global financial crisis of 2008, and across the years that followed, that attracting the *right* talent into an organisation (including *who* to employ, *what* characteristics should they have and *what* levels of development they need) became a key *strategic* decision, instead of a day-to-day, *operational* one (Vaiman, 2013).

The field of talent development (which includes planning, attraction and acquisition of key personnel) as with many others, suffers from a lack of a singular and consistent definition of its purpose. During the 2000s there was a distinct emphasis placed on selection and succession management by “talent” specialists; in recent times there is now the notion that “talent” refers to personnel who are in roles deemed more critical, embedded and influential than “normal” management roles (Schreuder & Noorman, 2019).

Attracting the right people into an organisation can be a resource intensive and complex process and, because of this, talent development should not be part of a generic approach that just deals with the import of new personnel, skills and techniques. In order to achieve a purposeful and effective approach, talent management processes need to be closely aligned with the strategic objectives of the organisation (Caplan, 2013; Schreuder & Noorman, 2019).

High-performing organisations will seek to obtain and maintain a strong level of competitive advantage; obtaining an advantage from talent will require a continuous investment in talent development. A continuous investment plan (rather than a static, “transactional” approach) may be a route to gaining an advantage through facilitating more adaptability, flexibility and reflection in management teams (Sheehan, 2014).

There are those that would acknowledge that the RBV is the optimal route to achieving competitive advantage (Bacq & Eddleston, 2018), although it can be argued that “resources” (be that access to IT equipment, finance or digital skills) are worthless unless the right people are there to support it and to “make things happen” (Wilcox, 2016).

The “war for talent” is not a recent phenomenon, although it has only been in the last decade that organisations have *genuinely* invested as much in it as finance and technology (Lawler, 2008). Retaining talent is crucial; whilst employers may instinctively believe that employees

leave an organisation due to financial reasons, there is a body of evidence that the working “experience” (one that doesn’t live up to expectations) is the main factor that causes talent to “walk out of the door” (Cattermole, 2019).

Losing talent can be a costly process, not least because it takes a period of time for new recruits to become efficient, effective and make a significant contribution to the performance of an organisation. It is unfortunate that too many assumptions are made regarding how an employee *really* feels about the working environment, more time may need to be spent on listening to and understanding the voice of the workforce (Singh, 2019).

In order to mitigate some of the risks of losing talent staff members, an effective talent development programme should consider the various approaches to learning that individuals working as part of a team may have; along with giving due consideration to generational requirements, Human Resource policies and procedures would be closely aligned with training and developmental policies (Johnson, Huang & Doyle, 2019).

A number of organisations have recognised that there are significant gaps in their talent development programmes. Talent recruitment and selection strategies have become increasingly more focused on selecting innovative individuals who are adept at dealing with uncertainty and who can perform at their optimal levels in environments that are continuously changing; to this end, “gamification” is gaining traction in talent recruitment (Tansley, 2016).

In conclusion, *how* an organisation deals with talent is an essential element of a successful growth strategy. Simply attracting the “right” people into an organisation is not enough to develop and sustain a level of competitive advantage; high-performing organisations will have to be able to offer a more tailored approach to enhancing skills that will have a positive impact on growth. It seems mandatory that an organisation *should* engage with talent development, moreover, *how* an organisation deals with talent is of greater consequence. There appears to be some acceptance in management circles that specialist, growth-related roles urgently require more innovative and creative approaches to skills development (Brown, 2019).

2.3 MBA Programmes.

The MBA has its origins in the USA, emerging at the beginning of the 20th century. Whilst L'Ecole Speciale De Commerce et D'Industrie (Paris) was established in 1819 as the first Business School in the world, it was the Tuck School of Business in 1900 that developed the Master of Science in Commerce programme. This degree was the first advanced degree in business and is recognised as the forerunner of today's MBA.

It was the Harvard Graduate School that launched the very first MBA programme in 1908. The establishment of London Business School and Manchester Business School (albeit this took place some decades later) showed that the UK was ready to adopt US structures and methods. Despite the MBA not being a recent addition to the world of management education, there has been continual debate over its relevancy and future (Ghoshal, 2005).

Observers have been commenting on MBA and business education for as long as the qualification has been in existence, especially when one considers that the development of the Harvard Graduate School was primarily the result of a "critical discussion about the need to professionalise what the men of business were doing at that time" (Vaara & Fay, 2011).

Since the Ford Foundation study (1959), MBA programmes have (generally speaking) followed a largely standardised template (Navarro, 2008), although one that lacks reflective practice. A major criticism has been that MBA programmes do not link theory and practice together effectively enough (Starkey, 2004). There have been numerous calls for businesses to be actively involved with the creation and curriculum design of programmes (Crotty & Soule, 1997). It has also been suggested that the learning process becomes more action-orientated, with students immediately applying their theoretical knowledge to live business problems (Gosling, 2003).

The application of knowledge is a contentious issue for some. Graduates are liable to adopt practices and mind-sets that are ethically questionable, developing a narrow "capitalistic"- only approach to problem-solving and decision-making (Grey, 2002). The qualification differs from country to country and it should be recognised that an "MBA" is often a catchall for a number of "versions". There are full-time programmes, part-time programmes, executive vs. conventional, pre-vocational and experienced MBAs, and a large number of schools have a combination of blended and online offerings (Baruch, 2009).

Businesses, including MSBs, have often recruited managers who have an MBA qualification as a way of gaining decision-making capabilities (Iyengar, 2015). The consensus is that MBA graduates make reasoned and rational decisions and have more up-to-date knowledge and skills.

Recruitment Managers expect that MBA graduates have the required combination of skills and knowledge that is required to manage complex businesses without significant, additional input from Directors (Baruch, 2000; Iyengar, 2015). The popularity of the qualification has meant that it has transitioned from being a major differentiator for executives to be a pre-requisite for most management roles (Baruch, 2000).

There are critics who have openly challenged Business Schools to reshape their teaching practices to ensure that managers become better decision-makers, believing that traditional methods are largely superficial (Bennis & O'Toole, 2005; Ghoshal, 2005; Khurana, 2007; Mintzberg, 2005; Pfeffer & Fong, 2002).

Other criticisms levelled at the MBA programme are that it does not equip managers with an appropriate *depth* of skills and that MBA graduates are more focused on understanding the “functionality” of business rather than its “practicality” (Boyatzis, Stubbs & Taylor, 2002; Navarro, 2008; Rubin & Dierdorff, 2009; Samuelson, 2006; Mintzberg, 2005). The “dogmatism” of graduates also ensures that there is a lack of organisational fit when managers move away from theory towards practice (Grimbly, 1993).

Two critical studies highlight that MBA programmes have been starting to align more closely with the general requirements of business. In Rubin and Dierdorff's (2009) highly cited work, examining the gap between executive competencies and MBA curricula, it was demonstrated that there was a significant misalignment between the competencies that drive managerial performance and what was being taught in MBA programmes. A follow-up by Rubin and Dierdorff (2011) contended that policy makers within Business Schools were aware of the disconnection between programme managers and businesses, claiming that they “closed their eyes” and resisted change.

The initial study highlighted that MBA programmes performed well in preparing graduates to manage logistics, administration and general tasks. The competencies that were represented

poorly in MBA curricula were managing the decision-making process, strategy, innovation and the management of human capital (Rubin & Dierdorff, 2009).

Challenging whether the insights from 2011 remained valid, Costigan and Brink (2015) understood that the gap had been narrowed, although there was still some development required in the areas of decision-making and strategic thought. It should be noted that each critical study is based on an analysis of US-based Business Schools, highlighting a gap in the literature that needs to be addressed. MBA programmes are designed to reflect global challenges and pay attention to the needs of specific markets and territories; a US dominated narrative about their effectiveness does not reflect the diversity that undoubtedly exists.

Business Schools have, historically, aimed their MBA programmes at corporate businesses. Enterprise and innovation, from a smaller business perspective, have grown to be a mainstay of the curriculum. The shift towards a more “entrepreneurial” MBA appears timely, given the aforementioned importance of technology, innovation and creativity. By enhancing MBA programmes with practical activities, internships and networking with entrepreneurs can add real value to the creative process (Erickson & Laing, 2016).

Curriculum development looks to move programme content away from theoretical constructs and case study teaching towards a more practical, hands-on approach. These circumstances highlight Gimbly’s early study (1993) into management education; the work captures the (ongoing) discussion about whether management education needs to be based in the “real world” or in the classroom.

Some commentators might argue that practising managers come to the workplace poorly prepared to make decisions when a task is complex and not easily quantifiable (Bennis & O’Toole, 2005). The business landscape is becoming more fluid, with more data and more complexity; it is unlikely that decisions will be better served by the application of logic and traditional problem solving methodologies (Kahneman, 2012). The questions asked by Gimbly (1993) appear as pertinent today as when they were first posed.

If MBA education sometimes fails to provide graduates with essential skills and attracts a significant level of criticism (Ingols & Shapriro, 2013), it is important to consider what graduates *really* get from it. A natural assumption is that an MBA should prepare graduates for the rigours of senior management positions. There is evidence that shows a “positive student experience” to be the most important characteristic of any programme (Christensen, Nance &

White, 2012; Machado & Paes de Paula, 2011; Vazquez & Ruas, 2012; Vaara & Fay, 2011). Whilst graduates may place considerable importance on this aspect, this may be to the detriment of businesses in general. Later, it is suggested that by placing considerable emphasis on satisfaction levels and graduate experiences (instead of ensuring that graduates are sufficiently equipped to solve complex problems) Business Schools may be unwittingly restricting growth in the organisations that they are seeking to help.

The obsession with student satisfaction has become more pronounced in recent years. It has become an increasingly integral part of how MBA programmes are measured, spawning numerous ranking systems and increasing the level of competition between providers. This has led to the misconception amongst some students that all programmes are uniform in design, thus providing the same standard and depth of education. Key metrics for measuring the effectiveness of MBA programmes tend to include satisfaction levels with faculty and post-graduation increases in salaries received by graduates (Halperin, Herbert & Lusk, 2009). No league table or assessment process, to the best of the author's knowledge, has included "impact on employer performance" as a key metric.

An analysis of the global MBA ranking systems suggests that an increase in salary is one of the most important factors that students will consider; whether decision-making skills increase in line with satisfaction levels and earnings is unclear. This lack of clarity supports the view that programme leaders and students often overlook problem solving and decision-making when deciding to engage with a programme (Boyatzis et al, 2002; Navarro, 2008; Rubin & Dierdorff, 2009; Samuelson, 2006). This may not be the only weakness with the current ranking systems. Data relating to business growth (including any measurable links between education and performance) is omitted from the evaluation criteria and they cannot provide a perfect indication of programme content and practical value.

If the MBA is not a panacea for all business challenges, can it be an effective tool for improving skills and driving growth? There have been numerous attempts to identify exactly what *should* constitute the key features of a programme. The most complete summary to date

summarises them as "multi-disciplinary integration, experiential learning, soft-skills, ethics and corporate social responsibility" (Khurana, 2007).

Having an MBA graduate in a business may actually do more harm than good (Mintzberg, 2005). Mintzberg argues that management should be a *practical* experience and not just an *academic* process and this might explain why topics such as “strategic management” and “problem-solving” have been difficult to integrate successfully into management education (Feldman, 2005).

Whilst it becomes clear from the initial review of the literature that graduates need to get all they can from management education, as continually developing their skills will form the basis of future successes, there is a gap between what is provided by Business Schools and what businesses require. MBA programmes can compound a student’s lack of general management skills by offering generic tools, thereby ignoring the fact that leadership is often developed at an individual level (Benjamin & O’Reilly, 2011).

Management teams are faced with an array of information that, when coupled with differing perspectives of reality, impact heavily on problem solving and decision-making (Kahneman, 2011). How Managers view their own environments and assess situations has been shown to be a critical factor in making effective strategic decisions (Gavetti, 2005; Kaplan & Tripsas, 2008; Reger & Huff, 1993; Walsh, 1995).

Whilst MSBs are right to focus on obtaining information, it is the case that the processes and procedures that are used to obtain knowledge are sometimes more important than the information itself (Lane & Lubatkin, 1998; Powell, 1996; Ranft & Lord, 2000). This is a point that is important to the author since knowledge transfer processes can embed a culture of innovation within an organisation; *how* to do this in practice is a common discussion point for MSB leaders.

Management scholars are aware that effective and efficient decision-making is a key characteristic of any successful organisation (Kahneman, 2012). Management teams need a combination of logical, objective analysis and the ability to be decisive under pressure (Rosenzweig, 2013; Safi & Burrell, 2007). The speed of decision-making has been a major influence on business performance (Baum & Wally, 2003). Any business that can make good decisions faster than their competition will gain a degree of competitive advantage; those businesses that make slower decisions risk being outmanoeuvred by the competition (Kownatzki et al, 2013).

These observations lead to the DC concept being reviewed in the next section, with the above-mentioned “speed of decision-making” being an inherent characteristic of the perspective.

2.4 Dynamic capabilities.

Emerging from the evolution in strategic thinking, as identified in the previous chapter, is the recognition that *flexibility* and *adaptability* of management teams to fluid situations are increasingly important in complex and competitive environments. A DC approach to strategy helps to channel knowledge development, creation and implementation as part of the strategy design process. Knowledge is considered to be “one of the most relevant elements of dynamic capabilities, permitting skill acquisition and learning, as well as the accumulation of intangible or invisible assets in an organisation” (Barros, Hernangomez & Martin-Cruz, 2016).

The business landscape for MSBs is complex and challenging and it is recognised that positive and sustainable growth will ultimately result in the creation of a competitive advantage for any business (Kotler, 2016). The creation of such an advantage is a fundamental part of strategic management thinking and a cornerstone of the DC perspective; it has emerged as an engaging and animated field that has generated significant levels of scholarly output since 1994 (Vogel & Güttel, 2013). It has accomplished much through the pursuit of a new paradigm and captures the concepts created by today's economists, especially the shift from traditional cost minimisation towards entrepreneurialism (Eisenhardt & Martin, 2000). This “entrepreneurial shift” is compelling as it places entrepreneurialism at the heart of *any* business and not just “small” businesses.

Despite it being a major focus of discussion within the field of strategic management, there is some confusion about exactly *what* constitutes a “dynamic” capability, as well as some misgivings about a perceived absence of theoretical foundation and ambiguity over the construct itself (Di Stefano, Peteraf & Verona, 2010).

Its emergence in the 1990s came about as a method of enhancing the RBV through the notion that scarce and naturally valuable resources can be *created* as well as being *inherited* (Ambrosini & Bowman, 2009). This was a major departure for researchers and has implications today for MSBs who need to expand their operations. Criticisms of the RBV have existed since its conception and the DC perspective highlights weaknesses with its inward-looking nature. A review of economics literature reveals that the RBV has been developed and modified extensively over time, allowing for the incorporation of more “external” elements (Lavie, 2006), indicating that traditional approaches have to reflect, at some stage, the needs of a more

fluid business landscape. The underlying rationale of the RBV (that resources are both heterogeneous and unsustainable over time) has not changed significantly. This rationale, combined with their imperfectly imitable nature, is what provides a business with some form of competitive advantage (Barney, 1991; Newbert, 2008).

The perspective is relevant and important because MSBs often find themselves operating in fast-moving and complicated environments. The RBV has influenced how management scholars view growth-related decision-making. The RBV's lack of flexibility, and its perceived rigidity, has been a driving force for exploring the DC perspective in greater detail (Newbert, 2008). Other criticisms include it being too tautological in its construction (Mosakowski, 1991) and without having any empirical grounding (Priem, 2001; Williamson, 1999).

Businesses that have the key resources that are identified within the RBV concept sometimes fail to grow and survive, as they are unable to operate in a fast-moving environment (Ambrosini & Bowman, 2009). This is an important observation, not only because of the nature of the research questions, but because of the relatively small number of MSBs who eventually develop into larger entities (BIS, 2018).

Collis (1994) takes a different perspective, rationalising that the *external* environment is more important than the *internal*. Collis understood that competitive advantages are obtained as much due to their durability and superiority as they are to their value, imitability and non-substitutability.

An evaluation of the early Strategic Management literature points to the development of critical thinking skills as being an essential part of any organisation's success. When Teece, Pisano & Shen (1997) published a seminal paper on the DC perspective, they advanced the idea that the mechanisms and processes through which businesses acquire and develop new skills are more important than the "bundles" of resources that they already have in their possession.

This viewpoint highlights that a business should be able to build and rebuild its external and internal competencies in order that it can respond to changes quickly and effectively. This stems from the observation that "innovation" and "uncertainty" are, respectively, key enablers and barriers to creating a significant level of competitive advantage (Teece, Pisano & Shen, 1997).

Because the RBV is static in its nature, the DC perspective “fills the gap” due to its explanation of how advantages are maintained in an ever-changing environment (Barreto, 2010). Scholarly explanations, however, of how competitive advantages should be achieved have typically used the RBV, in part because the model examines how advantages can be maintained in the long-term (Prahalad & Hamel, 1990; Teece, Pisano & Shen, 1997).

The DC perspective, on the other hand, is more “fluid” in its design. Eisenhardt (1988) noted that the speed of change that is present in the business environment is *always* increasing and an inability to respond to large or subtle movements in technological, regulatory and social domains will result in the reduction of any advantage.

It is clear that businesses have to move and act efficiently in order to stay ahead; of significance to any MSB is the understanding that efficiencies are shaped predominately by organisational design and structure (Christensen, 2010). Long-term competitive advantage in hyper-competitive environments may be difficult to achieve, primarily because of the speed in which a business gains an advantage will decrease over time (Wiggins & Ruefli, 2005).

These situations suggest that any business should be positioned, and management teams organised accordingly, in such a way that a series of temporary advantages can be built by responding to successive “environmental shocks” (Clarke, 1995; Eisenhardt and Martin, 2000). The depth of the DC perspective has been expanded since its inception, from capabilities that develop and challenge what is “ordinary” (Winter, 2003), to patterns of activity wherein a business challenges its processes through a series of continuous improvements (Zollo & Winter, 2002).

More recently, a progression in thinking has included the ability of a business to “flex” its resources to mirror the visions of key decision-makers (Zahra, Sapienza & Davidson, 2006). All of these transitions reflect the critical shifts experienced by MSBs (Grant Thornton, 2015). Transforming and adapting processes and routines have (on occasion) enabled MSBs to collaborate effectively and develop product differentiation strategies, thus helping to shape industries that are operating in complex market conditions (Makadok & Ross, 2013).

Whilst there are elements of the DC perspective appearing in a small number of publications before 1997, over 1500 articles were published in the following decade; the diversity of the

literature indicates a somewhat “disconnected” field, from business performance and organisational outcomes to the exploration of the idiosyncratic factors that arise in changeable environments (Barreto, 2010). This growth highlights how the perspective has increased in importance and reach over time.

Advocates of the DC perspective have tended to view it through an *organisational* lens, rather than an *economic* one (Eisenhardt & Martin, 2000). To a large extent, the literature fails to find a common ground about what “types” of external environments are appropriate. Some authors subscribe to the view that external environments are highly dynamic, whilst some contend that there are different degrees of dynamism. There are those that choose to ignore the characteristics of the general business environment completely (Barreto, 2010). Zahra, Sapienza & Davidson (2006) argue that volatile and highly changeable environments are not necessarily a key element of the DC perspective, whereas Teece (2007) proposes the view that dynamic capabilities are the *catalyst* for either successes or failures.

Like a large number of management concepts, different definitions abound. Barreto (2010) suggested a new definition, one that would address the challenges of it being too tautological and whether any empirical evidence can actually be obtained:

A dynamic capability is the firm’s potential to solve problems systematically, formed by its propensity to sense opportunities and threats, to make timely and market-orientated decisions, and to change its resource base.

The inclusion of decision-making is a critical one, as effective decision-making has been shown to have a positive impact on long-term business performance and, therefore, longevity (Rosenbloom, 2000). Advancements have been made that show a strong link between the skills of the practising manager and subsequent increases in competitive advantage.

2.4.1 The logic of Dynamic Capabilities.

Kor and Mesko (2013) identified the concept of “dominant logic” as being critical for explaining changes in management performance. They submit that a managerial dominant logic contains the same critical elements of managerial capabilities as described by (2003): “managerial human capital, managerial social capital and managerial cognition.”

Managerial human capital is perhaps the most important element here as it reflects the backgrounds and experiences of managers which, in turn, have shaped their skills and approaches to decision-making (Castanias & Helfat, 2001).

Commentators have acknowledged that the DC perspective has done much to further the field of Strategic Management in general and to enable a more coherent view of how external and internal environments work cohesively together; they also argue that developments in the world of cognitive neuroscience challenge the suitability of the DC perspective as a basis of future theory building and research work (Hodgkinson & Healey, 2011).

Separating cognition from emotion is the cornerstone of how thinking is shaped in the DC perspective; it disregards the roles that automatic and non-conscious processes play (Alvarez & Busenitz, 2001; Lane, Koka & Pathak, 2006). The perspective examines decisions that are deemed to be *strategic*. The author acknowledges in this study that business growth in MSBs is a *strategic* decision; strategic decisions can be undertaken across all levels in an organisation and have important, long-term implications for both the organisation and its management team (Shepherd & Rudd, 2014).

2.4.2 Dynamic Capabilities and strategic decisions.

Understanding what constitutes a “strategic” or decision (instead of operational) has long eluded experts (again) due to the lack of a singular definition. A high level of uncertainty has gripped this area of management study for some time (Cummings & Daellenbach, 2009). Understanding the processes by which organisations undertake strategic work is of huge importance to MSBs, as the insights that decision-makers obtain whilst making them ultimately drives the success of the organisation (Shepherd & Rudd, 2014).

While Cummings and Deallenbach (2009) examined the emergent themes from 40 years of outputs from “Long-Range Planning” (a journal concerned primarily with strategic thought), they concluded that a small number of emerging themes would shape strategy in the decades to come. They highlighted that organisational change will be central to the “strategic philosophy”, although practitioners should have more confidence to adapt and combine different areas and frameworks. Practitioners will focus on “influencing” rather than

“controlling”- appreciating that innovation may come from a deeper understanding of previous experiences rather than solely looking towards the future.

Their work did not identify a singular definition of “strategic”, although “knowledge and learning” emerged as critical themes in decision-making behaviours.

A link between problems, decisions and behaviour had been identified a number of years before their work. Mason (1981) specifies the characteristics of strategic problems (which they called “wicked” problems) as being distinguished by their inter-connectedness to others, complexity with recursive feedback and having conflicting trade-offs associated with alternative solutions.

2.4.3 Dynamic Capabilities Summary.

The DC perspective emerged out of a key shortcoming of the RBV; it ignores the contributing factors surrounding resources and assumes that they simply “exist”. The field adopts a process-driven approach. It acts as a buffer between resources and an ever-changing business environment, helping a business to adjust its resource mix, which otherwise might be eroded. The importance to this thesis is the knowledge that, whilst the RBV emphasises resource choice, Dynamic Capabilities emphasise resource developments and renewal -contributors to long-term growth.

2.5 Decision-making.

The initial review of the literature shows that decision-making links growth and capabilities together as one whole. When examining the origins of Decision Theory, the author was naturally drawn to Archer (1964), who examined the complexities of decision-making from the perspective of risk and uncertainty. Prior to any decision being made, management teams must undergo large amounts of activity, soul-searching and procedural steps. Procedures, in the context of post-war America (considered to be the birthplace of Decision Theory), were often used to determine whether the cost of securing the information required to make decisions was warranted by the nature of the problem itself (Archer, 1964). Evaluating alternative strategies, a fundamental part of Archer's work, is a cornerstone of Decision Theory.

Contemporary work that is underpinned by Decision Theory highlights the need for businesses to make swift decisions whilst evaluating their options. This balance is essential to survive and grow in any complex market (Nemkova et al, 2015). Quickly adapting to environmental conditions aids the effectiveness of decision-making (Homburg et al, 2008; Dean & Sharman, 1993; Vera & Crossan 2005). Much work has been spent examining businesses whose strategic leaders (the "top management team" or TMT) have the responsibility for decisions affecting strategic direction (Ganster, 2005; Wong, Ormiston & Tetlock, 2011). A clear gap in the literature is how lower level Managers influence strategic direction as much as the TMT.

The variations in the different definitions are particularly illuminating. Early work by Mintzberg et al (1973) establishes strategic decisions as those that set "significant precedents and determine the true direction of the business". The focus here is what happens *within* a business and is something from which current research deviates. Gary, Wood and Pillinger (2012), for example, view strategic decisions as those that take place due to "significant environmental challenges and corporate diversification."

2.5.1 Decision-making and “big data”.

The business world has faced an extensive and varied amount of issues during the last decade. From the globalisation of industry to the development of a multi-layered and multi-national trading environment, where complex interactions between cross-disciplinary teams are commonplace (Morrison, 2010). “Data” has emerged to become a topic of some significance for decision-makers. The explosion in the level of data that is produced, whilst not yet reaching an exponential level of growth, underlines the significance of this contemporary issue.

With the volume of data available to management teams increasing over time, the data itself has been changing considerably with regards to its complexity and ambiguity. The drive towards “effectively” managing data has been established, therefore, as a vital element of a “robust” decision-making process (Waller & Fawcett, 2013).

Organisations that are considered to adopt a “data-driven” approach, one where data analytics are readily incorporated into decision-making, have been seen to be more profitable and more agile than their competition (McAfee, 2012). With the emergence of “big-data” and the proliferation of information that is becoming more readily available to management decision-makers (considered to be in excess of what is usually available in large data sets), new opportunities to increase growth are likely to become more available (Marr, 2015).

Big data, again like many emerging concepts, has attracted numerous definitions. It is incredibly important and relevant to many classifications of business and, potentially very relevant to MSBs. Utilising big data effectively offers considerable challenges and opportunities to organisations of all sizes (Rialti et al, 2019).

The author refers to the editors of the Academy of Management’s perspective on big data as one that captures the combination of challenge and opportunity most succinctly:

Our own working definition is to view big data as a label that refers to the generation, organization, storage, retrieval, analysis, and visualization of data sets involving large volumes and a variety of data, involving new kinds of methodological, epistemological, and politico-ethical issues and questions (Simsek et al, 2019).

Whilst there may be some ambiguity regarding what can be classified as “large volumes”, it is notable that the field transcends merely “size and complexity”; big data has the potential to shape both methodological and epistemological debates (Simsek et al, 2019).

Through an effective analysis of big-data sets, organisations can enhance those decisions that are more “strategic” in nature and more long-term in their outlook (Tambe, 2014). Sales & Marketing teams, who play a significant role in delivering growth for MSBs, are able to enhance marketing decision-making due to having a greater level of knowledge of consumer preferences (Erevelles, Fukawa & Swayne, 2016; Solomon, 2010).

It is not solely sales and marketing-orientated organisations that benefit; efficient, big-data analysis can aid in the development of an optimal approach for managing logistics-orientated decisions (Martin, Abishek & Palmatier, 2017). The analysis of big-data has become a central part of high-performing organisations; mastering big-data analytics has helped organisations to improve production, research and development processes and have a lasting impact on product / service quality (Marr, 2015).

Lepeniotti et al (2020) describe business analytics as the “extensive use of data, that is acquired by diverse sources, statistical and quantitative analysis, explanatory and predictive models, along with fact-based management to drive decisions and actions to proper stakeholders” (Page 57); essentially, big-data analytics comprises the “application of statistical, processing, and analytics techniques to big data for advancing business” (Grover et al, 2018. Page 388).

Big-data analytics are playing an increasingly important role in the world of social media management. Social networks are capable of generating vast amounts of data, capturing individual and group opinions and is present in a wide variety of sectors; public sector health and law enforcement, financial predictions and what / when news is consumed (Deerosejanadej, Prom-on & Achalakul, 2016).

In conclusion, *how* management teams approach problems and utilise data is a core element of effective decision-making in a high-performance environment. The link between decision-making and performance is explored in more detail in the subsequent chapters.

2.5.2 Decision-making and the availability of information.

In exceptional circumstances, often highly results-focused ones, management teams will have to make decisions where there are no previous examples of best practice. Poor decisions often result in the creation of a crisis. When a decision-maker does not have the necessary cognitive “bandwidth” there is a high degree of risk to be associated with any decision being made (Ho, 2010).

Slade (1993) proposed that the characteristics required for effective decision-making could be identified and, therefore, embedded into any recruitment process. Slade also proposed a model that explained how “sensitivity”, a decision-maker’s ability to identify informational inputs and factors within their general environment, is crucial. Someone with a high degree of situational awareness will be able to receive and process multiple levels of informational inputs over a short period of time (Slade, 1993). A person would also require a high level of intelligence, a high degree of comprehension and high-quality education and training (Frankl, 2015). This is certainly relevant to the thesis as MSBs are seeking strong decision-makers when they identify talent.

Good decisions are naturally linked to positive outcomes, a positive outcome is a future state of the world that is desired relative to other possibilities. A “good” decision is an action that is logically consistent with the objectives, the alternatives that are perceived and the information that is available (Bratvold, 2010). It is possible, however, for a “bad” decision to lead to a good outcome. It is in this type of situation when “luck” is often mistaken for “skill”, which can then manifest itself in the shape of a decision-maker who benefits from a disproportionate share of luck and then attributes their success to skill and ability (Makridakis & Taleb, 2009).

When a decision-maker has complete access to all of the information that they need, then all outcomes are known. Observers of strategic decision-making will argue that “speed” (which is effectively the time taken between the first intention to act and the commitment to act) is one of the most critical aspects the decision-making process (Kownatzki et al, 2013). High-speed decision-making enables businesses to obtain a competitive advantage and capitalise on short-term strategic opportunities (Eisenhardt, 1988; Souitaris & Maestro, 2010).

Hodgkinson and Healey (2008) developed the concept of “time-centric” decisions further by arguing that practicing Managers must also work with imperfect information and a general lack of understanding. The idea that information is “imperfect” supports earlier research that identified the decision-making process to be non-linear; highly effective Managers evaluate alternatives as they gather information (Cyert & March 1963; Mintzberg ,1976).

The evaluation of alternatives is both pragmatic and political, especially as managers will have their decisions evaluated and scrutinised. Whether pragmatic or not, the decision-maker uses a combination of judgement, bargaining or analysis (Butler, 2013). It is evident that problem solving starts with the assumption that managers need to apply more effort rather than change their approach to the problem. Some of the early research into problem solving indicated that the previous experiences of management teams were likely to be more of an influencing factor on problem solving performance than the *environment* in which the problem had to be solved (Maier & Thurber, 1969).

Work from this period questions the General Theory of the Firm, stating that there are too many variables for the theory to be effective (Mansfield & Wein,1958). Also emerging was the notion that “group influence” can have a positive effect on decisions. Two types of influence were identified; “normative” influences can have more negative effects than “informational” influences, which are viewed as enhancing positive decisions in the workplace (Deutsch & Gerard, 1955).

According to Deutsch and Gerrard (1955), normative influences within team-based decision-making include persuading non-conforming team members to “go along” with the majority in order to maintain the status quo. Informational influences in team-based decision-making include cohesive attempts to alter attitudes towards a problem in order to achieve the best possible outcome (Kaplan & Miller, 1987). Kaplan and Miller had furthered Deutsch and Gerard’s work by offering that a group will adopt (either consciously or subconsciously) either position depending on the *type* of decision that is about to be made.

The way in which Managers solve problems can set them apart from their peers. Managerial problem solving is understood to have a series of steps that are carried out in order to achieve a specified objective and require the manager to make certain choices. The standard Theory of Problem Solving, originally proposed by Newell (1972), confirms the importance of

“evaluation” in the decision-making process. High-level human cognition is dependent on the mental interpretation and manipulation of “symbol structures” (Langley et al, 2014). This study offered extensions to the standard Theory of Problem Solving, stating that problem-solving typically “interweaves internal reasoning about problem states with an execution in the environment”. The process moves away from physical details during heuristic search.

2.5.3 Emotion and decision-making.

Simon (1997) posited that emotion is an integral element of problem solving and decision-making within organisations, although there is an underlying implication in his work that a broad Theory of Bounded Rationality can only be created when the role that emotion plays in thinking and learning is sufficiently understood across a number of disciplines, from Psychology to Economics (Lerner , Small & Loewenstein, 2004).

Significant advances have been made in how emotions are understood across different fields in the decades that followed the publication of Simon’s “Administrative Behaviour” in 1947. The classical understanding of the motivation required by an individual in order to complete a task (especially one that could potentially have a positive impact on growth) is borne out of the level of “desire” that is shown by them (Maslow, 1943). It follows that decision-making ability and future levels of performance might be forecast by measuring how much desire is being shown.

This is a measurement mechanism that is adopted throughout the majority of recruitment interviews, despite an acceptance that an unrealistic view of future performance is placed upon an unstructured job interview, where an interviewee’s desire and commitment are often seen an indicator of leadership ability and decision-making performance (Britt, Wright & Moore, 2012).

The work of Dweck (1999), on motivation and decision-making, advanced the argument that it is *how* an individual views intelligence that enables the classification of distinctly different “mindsets”. Dweck (1999) theorised that there are two distinct goals of learning: *performance-orientated* goals and *learning-orientated* goals. If an individual adopts a performance-orientated approach then it is one of *validation*, matching performance outcomes against ability. In contrast, a learning-orientated individual adopts the mindset that the overall goal is

to continually develop their abilities through different experiences, whether they be good, bad or complicated.

This incremental theory of intelligence suggests that high-performing people view decision-making situations not as “success” or “failure”, moreover as an opportunity to learn and evolve. This is a differentiator that ultimately leads to greater levels of emotional resilience and long-term increases in performance, rather than the attainment of short-term goals (Dai & Sternberg, 2004).

Building upon Dweck’s (1999) work, the two-factor model of Emotion-Regulation Theory, proposed by Gross and John (2003) offers that decision-makers may be able to put themselves in a position where they can “re-frame” the situation that they are in. This re-framing enables the decision-maker to either lower or increase the emotional impact of the situation, an emotional impact which may be either as a consequence of personality or derived directly from the situation being faced (Panno, Lauriola & Figna, 2013).

Panno, Lauriola and Figna’s (2013) is applicable here as an individual’s current state of mind, as well as their attitudes and experiences, can potentially have a great bearing on their decision-making ability. A positive mood enables a strategic decision-maker to view situations of uncertainty or a lack of clarity as being *opportunity* rather than a *problem*. Decision-makers in a low-mood state often take greater risks and their interpretation of a problem resulted in lower levels of success.

It is notable that adopting a decision-making approach that is significantly embedded in rationality (one whereby every course of action is evaluated and alternatives and pay offs are assessed) may result in a significant source of negative emotion (Luce, 1997). Negative emotions can be a by-product of how an individual manages the stress of uncertainty. Many decisions are made in environments where there is more uncertainty than certainty. Uncertain events are normally expressed in the form of “subjective probabilities”, with decision-makers being reliant on a restrictive amount of heuristic principles that can make them susceptible to making (sometimes sizeable) errors in judgement (Kahneman, Slovic & Tversky, 1982).

Errors in judgement (including levels and frequency) can be viewed as contributing factor to long-term business success. Schwartz (2000) highlights a bi-directional connection between an

individual's emotional state and whether the outcome of a decision is either positive or negative, with the outcome having a major effect on the decider's feelings. This demonstrates that the observation and management of emotional states can be very important for a team manager or business leader. Carpenter (2013) noted the wide body of evidence that exists showing the effect that positive mood has on improving cognitive processes, mental acuity and the ability to consider multiple issues or perspectives.

Age may have an influence on making effective decisions in ambiguous conditions; Schiebener (2017) suggested that there is an age-related decline of decision-making performance. They hypothesised that an older decision-maker takes unconsciously higher risks, something that they believe is underemphasised in management literature.

In addition to the psychological impact that emotions have, they also impact in a physiological sense. Sokul-Hessner, Camerer and Phelps (2013) built upon the work of Dunn et al (2010) to explore the broad relationship between interoception and decision-making under uncertainty; there is an identifiable link between interoception and loss aversion. Interoception can be defined as "the ability to perceive one's inner bodily feelings and is thought to be associated with the capacity of recognising and experiencing emotions" (Zamariola et al, 2019).

2.6 Innovation.

As the insights from the DC and the general decision-making literature show, the wider business environment is becoming more complex and more fluid. Successful, high-performing businesses are not *reactive*. When they approach the development of their business models, innovation is a *proactive*, experimental and continuous process. This forward-thinking approach allows them to widen their strategic responses to disruptions in the marketplace (Ambrosini & Bowman, 2009).

Innovations may occur in response to some form of threat or the identification of an opportunity. Whether the process of innovation should include reflection or be completely forward-thinking has been a subject of debate in the strategic management community. An overreliance on historic knowledge may create a rigid and risk-averse culture and one that will ultimately stifle any ambitions of growth (Leonard-Barton, 1992).

The argument, therefore, is that businesses should dismiss history and commit to future-thinking to inspire innovation. The process of utilising historic insights has been effective in developing new product designs. Analysing the existing knowledge base, identifying where novel practices work and *what* enabled the business to grow to its current position can provide a business with a level of competitive advantage (De Massis, Frattini & Lichtenthaler, 2016).

Whether an organisation adopts a backward or forward-looking approach, scholars agree that innovation is vital, and this is underlined when the mechanics of innovation are examined. Innovation encompasses the articulation of *how* new thinking, strategic plans and ideas should be realised in practice (Dodgson, 2018).

Whether innovation in business is due to luck or judgement has been contested for decades. Authors who write about innovation specifically in the context of smaller, technical businesses have continued to fuel the debate. This is a sector that naturally involves high levels of risk uncertainty and entrepreneurship (Prahalad & Pucik, 1989).

It appears that the *idea* of the “uncertainty of innovation” and not “innovation” itself has been extended to MSBs more readily in the literature; there is an accepted rationale that the

majority of all new innovations that enter any mid-sized market are likely to fail (Dougherty, 1990; Wycoff, 2003). This minimal chance of success supports the view that innovation is really about luck and timing, rather than skill and procedural frameworks. Innovation, as both an idea and practice, is important to any business that needs to grow; successfully developing a culture of innovation can lead to a sustainable source of competitive advantage (Barreto, 2010).

Nelson and Winter's (1982) seminal publication provides readers, both from an Economics and Business Administration background, with the notion that knowledge that provides competitive advantage is *tacit*. Tacit knowledge enables Managers to perform at a higher level and become more innovative and entrepreneurial in their approach than *explicit* knowledge, because effective knowledge transfer calls for novices to become experts through experiential learning rather than simply relying on exposure to information (Seidler-de Alwis & Hartmann, 2008). Tacit and explicit knowledge are *complementary*, providing explicit knowledge with insight, meaning and subliminal intelligence. Despite the identification of these themes, their work did not identify a singular definition of "strategic", although "knowledge and learning" emerged as a critical theme in decision-making behaviours.

2.7 Time.

A key theme in the decision-making literature is the concept of “time”, whether applied to the historic “baggage” that managers carry with them, or the pressures they are faced with due to impending deadlines. Making objective, informed decisions with the future in mind is at the heart of long-term, strategic decision-making (Schiegel et al, 2013).

A distinction should be made between businesses that look either to the past or to the future to determine their objectives. Linear approaches to strategic planning are becoming increasingly obsolete; this change is due in part because linear models only work effectively when the business environment is stable and predictable (Kahane, 2012).

Whilst leaders in some markets apply less attention to future studies, those in high-growth economies (e.g. Germany) invest heavily in foresight techniques, particularly the use of scenario planning (Schwartz, 1998). Scenario planning has been utilised by businesses to different levels of intensity over the last 50 years (Bradfield et al, 2005). It is a widely accepted methodology, although it has been noted that a deeper validation of the technique is required (Phadnis et al, 2015).

When it is used effectively, the process of scenario planning can improve an organisation’s position of strength (Phadnis et al, 2015; Teece, 2007). The method is very much *participatory* and those involved in the process are actively encouraged to engage in diverse thinking; this approach enables the business environment to be viewed from a number of different perspectives (Chermak et al, 2015).

Scenario planning should not be confused with the idea of simply “forecasting” the likelihood of events taking place (Ringland, 2006). It is a managerial decision-making method that deals with *strategic*, long-range decisions. It has been utilised successfully by large-scale corporations, including Royal Dutch Shell and Deutsche Post (Burt & Van Der Heijden, 2003; Phadnis et al, 2009). Despite being heralded as an “incisive, positive and effective tool” (Kahane, 2012), there are debates about its true value (Chermack et al, 2015). Evidence supporting its value has been criticised as being somewhat anecdotal and providing authors with little comfort about its applicability in situations of extreme uncertainty (Wade, 2012), situations that will be familiar to decision-makers in MSBs.

Adding to a user's level of discomfort is the absence of a standardised methodology that contributes to the successful anticipation of future environmental changes (Keough, 2008). There is also a degree of uncertainty about how transferable long-term insights are into a mid-term timeframe. Knowledge of a situation and the effect is having on the key players involved can be of greater importance to decision makers than the numbers that are behind the problem itself. "Back-casting" approaches have seemed perfectly suited as a strategic management tool, working backwards from an ideal endpoint to appreciate how different futures can be obtained (Dreborg, 1996).

When the work of the Institute of Alternative Futures was explored in 1999, scenarios were framed around the fundamental business issues of "employment, personal & organisational understanding and the enablement of business growth" (Bezold, 1999). Hojer and Mattson's (2000) early work on "future-casting" was heavily critical of the tools available to decision-makers at the time, either stating that they oversimplified strategic situations or were too rigid to allow for immediate interventions and action. This contrasts with the anthropological approach taken by Clark (2000), that likens futures work to the directionless (and risky) nature of evolution; humans are somewhat "trapped in the bubble of the present".

The need to shift towards a less cognitive and more physical approach to futures work in strategic planning was argued by Heugens and Van Oosterhout (2001) to be a key component in the evolution of scenarios thinking, allowing for lessons to be learned from corporate mistakes.

Future studies had been, to some extent, "legitimised" in the 1970s with the field being embedded within a number of Business School programmes (Slaughter, 2002). Slaughter (2002) wrestled with an ongoing issue within management education that, despite the inclusion of the field, there was more importance placed upon historical teachings of operational efficiency and control rather than the freedom to examine alternative scenarios. Freedom, creativity and the ability to brainstorm, are all elements of a successful scenario planning exercise (Partidario & Vergragt, 2002).

2.8 Strategic Management.

Strategy- *An integrated and coordinated set of commitments and actions designed to exploit core competencies and gain a competitive advantage – Volberda, 2011. Page 166.*

“Strategy” has always been a term that has been difficult to define explicitly and has a number of different meanings attributed to it (Hafsi & Thomas, 2005). It is understood to be a “specific intention” for a business or individual to act (Porter, 1980). There is an assumption within the field of Strategic Management that the *formulation* and *implementation* of strategy are distinct entities and that *implementation* always follows *formulation*; research, therefore, should be prioritised because of this. In a similar way, the content of strategy (especially how individual strategies are linked to performance when undertaken in a specific context) is addressed far more regularly than the strategy process itself (Mirabeau & Maguire, 2014).

The link between emotion and decision-making performance plays an important part in this study, as faster and more effective decisions may ultimately lead to business growth. It is important for any organisation, wherever possible, to limit the amount of emotion and subjectivity in a decision-making process (Dabke, 2016). Gaining an emotional connection with a client has numerous benefits (Solomon, 2010), however, emotive decision-making can cloud judgement and restrict overall performance (Lerner et al, 2004).

Studies have identified that an extreme emotional state, such as “anger” can adversely affect the perception of risk in a business environment (Lerner et al, 2004). Making decisions in a negative mindset can make the benefits of short-term outcomes seem disproportionately high (Fenton-O’Creevy et al, 2010).

It is possible to regulate the level of emotion that is applied to a decision-making situation (Gross & Thompson, 2007); this process of “regulation” can be extremely valuable as utilising emotion, as a way of placing previous experiences in context, can help increase problem solving performance (Fenton-O’Creevy et al, 2010). The analysis of “emotional content” within different MSB dynamics, therefore, becomes an important part of the thesis.

The field itself contains two main perspectives, “prescriptive” and “emergent”. The prescriptive view understands that the field is concerned with identifying the true purpose of a

business and the tactics and activities that will achieve that purpose (Lynch, 2012). This view adopts the position that the purpose of any organisation will change continuously over time. At the outset, the purpose of a business may be to provide its shareholders with income and, as the business matures, it's purpose may become one of national or international expansion. The competitive nature of business (e.g. changes in access to capital), the volatility of markets and increasing levels of internationalisation can all have an impact on a businesses' purpose (Hitt, 2015).

Undertaking a prescriptive approach to strategy starts with a full analysis of the environment and resources at the disposal of a management team (Lynch, 2012). Prescriptive strategy work has its roots in military planning and also borrows elements from economic theories. One might expect, due to such observations and logical beginnings, that the prescriptive approach would not prove to be controversial. The well-publicised conflict between Mintzberg and Ansoff, however, shows that the approach provided more than just a small element of debate.

In Mintzberg's (1991) critique, he argued that all schools of prescriptive strategy formulation "blindly" followed the Design School at Harvard, a school that offers little more than "a rigid set of tools that are applicable in a minute number of situations". Mintzberg argued that the prescriptive approach was all but irrelevant, insisting that the management world should take note of the "emergent" approach. Emergent strategic management views "strategy" as being without a clear final objective; the constituent parts are adapted over time as the strategy process progresses (Lynch, 2012).

Ansoff (1991) contested Mintzberg's view, claiming that it was "unscientific" and poorly formulated. It was agreed, however, that the emerging strategic model could provide a valid description of businesses operating in a discontinuous environment. As a scientific field, Strategic Management is relatively young. The field saw it's a key period of development in the 1950s, reflecting the desire of businesses to become better at long-range planning, regardless of what economic conditions could arise (Thomas, Byard & Evans, 2012).

Whether MSBs have become more adept at preparing for the future will be explored from within the limited confines of this thesis.

In the early days of strategic management research, scholars were focused on developing analytical and rational models to explain how the external environment impacted on performance (Hodgkinson & Healey, 2011). The field of economics has had a major influence on the strategic management world, from Porter's (1980) analysis of competitive positioning to the Game Theory analyses of competitive interaction (Nalebuff, 1996).

A second, significant shift occurred in the 1990s. There was a move towards *internal* thinking, moving away from an obsession with the *external*. Nerur, Rasheed and Natarajan (2008), in their influential study of strategic management literature, acknowledged that the field is "inter-disciplinary" in enquiry and one that has emerged from the influence of Porter to encounter a world of critical introspection. Heading this period of self-analysis and criticism were Mintzberg (1994), with "Rise and fall of Strategic Planning", and Gilbert (1992), with "The twilight of corporate strategy".

Porter, Williamson, Mintzberg and Pfeffer have clearly had a considerable influence. They highlighted that the dominant perspectives are Financial and Institutional Economics, Industrial Organisation Economics, the Process School and the Power/ Resource school (Nerur et al, 2008).

The current trend is to take a holistic approach, one that incorporates psychology and organisational thinking into this mix. The development of a business's long-term plans and how a leader's personality impacts on performance (due to the level of influence that a business leader has on the direction of a business) has evolved to become an important area of study (Herrmann & Nadkarni, 2014).

Herrmann and Nadkarni's work (2014) into the influence of leadership personality is important as it builds on the work of Chatterjee (2007) who developed the notion that a leader's personality shapes how they interpret and respond to the external environment - ultimately how they begin the strategic thought process itself. Integrating this work with emergent themes on Strategic Management, including how leaders create processes and procedures (Kaiser, Hogan & Craig, 2008), helped to develop the notion that different leadership personality traits have a clear effect on how strategic change is initiated and the overall performance of strategic change implementation (Herrmann & Nadkarni, 2014).

A significant volume of strategic management research is concerned with identifying strategies and attributes that help a business to outperform others (Chien-Ming et al, 2015). This focus on achieving competitive advantage is covered to some degree in the other areas of literature that have been explored. The identification of businesses that achieve and maintain a level of competitive advantage is relatively straightforward, however, it does depend on whether “performance” can be captured within a single, recognisable measurement (Chien-Ming et al, 2015). This will represent a challenge for most business leaders and not just those operating in the MSB sector.

An array of measurements exists for managers, from deployment levels of precious resources (Adegbesan, 2009), to the development of human capital (Ployhart, 2015). There is, however, an acceptance that long-term competitive advantage is only possible if these measurements are achievable in “turbulent” conditions.

2.9 Strategy as Practice.

A familiar theme within strategic management research is the assumption that strategy is something that a business *possesses*, rather than something that they *do* (Johnson, 2007). Strategy as Practice (SAP) represents a significant shift in conventional strategic theory and has reached the contrasting fields of technology, knowledge-management and accounting (Jarzabkowski, 2005).

Strategy is able to both *shape* and *be* shaped by the environment in which it is deployed, thus making those at the “front line” of a business equally as vital as an executive who is more “detached” from everyday situations (Vaara & Lamberg, 2016). Strategy arises from collaborations, social situations and networks, as readily as it does from boardroom discussions (Dahl, Kock & Lundgren-Henriksson, 2016).

Jarzabkowski, a leader in the field of SAP, contends that “strategy” is almost always under construction. This idea supports the view that strategy is a “situated” activity, something that stems from the connection of embedded layers of context, moving from away from an “institutional” level to a “local” level.

SAP focuses on how practitioners who are involved in strategy development are either “enabled or constrained” by their activities (Whittington, 2006). SAP conflicts with the Strategy Process School of Research and attempts to break the monopoly of Economics-based research over strategy research, thus responding to the challenges and issues arising in the field of DC (Jarzabkowski, 2005). Actors within a business cannot be considered to be separate from either the context or the situation in which they act- they are “situated” within society; “situatedness” refers to the way in which an activity both *shapes* and is *shaped* by the society within which it occurs (Jarzabkwoski, 2005).

As is common in the literature that has been reviewed, no clear consensus exists about what constitutes “practice”. Interpretations include viewing practice as a type of managerial action, a set of tools, inherent knowledge, resources or as global discourse (Rouleau, 2013). Regardless of which interpretation is most relevant, it is interesting to note that the role of today’s strategist may need redefining in order to reflect the broad and complex nature of the position (Arnaud et al, 2016).

2.10 The Theory of Administrative Behaviour.

Herbert A. Simon's seminal text, "Administrative Behaviour" aimed to demonstrate how the activities of organisations are understood in terms of their decision-making processes. In the years shortly after its publication in 1947, it achieved a reputation for being one of the key texts to address the *science* of administration (Dahl, 1957). In the decades that followed, the work gained increasing numbers of citations from business authors and, despite the wide-ranging themes presented by the text, interest in its views on decision-making remained undiminished (Dunn, 1988).

The science of Administrative Behaviour has made important contributions to the wider field of strategic management, most notably how organisations are studied in their specific context, how action is taken and "the study and development of methods to improve the strategic alignment between an organisation's capabilities and its environment" (Jemison, 1981. Page 633.).

Simon's understanding of decision-making remains the study's most significant contribution and forms the foundation of other significant works on the rationality of decisions (Ansoff, 1965; Steiner & Dorf, 1980), how decision-making processes can be enhanced (MacMillan, 1978) and how the design of organisations can be improved (Chandler, 1962; Channon, 1973).

The primary concern of Administration Theory is how best to construct an organisation in order that it achieves its goals more efficiently (Simon, 1997). Simon asserted that this "principle of efficiency" stems from any activity in an organisation that is both "rational" and "economic". For Simon, the "economic man" in an organisation makes rational decisions in order to achieve a specific goal.

Rational decision-making for the "economic man" means that a manager can always make a decision when there are valid alternatives presented and that these alternatives can be ranked and easily assessed. Naturally, rational decision-making assumes that, should the same situation arise in the future, the same choice can be made again without fail.

Whilst Simon's "economic man" perspective can provide acceptable insights into an environment where problem management and decision-making follow a linear model, it does

not provide a suitable framework for the highly complex organisations of today. Simon (1997) understood managers to be limited by their unconscious activities, old habits, instinctive actions and the level of available knowledge and information.

The “actual” behaviour of a manager is limited, when compared to objective rationality, because rationality requires a complete knowledge and anticipation of the consequences that accompany every choice that is made. Because of the limitations of the “economic man” model, Simon proposed the notion of the “administrative man”.

The models differ significantly, and the author was drawn to the distinctions that are made between them as being a potential theoretical base for understanding *why* some MSBs are better equipped to grow than others.

Simon (1976) noted that “when economic man *maximises* – selects the best alternative from among those available to him, his cousin, administrative man, *satisfices* – looks for a course of action that is satisfactory or good enough”. “Economic man” deals with the “real world” in all of its complexity. The “administrative man” recognises that the world he perceives is a drastically simplified model; “he makes his choice using a simple picture of the situation that takes into account just a few of the factors that he regards as most relevant and crucial” (Simon, 1976).

Simon theorised that the “administrative man” is more likely to appear in organisations, wrestling with the complex world around him. Working environments present a myriad of information for managers to deal with, different sets of priorities and corporate agendas that may be significantly different to personal ones. The working environment, differing levels of intelligence, decision-making experience and the level of information that is available about problems (and alternative choices) are factors that may see a decision-maker “bound”.

Different business structures may offer more or fewer restrictions (increasing or decreasing levels of “boundedness”). This thesis examines whether managers in high-growth MSBs are less “bounded” by both their individual abilities and organisational structures and, by extension, if the benefits of MBA education are diminished or enhanced over time (according to the “boundedness” of the organisation).

The findings from the exploratory review of literature revealed some significant themes that will be examined in the context of UK-based MSBs. The results of previous studies into decision-making and MBA education show that the origins of business growth are inconclusive and that there are often contradictions. To the best of the author's knowledge, no significant work (at the time of writing) had considered the role of management education (in the form of the MBA) and decision-making (with its associated fields), specifically in relation to the growth challenges that are faced by UK MSBs. The author acknowledges the wide body of evidence that encompasses SMEs and large-scale corporations.

Direction for examining what constrains the growth of MSBs and their management teams is extracted from the wider base of the work of Simon, in the domain of Administrative Behaviour and Bounded Rationality.

2.11 Developing a systematic review of the literature.

The exploratory review of the literature, following the establishment of the research questions (RQs), highlights some emergent themes. Business growth, management skills and the characteristics of decision-making feature prominently across a wide selection of publications. There is a large volume of published research, from across a number of different management disciplines, which may be helpful and informative. The volume of literature that is available can also restrict the objectivity of any research project. Variances in study types and the (often) conflicting perspectives of authors may not always produce results that can be used as the foundation for strategic decision-making models.

The exploratory review helped to crystallise ideas related to the RQs and the review is now further developed by employing a systematic approach to literature selection. A systematic review aims to mitigate the aforementioned challenges through the critical evaluation and synthesis of relevant, high-quality research studies. The selection of these studies was to be as scientifically objective as possible, thus minimising levels of bias.

Selection bias is decreased through the development of a review protocol that serves to crystallise and establish the research procedures (Nightingale, 2009). Within this literature review, the author is seeking to capture everything that is pertinent to the RQs, whilst maintaining the characteristics of being *objective*, *systematic*, *visible* and *transparent*. It is not only bias that should be a concern when examining traditional literature reviews. A traditional approach normally ceases when authors have obtained “enough” data from studies that they are familiar with and rarely have a measurement framework that evaluates the reliability of descriptions from within the research itself (Cooper et al., 2018).

It is vital for any author who conducts a systematic review to take the position of a “judge”, as opposed to one of a “lawyer”. This change in perspective will allow an author to evaluate evidence better, in order for them to arrive at the position of optimal judgment, instead of making the “best possible case” for one side of the argument over the other (Baumeister & Leary, 1997). Jesson (2011) contends that there are a number of essential stages that must be followed in order to undertake a systematic review correctly. These stages include designing the research plan, searching for literature, applying conditions for exclusion / inclusion and the criteria for assessing the appropriate levels of quality.

2.12 Systematic literature review design process.

The initial, exploratory review of the literature indicated a complex and highly competitive environment for MSBs; management teams are likely to face considerable challenges relating to decision-making and performance.

Building upon the exploratory review, the aim of conducting a systematic review was to understand more (combining greater depth with increased objectivity) about the challenges that are faced by MSBs (as outlined in the introduction and in the exploratory, scoping review) and how they are addressed in the MBA literature.

The main objectives of this thesis are re-stated:

- Do MBA programmes meet the requirements of MSBs that are seeking to grow?
- How can the critical lessons from Management Science literature enhance the Theory of Administrative Behaviour and the Bounded Rationality model (To aid decision-making in MSBs)?

Prior to conducting a systematic review of the literature, the following steps were taken:

1. Establish whether the planned systematic review has been done before: The author has not seen any evidence to show that a systematic review of this type has been undertaken previously.
2. Formulate the preliminary inclusion and exclusion criteria.

2.12.1 Systematic literature review criteria.

Objectively identifying the timeframe over which the systematic review will take place is important. The author noted that the House of Commons Briefing Report (2018) showed that the MSB sector has, on average, represented at least 15% of GDP since 2000. The absence of significant growth or decline beyond this point made it logical to examine what the critical discussions in management literature have contained in the last 3 decades.

Publications: Top-ranking (by impact factor and ABS rating, 4* only) journals in the fields of General Management, Ethics and Social Responsibility, Management Development & Education and Strategy are explored:

- Academy of Management Journal.
- Academy of Management Review.
- Administrative Science Quarterly.
- British Journal of Management.
- Journal of Management Studies.
- Academy of Management, Learning and Education.
- Strategic Management Journal.

2.12.2 Search terms.

- **Inclusions:** MBA, MBA Education, MBA curriculum, growth, problem solving, decision-making, management skills, leadership, strategy, capabilities. *Including Synonyms.* The study, whilst employing multiple methods, is predominantly qualitative in selection, therefore observational, experimental, and qualitative studies are included.
- **Exclusions:** Studies that cite “executive education” and not “MBA education”.

The author conducted the systematic review in conjunction with a quality checklist for both qualitative and quantitative studies (Appendix 2: Quality checklists), recognising that the purpose of a systematic review is not to provide a full set of “answers”. A “complete” review is beyond the scope of this thesis. The main objective is to report accurately and concisely about what is known and what is not clear regarding the questions arising in the review (Briner et al, 2009)

2.13 Management skills.

“Management” dominated the selected literature (0.75% Weighted average – Frequency of identified word relative to the total words counted). Management skills, as a direct result of focusing on procedures and process improvements, are an essential element in developing entrepreneurial thinking (Agbim, Owutuamor and Oriarewo, 2013). Whilst Business Schools originally existed to help management teams to drive growth, the space available for entrepreneurial thought in the original schools was often taken up with the development of more professional practices (Currie, Davies & Ferlie, 2016).

Marek (2014) highlighted the growing need for management activities to be more closely aligned with the Marketing functions in the business; relationships between the two professions have long been a source of weakness. Marek (2014) noted that it may be less important for a smaller organisation to have a grand, hierarchical strategy. The perceived lack of complexity, however, in a smaller business environment should give an organisation an advantage over the larger enterprises.

2.14 MBA skills.

The drive towards obtaining competitive advantage and delivering results has prompted a number of Business Schools to incorporate management simulations into their MBA programmes (Quigley, 2013). Team-based simulations are seen as being an ideal way for students to experience the complexity and ambiguity that can sometimes exist at a team level. Quigley (2013) called for more research to better understand how the development of leadership efficacy can lead to more insights into the impact of team-based business and management simulations.

Interestingly, the first experience that a student has of a performance metric and competitive situation will have little to do with the practice of management, simulated or otherwise. Kuncel, Crede and Thomas (2007) shows that the most commonly used tool for admitting students onto MBA programmes and predicting success is the Graduate Management Admissions Test (GMAT). There have been a number of studies demonstrating that academic performance may have little in common with job performance, and therefore the GMAT may be deceiving businesses and students alike (Kuncel, Crede & Thomas, 2007).

Intergenerational learning, prompted by societal, technological and structural changes in organisations, can aid knowledge transfer and develop team-based learning and construction (Gerpott, Lehmann-Willenbrock & Voelpel, 2017). This may help alleviate any issues arising from inexperienced cohorts.

Some authors have called for changes to programme delivery, especially as MBA course content often does not mirror a business landscape where services dominate (Ford & Bowen, 2008). Whilst there would be major challenges involved with any restructuring of programmes (to reflect the dominance of services), it may be advisable in order to prepare students accurately and appropriately for their future careers.

2.15 Criticisms of MBA programmes.

Coetzee (2011) highlighted that, whilst there have been decades of criticism and critique regarding the state of MBA education, more questions should be asked about the role of MBA programmes and Business Schools in society. Coetzee stated that leadership teams should be “entrepreneurial visionaries who possess the conviction to take an international mindset and apply it to problems.”

Reform of MBA Curricula has long been debated. Navarro (2008) highlights an unsatisfied requirement to embed soft-skills within programmes; “team taught cross-disciplinary courses, integrative general management cases, guest lectures... all should be included” (Navarro, 2008).

Dreher (2004) questioned the selection processes at all major Business Schools, highlighting that students without significant prior work experience performed better than their more experienced counterparts and were more “flexible and creative” when it came to selecting businesses to work with after they graduated. An explanation of this may be obtained, in part, from the work of McCabe (2003), whose exploration of cheating behaviours of MBA students underlined that the majority of human behaviour “is learnt through the influence of example”.

The inference here is that the strength of experiential learning in the classroom is a far greater predictor of success than the results or qualifications that a student brings into the programme.

Shepherd et al (2008) continued the critique of the MBA programme admissions processes by building on Mintzberg and Gosling’s (2002) contention that the level of performance demonstrated in MBA programmes has little bearing on the broad requirements of management teams in complex organisations. Mintzberg also contends that the relatively short, minimum requirements of work experience (often just 2-3 years) provide an inadequate grounding for assimilating new information and making effective decisions.

Mayo et al (2012) suggested that leaders who develop a more accurate sense of self-awareness will be more adept at dealing with the challenges and intricacies of managing organisations that have dynamic cultures and who operate in increasingly fluid business environments. They develop their work by identifying four critical leadership competencies: “self-management,

behavioural flexibility, self-confidence and interpersonal understanding”. Importantly, these competencies are not explicit or widespread in the curricula of leading and second-tier MBA programmes (Appendix 2.1: MBA Curricula summary).

Criticisms of MBA programmes can be traced back a number of years and have largely focused on the “trade school debate” and the level of rigor that should be evident in teaching and research (Hall, 1968). Leadership is often a short, concentrated piece of educational development. Leadership skills are better developed when teaching is delivered in incremental stages and continually reviewed over a longer period of time (Costigan & Brink, 2015). There are also arguments that the topics of “Business Ethics” (Rutherford, 2012) and “Diversity” (Bell et al, 2011) should be part of a standalone, long-term delivery programme.

The development of interpersonal skills in MBA programmes has been conspicuously absent from the programme design process (Rubin & Dierdorff, 2011). A lack of a continuous focus on ethics has contributed to an educational culture where profit maximisation has overtaken ethical thinking and has been one of the main contributory factors to illogical and unethical management behaviour patterns (Shareef, 2007).

How much do MBA graduates think about an organisation’s ethical behaviour when they consider their next role in business? MBA job seekers do seek a level of congruence between their own personal values and those of the organisation they are seeking to join (Montgomery & Ramus, 2011). Montgomery & Ramus (2011) highlight that having an intellectual challenge is 25% more important when it comes to graduate decision-making than the financial benefits that follow. This can be somewhat counterintuitive when one looks at the structure of MBA league tables.

An alternative perspective on the teaching of ethics in business comes from Hartman (2006), who argued that “integrity” and “character” can be taught and that, by modifying their intentions and becoming more reflective, better decisions can be made that benefit both the individual and the organisation. Indeed, institutionalising ethical thinking early on in a programme can have a profound effect on the capabilities of managers and businesses (Nkomo, 2015). There is little happening to suggest, however, that it will become permanently embedded within MBA curriculums (Rasche, Gilbert & Schedel, 2013).

There has long been an institutional bias towards face-to-face delivery in MBA education, even though the number of distance learners and blended learning deliveries has grown considerably in recent years (AACSB, 2018). Management education should be a collaboration between the institution and the learner, taking into consideration the different learning characteristics, ethical perspectives, cultural backgrounds and experiences that abound (Redpath, 2012). Any disparity in online and face-to-face delivery may, therefore, contribute to the “ethical deficit” existing in Business School / MBA education.

2.16 Adaptability and flexibility.

These concepts contribute to the perspective that organisations are required to be more agile and flexible in their approaches if they are to achieve a form of competitive advantage. Strategic decisions are collaborative; and managers learn through *doing* rather than through *theorising* (Adner & Helfat, 2003). Adner and Helfat (2003) recognised the importance of DC traits that include reflexivity and ethical behaviour and enable management teams to build, reconfigure and deploy management resources to the advantage of the organisation.

It has been challenging, however, for organisations to motivate employees to become more culturally adept and able to manage cross-cultural teams (Ramsey & Lorenz, 2016). Ramsey & Lorenz (2016) contended that, by increasing the level of “cultural intelligence” that managers have, there will be an increased level of satisfaction with the learning process and they will be more able and willing to respond to the demands of a dynamic and changing organisation. At the heart of the narrative surrounding businesses and MBA students, “decision-making” is a central theme, linking together with “leadership” and “performance” (Appendix 2.2: Weighted averages content analysis summary).

Decision-making is a cognitive function and it has been seen that leaders are constantly faced with complex, data-orientated tasks that require a high-degree of interpretation and flexibility of thinking (Quigley, 2013). Leaders with greater levels of cognitive abilities are more likely to succeed when faced with these tasks and they are also more likely to seek out support programmes and development mechanisms, such as training courses (Maurer & Yuping, 2007).

When recruiting students to MBA programmes, the GMAT is often seen to be the best predictor of decision-making ability (Kuncel & Thomas, 2007). Whilst evidence does support the GMAT as being a better predictor of future success than a-priori grades, there is some concern that situational factors will weigh heavily in the recruiting institution’s mind, thus reducing the level of objectivity in the decision-making process (Kuncel & Thomas, 2007). As has been discussed, levels of morality and ethics greatly affect the ability of Managers to make the “right’ decisions.

Psychology-based research highlights that questions about morality (“*What* should I do? *Why* am I doing this?”) occur both prior to and after a decision has been made (Michaelson, 2016).

Michaelson (2016) advocates a different approach to evaluating morality in decision-making, by utilising deep novels to expand the narrative. Michaelson understands there to be a potential to learn more effectively and apply decision-making better in a business context by doing this.

Decision-making in the context of complex groups, as is often found in an MSB environment, can be improved through increasing levels of diversity in the team dynamic. Intergenerational teams are more inclined to discuss situations together and combine their perspectives (Gerpott, Lehmann-Willenbrock & Voelpel, 2017). There is a significant contextual difference when decision-making in manufacturing and service-led organisations are compared.

Ford and Bowen (2008, Page 242) noted that “co-producing a solution to a customer’s problem or making decisions with the customer present differs from the rational decision-making process by adding uncertainty and time constraints that are different than seen in manufacturing.” This is an important element to consider within this thesis, as manufacturing is still a sector that houses a large proportion of MSBs.

Studies into decision analysis, as a core part of MBA curricula, show that it is present in only 18% of MBA programmes, often as a standalone teaching module (Navarro, 2008). It has also been identified that an individual’s “personal power”, when it comes to decision-making, should be explored more deeply. Clegg (2009) explains “power” to be an individual’s potential ability (or capacity) to exert some form of control over an individual, an organisation or their environment. This is important as “emotion” sits at the heart of decision-making and a student’s ability to become aware of the irrational, emotive and subjective aspects of organisational decision-making are critical if they wish to increase their level of “power” and performance.

Mayo et al’s (2012) evaluation of Transformative Learning Theory (Mezirow, 1991) demonstrated that MBA programmes would benefit from a consistent delivery of peer-to-peer feedback amongst students to increase levels of self-awareness. They argued that, because of the positive educational outcomes gained from increased levels of self-awareness, Business Schools would see the benefits of a standardised peer-evaluation system across all of their modules. This perspective is supported by Arbaugh and Raquel (2006), who demonstrated that collaborative learning reinforces teaching methods more effectively and leads to more positive experiences and outcomes.

2.17 MBA curricula.

Some of the most marginalised subjects in MBA curricula, according to Costigan & Brink (2015), are “decision-making and problem solving.”

When a structured visualisation (Appendix 2.3: Nodes coded.) is applied, showing hierarchical data based on the number of nodes coded, one can see the prominence of specific themes: “Leadership”, “education” and “decision-making” are explored mainly from the perspective of the student and not from the perspective of a business.

Overlaying the visualisation with additional cluster analysis indicates that there are four dominant clusters in play. Firstly, MBA programme design is both shaped from *within* and developed *for* its programme members. This may be unsurprising when one takes into account that MBA participants are often viewed as “customers”, and the notion abounds that the “customer” should always be at the heart of any marketing process (Kotler, 2016).

Decision-making links predominantly to “corporate thinking” and, whilst it forms part of some high-ranking MBA programme curricula, it does not feature heavily in terms of applied research or improving overall management decision-making. Leadership behaviour is an experiential process and one of the criticisms often levelled at MBA education is that it can be “too theoretical and lack practicality” (Pfeffer & Fong, 2002).

It would seem here that certain MBA programmes that have been subject to some form of review have heeded some of these criticisms and are trying to get their students closer to the problems that businesses are facing. Social impact and ethical challenges feature prominently but, once again, this is very much from the perspective of students and not that of businesses themselves.

2.18 Summary of the systematic literature review.

“Management”, “decision-making”, “performance”, “leadership”, calls for “MBA curricula re-design” dominate the systematic literature review. These interlinking themes are reflected in the semi-structured interviews with MSB Key Informants.

Table 2: Thematical summary of key literature

Theme.	Authors.	Implications for MSBs.
“Management”.	Saggurthi & Thakur ,2006; Boyatzis et al 2002; Kor & Mesko 2009; Wright et al, 2018.	Possible inclusion of “Negative Capabilities” thinking. Management practices benefit from increased levels of emotional resilience. Evidence of the benefits of evidence- based management techniques – are MSBs recruiting managers who have been trained in this way?
“Decision- Making”.	Harrison et al, 2007; Benjamin & O’Reilly ,2011; Garvin, 2007; Adner & Helfat ,2003; Waddock & Lozano ,2013; Boyatzis et al 2002; Liang & Wang,2004; Ungueranu & Bertolotti, 2018.	Teaching “mentality” rather than “knowledge” is critical for management team learning, Strategic decisions require change over time. Reflection aids management decision-making.
“Performance”.	Samuelson ,2006; Bolton & Nie ,2010.	Goal orientated “mindsets” can lead to increased levels of performance. MBA programmes not leading to performance increases in social impact. Educational performance can only be achieved through continuous review of objectives.

“Leadership”.	Raelin, 2006; Mayo et al 2012; Cox & Hassard, 2018.	Action learning has a positive impact on leadership. Peer feedback can have a positive impact on leadership. Socio-material relationism can enable greater critical analysis of leadership in a contemporary setting.
“MBA Redesign”.	Hoover et al, 2010; Thompson & Purdy, 2009; Barr et al. 2009; Saggurthi & Thakur, 2016; Bolton & Nie , 2010; Samuelson, 2006; Navarro, 2006;Connolly, 2003; Garvin, 2007;Verzat, 2009, Rubin & Dierdorff, 2011; Miller, Curtis & Williams, 2012; Dobrow and Posner , 2011; Arbaugh & Raquel , 2005; Navarro 2008; Grenier, Bhambri & Cummings, 2003; Waddock & Lozano ,2013.	Are we teaching the right people, the right things at the right time? Are the right educators involved in the curriculum design process? Technology based firms may require a separate curriculum / pedagogical approach. Call for management education to be “personal”, not generic. Student motivation has a great impact on learning performance. Course content should be in line with stakeholder needs. Pedagogy more important than content. Delivery methods are the main area for obtaining competitive advantage in online programmes.

2.19 Contextualising how MSBs and MBA programmes intersect.

The review of relevant literature reinforces that a gap exists in terms of management education and growth-related decision-making, specifically in the context of MSBs. The chapter concludes with a contextualisation of the relationship between the MSB business landscape, management education (in the form of the MBA), and the diverse needs of business decision-making.

One of the most established areas of management science, *strategy*, has evolved into a complex, varied and interconnected set of disciplines. The narrative that surrounds the different definitions of strategy in the context of business performance (“strategy” has long been a Keystone of MBA curricula) is illuminating. There is a palpable sense of change, presented as constant process of *evolution*, if not *revolution*.

2.20 Evolution of strategic thinking.

The following table summarises the journey that Management Science has undertaken in the past century from a strategic perspective.

Table 3. Evolution of Strategic Thinking.

Author (s)	Year of Publication	Perspective of Strategy
Barnard, C	1938	Barnard distinguishes between organisational thinking and individual thought, the notion that strategy is developed for the good of the organisation is supported.
Drucker, P	1955	Strategy becomes part of entrepreneurial thinking.
Chandler	1962	Chandler examines the long-term interests of an organisation and how this is the main strategic driver.
Ansoff	1965	Strategic decisions need to be made in the context of an organisation's own unique environment. Decision-making is either "Strategic", "Administrative" or "Operating".
Mintzberg	1967	Mintzberg views strategy as the result of a series of managerial decisions.
Schendel & Hatten	1972	Both called for a new perspective on strategic thinking. Strategy should be the fundamental undertaking of an organisation.
Ackoff	1974	Ackoff demands a greater examination of the future. For problem solving to be effective, time must be invested in reflection and analysis- noting that too many organisations solve the wrong problem.
Ansoff	1979	Strategic planning should be approached in a rigorous way, combining sets of practical tools.

Mintzberg	1979	Mintzberg now calls for a greater understanding of how organisations work, how decision processes link together with authority and knowledge within an organisation.
Porter	1985	Porter establishes that strategy is the output of either defensive or offensive techniques that should be defended and then developed into a form of competitive advantage.
Fahey	1989	Resource allocation becomes more important. Greater resources lead to strategic decisions and to the creation of competitive advantage.
Mintzberg and Quinn	1991(b)	Strategy can now be understood as a process of moving between “Plan”, “Ploy”, “Pattern”, “position”, and “Perspective”.
Porter	1997	Strategy is dependent on doing things differently from the competition, either different activities or the same things done differently.
Wright, Kroll & Parnell	1997	Strategy is concerned with delivering against the requirements of the top management team.
Barney	2001	Strategy is the Theory of the Firm when it comes to delivering successful operations. Performance is influenced directly by strategy.
Hardy	2001	Developing the notion of strategy as discourse- Hardy et al examine the linguistic nature of strategising and how language shapes the practice of strategy.
Jarzabkowski	2008	Strategy as Practice becomes an established perspective. Strategy is not something that an organisation develops. It is more than just its position- it is something that it <i>does</i> , and also multiple actors <i>do</i> .

The world of strategic thinking has, in some respects, undergone significant change since Barnard's seminal work of 1938. Interest in strategy has evolved from being inward-looking to having more of a holistic approach. The advent of a linguistic standpoint to the understanding of the complex nature of strategy could also be viewed as somewhat *revolutionary*.

Drucker (1955) advanced the idea of entrepreneurial thinking and this caused a paradigm shift in the world of Management Science. Concepts that would be developed further in the coming decades, culminating in the publication of "Innovation and Entrepreneurship" in 1985, included the notion that those organisations who are first to enter market would hold a dominant and competitive advantage.

The concept of competitive advantage evolved into the realisation that managers could lead their teams and organisations more effectively through the use of more innovative practices (Drucker, 1985). Decision-making is a fundamental component of Drucker's work. Drucker's perspective, "that an entrepreneurial leader is effective as long as they weigh up the appropriate risks and opportunities", is reflected in his later publications and underlines that performance can be a by-product of cognition as much as it may be a result of resource allocation.

Chandler was seen to be an early adopter of a "centralisation culture", advocating that businesses develop and co-ordinate strategy from a central function, thus enabling business units to deploy strategic tools and manage their day-to-day operations effectively. The common thread that runs throughout these pivotal works is that *strategy*, and therefore business *success*, is ultimately reliant on the extent to which management teams *think* and *act* effectively.

2.21 The emergence of “Strategy as Practice”.

Hardy and Thomas (2014) recognised that the Strategy as Practice literature demonstrated that decision-makers will often utilise discourse within their own strategy development. Previous studies into business behaviours identified numerous areas where discourse has become part of the “fabric” of the business. Business negotiations (Ehlic & Wagner, 1995) social media for corporate communication (Darics, 2015), and the role that verbal communication patterns play in successful and unsuccessful inter-cultural collaborations (Clyne, 1995) have shown the author that the “language” of strategic (growth-related) thinking should be an important element of the thesis.

2.22 Evolution of the MSB landscape.

MSBs are defined as “having a turnover of between £25-£500 million” (BIS, 2011) and have between 50 and 249 employees. It should be understood that where a business exists with more than 50 employees, but turns over less than £25m, it is classified as an SME. When a business has a turnover in excess of £25m, but has less than 49 employees, it is classified as an MSB.

The MSB sector has enjoyed a steady year-on-year level of growth, even when one considers the global financial crisis of the last decade (ONS, 2017). The BDO (2017) highlighted how MSBs (The “Economic Engine”) outperform the FTSE 350 and SMEs in the areas of turnover, profit contribution and employees:

Table 4: “Economic Engine” overview.

	Turnover (£)	Turnover (2015)	Turnover (2011)	Turnover (increase on 2015)	Turnover (increase on 2011)
Economic engine	£1.249tn	£1.203tn	£927bn	3.83%	34.78%
FTSE 350	£1.666tn	£1.907tn	£1.476tn	-12.63%	12.81%
Small businesses	£147bn	£159bn	£148bn	-7.68%	-0.62%

	Profit (£)	Profit (2015)	Profit (2011)	Profit (increase on 2015)	Profit (increase on 2011)
Economic engine	£97bn	£82bn	£81bn	19%	20%
FTSE 350	£97bn	£140bn	£175bn	-24%	-44%
Small businesses	£19bn	£24bn	£16bn	-26%	15%

	Employees	Employees (2015)	Employees (2011)	Employees (increase On 2015)	Employees (increase On 2011)
Economic engine	7.5m	6.79m	4.93m	11.4%	53.6%
FTSE 350	7.2m	6.9m	6.1m	4.5%	17.9%
Small businesses	1.6m	1.46m	1.03m	9.2%	54%

Source: BDO.

Since 2000, the number of UK businesses (as measured by registration) has increased by an average of 3% each year, providing 2.2 million more businesses in 2016 than in 2000 (House of Commons Briefing Report, 2018). In 2017, there were 7,000 large-corporate businesses accounting for only 0.1% of the population, but with 40% of employment levels and 49% of

total turnover. The large-corporate business population is relatively unchanged in this time, highlighting that the growth in the volume of MSBs may be driven by the growth of SMEs. The (comparatively) low volume of MSBs that reach large corporate status has prompted the focus for the research questions outlined earlier.

The levels of investment into the MSB sector have been significant in recent years. The Business Growth Fund, which provides equity investments up to £10m for minority stakes in growing organisations, has deployed over £500m into nearly 100 MSBs (Fairbairn, 2018). Other government backed funds that have supported MSBs include the British Business Bank, the Enterprise Finance Guarantee and the Green Investment Bank.

The sector is not without strong levels of investment and access to finance, it also has a ready-made source of strategic decision-making expertise in the form of the growing talent pool of MBA graduates. MBA graduates are a logical choice for talent acquisition in MSBs, providing organisations with managers who are already trained and have a good level of decision-making expertise.

The overall demand for MBA graduates has grown over recent years. Roles that drive business growth (including sales, marketing and analytics) are the most popular functions that employers are seeking to fill with MBA talent (GMAC, 2018). The GMAC report highlights that MSBs are more likely to hire MBAs than larger corporate organisations, placing graduates into senior-level and executive-level positions.

Chapter 3.

The development of a theoretical framework.

3.1 The applicability of the Theory of Administrative Behaviour.

From the conception of this thesis to its conclusion, two expansive questions were given continuous attention: What makes MSBs to be distinctive from each other? Why do some MSBs expand and fulfil their growth aims, whilst others remain static or go into decline?

Chapter 3 explores the various theoretical frameworks that were given consideration when contemplating what could best illustrate what was happening within the different decision-making environments at UK MSBs. An appropriate theoretical framework should help to address the gaps that have arisen during the review of literature and complement the dynamics of the environment and phenomena under investigation (Hart, 1998).

The suitability of the Theory of Administrative Behaviour became more apparent after reflecting about the *act* of achieving growth; a key requirement of any successful organisation is to *achieve* through *actions* and *purpose*. The literature indicates that growth cannot be relied upon to simply emerge by chance, good fortune or due to an alignment with market movements; growth is a by-product of decisions (effective), behaviours and skills.

In its simplest terms, administration is the act of “getting things done”; action is a major component of a successful administration structure, reflecting an organisation’s ability to communicate, to make the right choices and to evolve as an entity (Bose, 2012). As indicated by Bose (2012), administration is an incredibly complex set of activities that draws upon multiple disciplines that include sociology, anthropology, philosophy and psychology (Mustafa, 1992). This combination of complex human and structural factors piqued the scientific interest of the author and followed numerous discussions with MSB management teams regarding the idiosyncrasies of their different decision-making environments.

There have been, of course, a number of different theories that have been developed during the last 40 years that could help to explain the interaction between leadership and performance, between decision-making and growth and that also outline the differences between personality and organisational structure (Mustafa, 1992). These theories have been inspected alongside the

Theory of Administrative Behaviour, as a basis for exploring the different phenomena presented by MSBs and a comparison of the alternative theoretical frameworks follows.

3.2 Considering alternative theoretical frameworks – Personality and Organisation Theory.

It was Argyris (1964) who presented a model of both human and organisational behaviour that could be relevant to this thesis (Personality and Organisation Theory), within which specific organisational structures come into being when objectives are too complex for one individual to manage. This theory is certainly relevant today and resonated with the author because it places considerable emphasis on the team dynamics that are at work within an organisation. The ability to work effectively in a team is a characteristic prized by the hiring managers of leading MSBs and larger corporate entities. Argyris also contended that managers working within a business are *themselves* complex organisations - making decisions, having individual goals and providing the energy for the organisation to move forward.

The subsequent validations of Personality and Organisation Theory have shown that those who possess low levels of self-actualisation are more inclined to postpone making difficult decisions (Bonjean & Vance, 1968). There are also significant differences between an individual's requirements and the strategic objectives of any organisation (Farris & Butterfield, 1972). Connecting these two works, Holloman and Hendrick (1972) showed that as job complexity decreases, so does job satisfaction. This correlation was of interest because MSB leaders had discussed (albeit anecdotally) how some staff members had moved on, *before* they had become effective managers, due to work not being as interesting or demanding as they expected.

3.2.1 Considering alternative theoretical frameworks – Structural Contingency Theory.

Structural Contingency Theory provides a different, resource-based perspective, to both decision-making and task completion; businesses require more decision-makers in highly complex situations and in times of turbulence (Pennings, 1975). It is a theoretical framework that has been deployed differently in a number of environments and the theory has reconciled some of the debates that exist within corporate entrepreneurship and financial risk-taking (Burgers, 2016). It has also been used to explore whether managers act out of their own self-interests or achieve their objectives via a series of coordinated efforts (Volberda, 2011).

Whether managers are driven by organisational growth objectives or by something more personal, the coordination of managerial effort is of great interest, as the study set out to examine why different MSBs are achieving differing levels of growth.

3.2.2 Considering alternative theoretical frameworks – Systems Theory.

There were some justifiable reasons for utilising Systems Theory, a framework that is relevant as it can be utilised to evaluate the “inter-connectedness” of key elements within an organisation. This could be particularly useful when analysing *how* an organisation interacts and, ultimately, *makes* its decisions. It has been previously employed most effectively when exploring the challenges created by “organisational conflict” (Pondy, 1966).

Whilst there are different perspectives of Systems Theory, Pondy’s was viewed as being the most relevant, as it considers conflict between the interconnecting elements of a system – much as one might consider MSB management teams to sometimes be at odds with the overall decision-making requirements of the organisation.

Pondy (1966) described “conflict” as meaning some form of *hostility* or *imbalance* when it comes to “decision-making, information processing, the elaboration of sub-goals, the structure and use of communication channels and search activities”.

3.3 From the Theory of Conflict to the Theory of Administrative Behaviour.

Whilst these theories are effective and would have been applicable for use as a framework for this thesis, the author was drawn to a source of inspiration for many proponents of Systems Theory – the March/ Simon Theory of Conflict. In their 1958 publication, March and Simon began their work with a review of the theories that understood managers to be driven by the motivational and cognitive aspects of human behaviour – *how people think, act and behave*.

In earlier firm-based theories, changes to the environment and the internal decision-making structure of organisations were seldom taken into consideration. March and Simon concluded that an individual will, ordinarily, face one of two different decision-making situations: a manager must decide whether to “participate”, to make a vital contribution to the overall success of an organisation or whether to “produce”. Production requires an individual to weigh up the consequences and alternatives of carrying out a required action (March & Simon, 1958).

The decision to “participate” is based on the concept of “organisational equilibrium”, thus explaining how decision-makers need to be in balance with their business in order to guarantee their ongoing participation and positive contribution to the organisation. This might be a universal condition, applicable to corporate entities and co-operatively owned enterprises alike. Even within a co-operatively owned enterprise, there will be variances between the levels of economic, social and cultural needs that are exhibited by individuals working together within the association.

Whilst this thesis does not examine the dynamics of co-operatives, it may be explored (by way of comparison) in future research projects. The notion of “equilibrium”, however, is pertinent here.

As Tosi (2009) explained, “organisational equilibrium” is derived from several critical factors, summarised/ adapted below:

1. An organisation is a *system* that consists of the interrelated social behaviours of its participants. Within an MSB, each decision-maker will be drawing upon different levels of social experience and will be dependent on the experience levels of the management team.

2. Each participant and group receive inducements from the organisation in return for their contribution. An initial case study review of a cross-section of MSBs showed that there are clear differences in inducements and performance-related metrics from one industry to another.
3. An individual will continue to participate so long as the inducements he or she receives are greater than his or her contribution. This evaluation is measured by the individual in terms of their own values, which may include non-economic ones.
4. The contributions of various groups are *sources* from which the organisation creates inducements to pay others.
5. Equilibrium (or solvency) occurs when the organisation can continue to provide inducements to its members, in order to obtain their contributions.

The decision to *produce* is based on a set of factors that are different from those affecting the decision to *participate*. It is a function of both the character and perceived consequences of the evoked set of alternatives that emerge from the cues perceived within the environment (both *internal* and *external* to the organisation) that are then weighed against the goals and values of the individual. Essentially, can high-performing decision-makers receive a greater reward for their exertions in other organisations? Is “driving” an MSB forward towards growth targets really worth their while?

External alternatives, as perceived by the individual, may also affect their motivation to produce. Leaving an organisation may be preferable to complying with its performance requirements or “group norms”. This motivational element may help to explain some of the anecdotal information given by MSBs regarding staff movements and retention.

The Theory of Conflict can be viewed as being the pre-cursor to the Theory of Administrative Behaviour, in which Simon (1958) explored in detail the extent to which rational and logical behaviour is developed in organisations.

There will have undoubtedly been many significant changes experienced in the UK MSB landscape since the final publication (1997) of Simon’s seminal text “Administrative

Behaviour”, though that does not detract from its relevance and suitability. Simon (1997) contended that an organisation is constructed around a series of communication-related activities, relationships (internal and external) and decision-making structures. This perspective complemented the prior experiences and understanding of the author, who particularly connected with Simon’s views on decision-making:

Much of what an executive does has its principal short-run effect on day-to-day operations. The executive makes a decision about a product, price, a contract for materials, the location of a plant, or an employee’s grievance. Each decision has the immediate effect of settling the specific question at hand. But the most important cumulative effect of this stream of decisions and refusals to decide- like the erosion caused by a steady trickle of water- is upon patterns of action in the organisation surrounding the executive.

Every Executive makes decisions and takes actions with one eye on the matter at hand and one eye on the effect of this decision upon the future pattern – that is to say, upon its organisational consequences. - Simon 1997. Page 19.

The concept of “success-orientated” decision-making was an attractive framework for this thesis; one that is even more beguiling when the idea of “boundedly rational” behaviour is considered alongside it. Simon (1997) stated that the level of alternatives that exist when decisions are made, along with the level of intellectual capital that is immediately available, serves to *limit* human behaviour. Limiting human behaviour may ultimately restrict what managers are able to achieve. In the following chapters, an argument is put forward that shows that human behaviour (in the context of an MSB manager /decision-maker) is also driven by *how* situations are viewed and the “time horizons” that situations are viewed in.

Whilst debates about the strength of Simon’s theory continued, Simon himself debated the relative strengths and weaknesses of other key works. Simon was particularly critical of Taylor’s perspective of Management Science, as outlined in his publication of 1911, “The Principles of Scientific Management”. In this publication Taylor viewed collaboration between management and staff as being absolutely *essential*. Taylor progressed this perspective further by arguing that if collaboration could not be effectively achieved, then all management interventions are nothing more than an “irrelevance”. Simon opposed four critical concepts of

Taylor, and his rationale helps explain the depth of consideration that was subsequently given to Administrative Behaviour Theory:

1. The old, “rule of thumb” model of management should be disregarded. Personal judgements and intuition should be removed, as every process in an organisation can be scientifically planned and executed. Tasks assigned to managers and employees should be analysed ahead of, and during, the activity to identify an optimal level of execution.
2. Co-operation in the workforce should be encouraged as much as possible, with the goal of achieving harmony. Harmony is essential, as discord ultimately leads to inefficiency and benefits nobody. Managers and workers should exist as part of a symbiotic relationship. There needs to be some form of “mental revolution”, where management should always be ready to share the gains of the organisation and that workers should give their full energy, attention and co-operation for the fulfilment of the organisation’s objectives.
3. Whilst the efficiency of any organisation largely depends on the human capital and skills in its possession, the training of staff is essential. Managers should scientifically select, train, observe and manage the workforce (historically, a workman would have selected his own work and trained himself to the best of his abilities).
4. There should be an almost equal division of work and responsibility between the management and the workforce. Management should take over all work for which they are better suited than the workforce, while in the past almost all of the work and the greater part of the responsibility were thrown upon the worker.

When establishing a strong comparison between the two thinkers, Turan (2015) noted that a number of Taylor’s principles could be considered relevant today, although Simon would always challenge Taylor’s philosophical viewpoint. Basing a philosophy on “Rational Economic Man Theory” seemed completely “irrational” to Simon, especially his assertion that employees and organisations operated together for the greater good (Turan, 2015).

Taylor’s principles were examined, as part of the process for evaluating the applicability of the Theory of Administrative Behaviour, to identify what would be applicable in today’s MSB environment and when Simon’s challenges to them are deemed appropriate.

Table 5: Taylor's Principles.

Philosophy	Validity	Current Acceptability	Area of Focus
Making a scientific decision	Yes	Yes	Management Science, operational research, cost accounting.
Manager-Worker Collaboration	Yes	Partly	Management – workman collaboration.
Techniques, Time and Motion Studies	Yes	Yes	Using standardised times on a large scale.
The standardisation of studies	Yes	Yes	Standardisation process on various grades, labour force engineering.
Mission	Yes	Yes	Management by objectives, reward system enriched with feedback.
Subsidies	Yes	Increasingly	Incentive wage system.
Individualised Study	Partly	Partly	Risk assessment of groups, the conditions of group decision-making.
Executive Training	Yes	Yes	Personnel management and developments in industrial psychology.
Scientific Selection	Yes	Yes	Personnel management and developments in organisational psychology.
Shorter working hours /rest range	Yes	Yes	Common use of rest hours in a working week.

There are clearly elements within Taylor's study that are valid and applicable to the world of management today. Simon's main challenge to the "Homo-Economicus" model (and what piqued the interest of the author) is that there was a lack of empirical evidence to support the

notion that individuals in organisations are solely motivated to achieve the organisation's objectives.

The "counter-theory" of "boundedly rational" behaviour maintained that, as humans lack the cognitive skills to balance all of the information that is available to them within the organisation, people generally seek to achieve something that is "satisfactory". This model of "satisficing" could be applied to organisations as well as to individuals.

3.4 Criticisms of the Theory of Administrative Behaviour.

The theory, for all of the significant contributions that it has made to Management Science, has not been without criticism. The criticisms show that there may be opportunities to deploy some of the principles in a different context or propose amendments / refinements that could make it more applicable in a number of different situations. It was Argyris (1973) who highlighted a large degree of conservatism in the work, with Simon advocating a disproportionate level of management power over weaker members in the organisation as being necessary.

Outside of the strategy and management communities, classical economists have long resisted Simon's notion of boundedly rational behaviour. Kerr (2011) noted that the prominent Economists of the time argued that Simon was unnecessarily complicating situations with his perspective of "rationality" and "satisficing", challenging the classical assumptions of rationality. Waring (1991) took the accusation of complication further still by suggesting that Simon may not have fully grasped the concept of classical maximisation assumption in the first place.

Whilst Simon argued that bounded rationality and satisfying have been ever-present themes within all four editions of "Administrative Behaviour", both were only formally introduced in the second edition. Each edition housed a number of new developments and presented a separate introduction from Simon, outlining how the theory had been progressed. Wilson (1973) argued that these were simply "back door" revisions that belatedly addressed a number of oversights. Whether an oversight or not, Simon appears to wrestle with both the *importance* and *value* of logical positivism as the philosophical framework for the text. Language is, however, critical to Simon. Kerr (2007) notes that Simon places great emphasis on the value of language as part of the scientific process:

An experiment in chemistry derives its validity – its scientific authority – from its reproducibility; and unless it is described in sufficient detail to be repeated it is useless. In administration we have as yet only a very imperfect ability to tell what has happened in our administrative experiments – much less to ensure their reproducibility. We must be able to describe, in words, exactly how an administrative organisation looks and exactly how it works.
Simon -Administrative Behaviour (4th edition). Page 11.

3.5 Utilising the Theory of Administrative Behaviour.

If there were no limits to human rationality, administrative theory would be barren. It would consist of the single precept: Always select that alternative, among those available, which will lead to the most complete achievement of your goals. The need for an administrative theory resides in the fact that there are practical limits to human rationality, and that these limits are not static, but depend upon the organisational environment in which the individual's decisions take place, the task of administration is so to design this environment that the individual will approach as close as practicable to rationality (judged in terms of the organisation's goals) his decisions – Simon, 1976 Page 322.

Having scrutinised the various debates, strengths and limitations surrounding the Theory of Administrative Behaviour, it was duly chosen to be the theoretical foundation of the thesis. The compatibility of the theory is framed by its simple summary; it addresses the processes by which managers / decision-makers operate and *how* they make their decisions in their organisations (Simon, 1976). Simon originally suggested the concept of an “administrative manager” who is self-interested, unwilling to think expansively and who settles for an adequate (not optimal) solution. Whilst other theoretical bases have emerged, and were duly considered, the author was well placed to investigate whether managers in MSBs are *equipped* and *motivated* (either through their own experiences or via management education) to achieve “optimal” solutions.

Simon (1976) distinguished between Taylors “economic man” and the idea of the “administrative man”. The distinction is further explored as it helps to create a view of the “actors” who are part of MSB decision-making teams. The concept of the “economic man” represents objective reality in an “ideal” model.

This rational decision-model (“Economic Man”), is summarised by Bakka and Fivesdal (1986) as having five key components:

1. You can always make a decision when you are faced with a set of alternatives.
2. You rank the consequences of the alternatives according to your preferential treatment.

3. The preferential treatment is transitive.
4. You will always choose the alternative that is highest on your value-scale.
5. You will always make the same choice if / when the situation reoccurs.

Instinctively, there are constraints and limitations to the “economic man”/ rational decision-making model. Their unconscious skills, habits and reflexes will limit managers by their values and conceptions of purpose, along with the extent of the knowledge and information that is available at that time (Simon, 1976). Simon compares and contrasts *actual* behaviour to *objective rationality* in a least three ways:

1. Rationality requires a complete knowledge and anticipation of the consequences that will follow on each choice. Knowledge of consequences is always fragmentary.
2. Since these questions lie in the future, imagination must be used to supplement the lack of experience at hand in attaching value to them. Values, however, can only be imperfectly anticipated.
3. Rationality requires a choice amongst all possible and alternative behaviours. In *actual* behaviour, very few of all these possible alternatives ever occur.

“Administrative man” and “economic man” differ in two ways. Whilst “economic man” *maximises*, “administrative man” *satisfices* – looking for a course of action that is “satisfactory or good enough”. Whilst “economic man” deals with the “real world” in all of its complexity, “administrative man” recognises that the world he perceives is actually a drastically simplified model; he makes his choices using a simple picture of the situation that takes into account just a few of the factors that he regards as the most relevant and critical (Simon, 1976).

Simon (1976) stated that organisational influences are often manifested through five distinct mechanisms: division of working practices, the establishment of standard operating procedures, the transmission (downwards) of decisions, providing channels of communication, training and internalisation. Contending that the decision-making infrastructure of any organisation should be able to respond to and influence (where possible) the external

environment, Simon (1976) describes the interface (artefact) between an inner and outer environment:

An artefact can be thought of as a meeting point- between an “inner” environment, the substance and organisation of the artefact itself, and an “outer” environment, the surroundings in which it operates. If the inner environment is appropriate to the outer environment, or vice versa, then the artefact will serve its intended purpose (Simon, 1969 .Page 182).

He goes on to conclude that the major problems of business are problems of organising, storing and processing information. He argues that a general principle of design should be to analyse the information system in abstraction, from agency and departmental structure (Simon, 1976). Simon states two key guidelines (or heuristics) for design when a business is considering improving its levels of performance by adding “an additional component (whether human or virtual) for an information-processing system” (Simon, 1976):

1. Its output is small in comparison with its input, so that it conserves attention instead of making additional demand on attention.
2. It incorporates analytical models that are capable, not merely of storing information, but of solving problems, evaluating solutions and making decisions.

The concept of bounded rationality is central to this thesis, as it frames the cognitive limitations of decision-makers. Most managers are only *partly* rational and are either emotional / irrational in the remaining part of their actions. These boundedly rational agents experience limits in formulating and solving complex problems (Williamson , 1991).

Simon also describes a number of dimensions along which “classical” models of rationality can be made to become more realistic, whilst sticking with the vein of a fairly rigorous formalisation. These dimensions include limiting what utility functions exist, recognising the costs of processing information and the possibility of having a “vector” or ‘multi-valued’ utility function.

The second key concept related to the Theory of Administrative Behaviour is “satisficing”. “Satisficing” can be considered to be a behaviour, or set of behaviours, that attempts to achieve (at least) some minimum-level of a particular variable, but which does not strive to achieve its maximum value. The applicability of this concept to MSB growth performance is clear; it should not be assumed that all employees will be working to their maximum potential all of the time.

There is a significant difference between the concept and the principles of classical economics; it postulates that producers treat profit as a constraint, not as a goal to be maximised. Under these theories, firms must (at least) achieve a critical level of profit, thereafter, priority is attached to the attainment of other goals.

The various strengths and limitations of the chosen theoretical framework are acknowledged. Investigating the research questions, by examining how significant a factor *emotion* is (amongst others) when MSB decision-makers face their different challenges, reduces the effects of these limitations.

3.6 The application of theory to practice.

The thesis explores the Theory of Administrative Behaviour (along with that of boundedly rational behaviour) in more depth, overlaid with insights into decision-making at a number of UK MSBs. It will be evident to many that, in the decades following Simon's final rendition (1992) of Administrative Behaviour, the economic landscape of the UK has seen considerable change. As businesses have evolved, along with the choices that face decision-makers / management teams, MBA programmes have evolved too. Whilst it can be said that the general economic landscape has progressed considerably, the same cannot be said about the overall size and reach of the MSB population (BIS, 2018).

The overarching aim of this thesis is to understand how leaders at successful MSBs *think, how* decisions are made within the business and *how* challenges are reflected in the “intellectual performance enhancement” / management education tool” that is most accessible to them – the MBA. This framework will then be used to develop a model for assessing the “boundedness” of leaders and organisations, along with recommendations for developing the effectiveness of MBA programmes.

Contemporary discussions regarding the impact of the Theory of Administrative Behaviour in the field of Economics debate the notion of “complexity” for decision-makers; Simon (1957) posited that the main barrier to a decision-maker who considers any performance-related objective are the limits of their own intelligence when compared to the complexity of the decision-making environment that is being experienced.

For more contemporary authors, “complexity” may mean “complicated” or be associated with the notion of a “hierarchical system, consisting of a large number of parts that have many interactions” (Dequech, 2001). Dequech noted that, due to the difficulty of defining a complex, hierarchical system and there have been numerous attempts to condense Simon's (1957) concept of bounded rationality into a battle between information-gathering abilities and levels of mental ability.

An absence of perfect information, along with imperfect motivation (vs the classical economic/rational view of an employee) is what creates an environment of uncertainty. There are neo-Schumpeterian economists, including Dosi (1988) that express the importance of “fundamental uncertainty” within their work, mirroring Simon's perspective on bounded rationality

(Dequech, 2001). Indeed, the organisation itself may actually liberate an individual from their cognitive limitations by extending their capacity to achieve their objectives, thus providing an environment in which their cognitive limitations can be changed (Jones, 2002).

Across Political Science research, debates exist about the level of rationality that voters adopt when making decisions at the polls; small difference in details can lead to considerable changes in decision-making rationale (Osorio, 2011). It is the concept of irrationality, rather than the disproving of any classical economic thinking, that contemporary authors seem to grapple with. For authors concerned with decision-making, the influence that Simon's work has had (be that directly or indirectly) on authors like Kahneman is evident. Kahneman's drive to follow up on hypotheses of irritational behaviour form the foundations of his early work into decision-making behaviour.

This thesis is not a continuation of the debate into rationality or seeking to disprove classical perspectives in Economics. The author's approach to data collection is to consider whether the organisation, its context and its structure has an impact on a manager; what is it (beyond intellectual capability, training and resources) that enables some organisations to grow, whilst others decline?

Chapter 4

Research Methodology

4.1 Establishing a research methodology.

An examination of the factors that affect the growth prospects of MSBs is at the heart of this study. The work examines the implications for strategic (growth-related) decision-making, management education and the recommended enhancements to the Theory of Administrative Behaviour. The research methodology that has been deployed stems from the motivation to explore MSBs, the availability of data and the author's philosophical position. To this end, Chapter 4 outlines in detail the research philosophy that underpins the work.

The chapter discusses the author's interpretivist perspective and provides an explanation of why qualitative approaches were adopted. There is an examination of the decision to select a multiple-methods approach, the use of content analysis as the main analytical tool and the suitability of the Theory of Administrative Behaviour and Bounded Rationality as the main theoretical frameworks.

4.1.1 Situating the research.

Research" attracts many different definitions, which is due (in part) to the complex mixture of opinions and philosophies that abound in the world of science (Lee & Lings, 2008). Some of the common questions posed by authors have been, *what* to research and *how* to research it? It can be argued that the most pertinent question for an author should be: "why carry out research anyway"? (Reymeni, 1998).

Reymenyi's work is particularly relevant to the decision-making process employed by the author during the development of this thesis; the question was framed at a time when Business School education was being challenged in terms of its relevance and validity (Bailey & Eastman, 1996; Bailey & Ford, 1996). It has not been the intention of the author to prove or disprove the validity of Business School education; an over-arching objective of this thesis is to explore whether it has an impact on the growth challenges faced by MSBs.

With a clear purpose regarding *why* the research should be conducted, the author was mindful that the practicalities of the research process can sometimes drive how decisions are made when selecting a particular methodology (be that qualitative, quantitative, or a mixture of both). *What* to research will also be forged by personal interests, along with the availability of funding (Reymenyi et al, 1998).

Considering the question of “why” requires there to be an understanding that reaches beyond the practicalities of the research process. The question demands the development of a philosophical perspective from which the author is clear about two specific dimensions- *how* society works and exactly *what* is meant by science (Burrell & Morgan, 1979). This philosophical debate is neither new nor likely to be addressed satisfactorily in the short-term; during the past 100 years there has been a significant debate regarding the exact purpose of doctoral education.

Whether the key motivation for someone who is considering pursuing a doctoral research programme is one of career advancement, interest in a particular topic , or the fulfilment of professional requirements, the aim of breaking down barriers to enable knowledge creation has always been a core part of the scientific research process (Eggleston & Delamont, 1983; Rudd & Hatch, 1968).

The author cites the latter as a pivotal, personal motivation for carrying out this work.

Science itself does not operate outside the confines of society, nor does it operate in isolation. Science is the *output* of society, shaped and moulded by numerous and complex components that enable it to solve an infinitely vast range of problems (Gibbons, 1994). The complexity that exists within MSBs, along with the interconnected worlds of society and scientific knowledge, has guided the author to consider undertaking an expansive approach to understanding the challenges that MSBs face.

4.2 The adoption of a multiple-methods approach.

Research is about generating knowledge about what you believe the world is. – **Nick Lee, 2013.**

This thesis contains reflections of the author's personal and professional journey, one in which questions have been raised regarding what is known and what can be learned. Reflection has been viewed as a necessary process, as author and the subjects of observation are seen to be inextricably linked; this link is due (in part) to the nature of qualitative research and the desire to make a contribution to knowledge.

Qualitative research methodologies, including case study analysis, are insightful and powerful tools that can be used to uncover phenomena that can aid decision-making in a number of fields. Until the late 1990s, qualitative methodologies were often viewed as a "poor relation" to quantitative techniques and this is perhaps due to the preoccupation that many Business Schools have had with statistical analysis (Gummesson, 2000). There has been a significant shift since the beginning of the century, and qualitative methods are now considered to have parity with quantitative techniques (Lee & Lings, 2008).

Due to the complex and fluid nature of the research environment, a multiple-methods approach was applied to the design of the study and was selected ahead of a mixed-methods approach. Whilst there have been claims in the management literature that the two terms are interchangeable (Tashakkori & Teddlie, 2010), the author views them as being distinctly different.

A mixed-methods research design combines both qualitative and quantitative research techniques within a single study, in order to provide a greater level of understanding and rigor (Bryman and Bell, 2015). Rigor is often provided through a process of triangulation in order to achieve more than would ordinarily happen by taking a singular approach (Bryman & Bell, 2015; Lee & Lings, 2008; Venkatesh & Bala, 2013).

The main goal of adopting such an approach is to develop rich, detailed insights into the numerous phenomena that can exist within the research subject; mixing a design strategy can

enable authors to understand complex situations and overcome issues where existing theories are not sufficient to explain the world around them (Venketesh & Bala, 2013).

The practice has endured a high level of epistemological criticism from those who believe that mixing methods automatically requires the mixing of different research methodologies (Greene, 2008). The counterargument to this is that methods can be mixed to good effect, often through the use of triangulation, although research philosophies must be distinct and never mixed at all (Lee & Lings, 2008).

Triangulation, where a researcher achieves a convergence of the data collected to enhance a study's credibility (Mertens & Hesse-Biber 2013), and *complementarity* are compelling reasons for any author to consider mixing methods. Complementarity occurs when quantitative and qualitative data are used together, not just the numerical or narrative explanations (Mertens & Hesse-Biber, 2013). Complementarity has enabled authors to obtain greater levels of comprehension, especially when identifying cultural nuances within a business (Yauch & Steudel, 2003).

In order to better understand, the use of "language" and insights obtained into decision-making in more detail, the author concluded that a multiple-methods methodology would be most appropriate for this type of scenario.

4.3 Multi-Methods research components – Case Study Research (CSR).

The study began with a series of case studies that covered a small number of non-competing MSBs. Selection of case study participants was a result of a stratified random sampling process, utilising a pool of non-competing MSBs. The pool consisted of leading MSBs from the Investec, FT and BDO MSB reports (Appendix 3: External MSB reports). Stratified random sampling is a regularly deployed sampling method; stratification is cost effective, minimises bias and is used in a wide variety of industries and applications (Parsons et al, 2014).

The broad aim of utilising case study research (CSR) was to investigate the “top-level themes” (the challenges, problems and complex decisions) that may be affecting organisational growth.

Although there is an existing body of research that explains the merits of qualitative studies, their expected outcomes and how to conduct them (Denzin & Lincoln, 2000; Dul, 2008; Evans, 2011; Gummesson, 1998; Marshall & Rossman, 1999; Seuring, 2008; Dai & Sternberg, 2004; Weller & Barnes 2014), there is still some ambiguity about what constitutes CSR.

In the context of this study, CSR is a method of enquiry that centres on the description, explanation and understanding of the external/ internal elements that affect a decision-maker. This study broadly expansively covers the *environmental*, *linguistic* and *organisational* elements that impact on performance levels.

Schramm (1971) contended that the central premise of CSR is to “illuminate a decision or set of decisions: *why* they were taken, *how* they were implemented, and with *what* result”. This is one of the earliest works to formally link outputs (*how* they were created) with performance. The possibility of such a link, in the context of this thesis, is one that should be explored from as many perspectives as possible. Schramm’s (1971) work also highlighted a possible weakness; “decisions” are a key focus of CSR, something that represents a potential limitation in the approach.

The most relevant limitation is that it excludes other important elements that are occurring within an organisation that may be able to make a positive contribution to growth: processes, procedures, strategy, language, general capabilities and resources all have a major bearing on whether an organisation has the capacity to be successful or not (Helfat, 2007; Teece, 2009).

Stake (1995) highlighted that case studies are not singular entities; case studies can be *collective*, *instrumental* and *intrinsic*. An intrinsic case may help enable authors to gain a better understanding of that particular case's nuances, although it is not necessarily representative of similar cases and might not aid in the construction of theory (Stake, 1995).

In direct contrast, an instrumental case is developed with the key aims of looking deeper into specific issues and the *refinement* of theory. This type of case still requires considerable levels of analysis, however, the case itself can play a supporting role as it enables an understanding of something else to be developed.

It is the *collective* case that was of particular interest to the author; this approach involves the study of multiple, instrumental cases. Cases here are not chosen to provide a better, more "generalisable" sample, as this would contradict an interpretivist methodology (Lee & Lings, 2008). Multiple cases are often utilised because expanding the level of understanding about them leads to a continued process of knowledge development, along with a greater theoretical appreciation of a larger collection of work (Stake, 1995).

The author makes no claims to be "anti-positivist" but instead views CSR as a mode of enquiry that will enable any author to move beyond a static, "one shot" approach that is sometimes offered by survey-research teams (Salas, Goodwin & Burket, 2009). It is acknowledged that survey research does represent the dominant line of enquiry across the Management Sciences (Lee & Lings, 2008). The dominant logic that exists here is that respondents are naturally willing and able to articulate their thought processes, the key stages of decision-making and the exact sequence of events over a substantial amount of time (Woodside, 2010).

This logic has been challenged from those operating within the Management, Psychology and Marketing communities who understand that only 5% of human thought is ever carried out on a conscious level (Wegner, 2002; Zaltman, 2003) and they have a limited understanding of *how* they have reached the decisions that they made (Clark, 2014; Kahneman, 2011; Welsh, 2014; Zaltman, 2003).

Conversely, critics of a CSR approach will highlight a supposed lack of statistical validity, generalisability, and an inability to test hypotheses (Gummesson, 2000). Gummesson's view (2000) conflicts with CSR's challenge to the dominant view of quantitative techniques,

asserting that no respondent will be able to recall, evaluate and accurately report their thinking within the confines of a questionnaire (Woodside, 2010).

Gaining an in-depth understanding of thought processes should require a researcher to understand the “mental models” that are used by participants (Harris, 1990; Huff, 1990). A “mental model” is known to be the set of propositions that those under observation understand to be “reality”.

The author followed the guidance of Senge (2006) who stressed that each participant’s model should be evaluated in the following stages:

1. An **examination** of the “typical” steps (Interactions, behaviours, communications and events) that occur in the process being observed by the author.
2. An **exploration** of what happens within those steps (such as the participant’s normative mental model).
3. A deeper **understanding** of *what* actually happened within a specific process (i.e. a completed process of some strategic significance for the business).
4. An **analysis** of a participant’s perceptions of how another specific individual or team understands the details of the process under examination.

It becomes clear that CSR involves an in-depth exploration, evaluation and analysis of what Merriam (2014) describes as a “bounded system”. Further developing Yin’s (2004) belief that CSR investigations should take place when “boundaries between phenomena and context are not clearly evident”, Merriam (2014) went on to argue that “one particular program, one particular collection of decision-makers (a bounded system) or one decision maker (selected on the basis of experience and skill) would be the main unit of analysis.”

Within this study, the “unit of analysis” is the key informant and the “bounded system” is the decision-making group that constitutes the MSB. It was noted that conducting several case studies in parallel with each other generates comparable data, however, each piece of CSR is distinct – focusing on each specific, bounded system.

The study commenced with CSR, primarily because it is capable of both the generation and testing of theory (Woodside, 2010). It was the intention of the author to consider key theoretical frameworks whilst conducting the CSR, notably whether the Theory of Bounded Rationality could be used to explain any limitations and degradation in decision-making abilities within each MSB.

It is possible that theory generation may occur during this type of process, however, the author did not contend that a Grounded Theory approach was applicable. Significant similarities and differences exist between an evolutionary multiple-methods approach and Grounded Theory, and these have been considered and evaluated.

4.4 The consideration of Grounded Theory (Summary).

“We would all agree that in social research, generating theory goes hand in hand with verifying it; but many sociologists have been diverted from this truism in their zeal to test either existing theories or a theory that they have barely started to generate.”

-Glaser and Strauss, 1967

Because Grounded Theory (GT) has become a popular and widely accepted research methodology, one that has been used in doctoral programmes worldwide, the method required analysis and consideration. The origins and uses of GT are widely publicised and there have been numerous, recent publications that examine its virtues (as well as its limitations) and highlight the different approaches that are taken (Charmaz, 2014; Gibson, 2014; Goulding, 2000).

The roots of GT are often traced back to the research of Glaser and Strauss in the 1960s, although it would be more accurate to extend back even further to the symbolic interactionism movement which is rooted in the work of Cooley and Mead (Goulding, 2000). The work of philosophers Charles Cooley and George Mead developed a framework of sociological theory that was revolutionary. They were concerned with avoiding the opposing views of psychologism and sociologism; psychologism assumes that logical processes can explain behaviour whilst sociologism views behaviour as the “pre-programmed” output of societies’ ideals. Cooley asserted that there should be no distinction between individual and group behaviour, with personal identity flowing from the individual’s relationships with others. Mead proposed that the interpretation of symbols, of which language is the most powerful, is fundamental to human behaviour (Goulding, 1999).

There are some parallels with what the researcher wishes to achieve and the methodological approach of symbolic interactionism. In Cooley and Mead’s world, a researcher would be required to immerse themselves in the subjects’ environment, observing and participating in the interactions and interpretations that occur. Being involved in symbolic interactions would require the researcher to “interpret actions, transcend rich description and develop a theory which incorporates concepts of self, language, social setting and social object” (Schwartz, 1994). The resulting theory should then be articulated in a form that creates an eidetic picture.

We consider symbolic interactionism should be considered both a theory of human dynamics and a route to evaluate human conduct and group behaviour. Symbols are absolutely intrinsic to the symbolic interactionism perspective and language is the most important symbol; it is a micro-sociological theory as it leaves alone questions about the wider shape of society, focusing more on the relationships between individual perceptions and society (Annells, 1996). The “vocabulary” of growing businesses is an important element of this thesis.

4.4.1 Potential data collection and data analysis issues using Grounded Theory.

“Generating theory and doing social research are two parts of the same process” - Glaser, 1978.

The approach involves the discovery and subsequent development, personal verification through systematic data collection and analysis of data relating to the phenomenon in question (Straus and Corbin, 1990). Straus and Corbin (1990) outline three levels of analysis:

1. Data presentation without interpretation, allowing research participants to express their own “story”.
2. The development of a rich, descriptive narrative, thus allowing the researcher to make contextual judgements to apply knowledge gained from the case elsewhere.
3. The creation of theory through high level, repeated levels of interpretation and abstraction.

This study is concerned with the realities experienced by problem solvers and decision-makers in MSBs. In classical GT, sampling is theoretically orientated; its purpose is to generate and develop conceptual theory instead of delivering a descriptive account of the phenomena under observation. Its direction is driven by the theory that emerges, pursuing insights and interests as they appear from the data, requiring the researcher to continually refocus, refine and integrate theory as part of the data collection process (Glaser & Straus, 1967). Given the fluid nature of management research studies, it is likely that a researcher will be required to invest time in refinement.

Whilst many facets of GT have been debated over the years, the original definition of what theoretical sampling entails has been largely accepted by the research community (Brekenridge, 2009); “the process of data collection for generating theory whereby the analyst jointly collects, codes and analyses his data and decides what data to collect next and where to find them, in order to develop his theory as it emerges (Glaser & Strauss 1967 p.45).

The process of theoretical sampling always starts with the initial data collection and analysis (Glaser, 1978). After the initial collection an open coding of the broad data set will develop initial codes that will then stimulate ideas for future data collection. It is within this initial stage of the research process that codes are quickly created (and often in large volumes) followed by a combined process of theoretical sampling and memo writing that will correct and narrow down codes so they can be continually fitted to the data (Glaser, 1978).

The process of memo writing helps the researcher to visualise the boundaries and content of each chosen category, helping to identify gaps in the theory that is being created. This process signposts where the next sample should originate from and what theoretical purpose it should be used for (Glaser, 1978).

The process of constant comparison is attractive to the researcher. Constant comparison will enable the researcher to develop insights from the data by simultaneously coding and analysing (Taylor & Bogdan, 1998). A researcher should sample for theoretical similarities, and also differences, so that they can explore the properties of each individual category until saturation is reached and a core category emerges (Glaser & Straus, 1967).

Whilst there is a valid epistemological connection between the objectives of the researcher and GT methodology (the “objectivity” resonates with the researcher), the author did not wish to begin with the sole focus of theory generation. The author instead sought to explore phenomena as they occur and utilise a number of methodologies to deliver increased rigor and transferability of insights.

4.5 Expanding on the research philosophy.

The term “research” is often misunderstood to be an esoteric activity with little or no importance, or a collection of information that lacks an ultimate purpose (Walliman, 2011). Research does offer significantly more than this, it is a systematic process that provides people with a way to discover, evaluate and make a contribution to knowledge (Saunders, Lewis & Thornhill, 2016).

It is this contribution that bridges the numerous definitions, becoming the “pursuit of objectivity via observation, analysis and experimentation” (Kothari, 2004); the author had Kothari’s (2014) perspective in mind throughout the research journey.

The philosophical assumptions that underpin this thesis stem from the tradition of interpretivism; within this paradigm is the ontological belief that knowledge is something that is socially constructed (Singh, 2015). Blaike (1993) defined ontology as the “science or study of being”, it is concerned with the *nature* of reality and reflects an interpretation of what an individual considers to be *fact*.

The author asserts that reality is subjective. This ontological perspective is concerned with the understanding that every person possesses perceptions and experiences that are unique to them, and that they may shift with time and context (Eriksson & Kovalainen, 2008). A number of qualitative approaches to research are based on this perspective.

This perspective is directly contrasted with objectivism, which is often seen as the ontological starting point for most quantitative approaches (Bryman, 2015). Objectivism assumes that reality exists independently of people and of what they are doing (Saunders, Lewis & Thornhill, 2016). The subjectivist perspective on ontology (constructivism) is that *reality* never exists outside of individuals, it is always about their perspectives and interpretations (Lee & Lings, 2008).

If the ultimate aim of research is to make a contribution to knowledge, a researcher should begin their journey by considering the following questions: *What* constitutes knowledge, *how* is the contribution to knowledge made and *how* does one quantify the value of knowledge (Jacob, Popescu & Ristea, 2015)? These questions are at the heart of what forms the study of epistemology.

Throughout history, a number of epistemologists have attempted to define knowledge as a “true and justified belief” (Rescher, 2003). Epistemology is, perhaps, better described as the “philosophical discipline that studies the evaluative dimensions of cognition, their metaphysical bases, and the language we use to ascribe cognitive states” (Turri, 2013).

There should be a clear connection between an author’s view of epistemology, their theoretical stance and the methodology that they employ (Gray, 2014); how the author connected these areas during this study, are outlined below.

4.5.1 Connecting epistemology and methodology.

Adopting a specific philosophy has required the author to consider what is happening in the business world from a different angle, one that has not been without its frustrations and deep considerations! The author believes that managers operate in the way that they do because of how they are shaped by their environments and the experiences that they bring to certain situations.

Whilst ontological and epistemological claims in research are closely associated with one another, epistemology defines the criteria by which knowledge is actually made possible (Eriksson & Kovalainen, 2008).

A separation that is often made between research philosophies is the difference between interpretivism and positivism (Bryman, 2015; Lee & Lings, 2008). Positivism is sometimes described as a “scientific” approach, although caution should be used if using the terms interchangeably (Bryman, 2015). The key objective of positivism is to explain a behaviour and not to investigate it’s meaning, often using theories to generate hypotheses that can be tested via direct observation (Marsh, 2010).

Whilst positivists attempt to construct knowledge from out of a reality that exists beyond the human mind, interpretivists recognise that they internally constitute knowledge, articulating their observations from within the frameworks of their own experiences and senses (Weber, 2004).

Despite authors who adopt this philosophy making a significant contribution to Management Science, this approach is not without its pitfalls. Contemporary writers, often to provide an appropriate response to the growing complexities of businesses, are examining the relatively underdeveloped aspects of an interpretive ontology and epistemology.

Recognising that interpretivism is far from being a singular methodological approach, more of a blend of numerous approaches that are served by common philosophies, such a viewpoint is adopted due to a desire to establish knowledge via the perspectives of different stakeholders.

In its formative years as a “serious” scientific approach, hermeneutics has been identified as one of the foundations of interpretivism (May, 2002). The author intended to understand the factors that affect growth in MSBs; this objective involved considering the world from the perspective of the business in question, other stakeholder involvements and a comparison between unsuccessful and successful strategies. Hermeneutics, according to Dilthey and Jameson (1972), transitioned into a “general understanding of human behaviour”, which is a desired outcome that links the research stages together.

A working environment provides multiple representations of reality (in either real-life settings or case-based ones) and one that enables content and context-dependent knowledge construction (Jonassen, 1991). Creswell and Plano-Clark (2011) noted that *constructivism* is regularly used interchangeably with *interpretivism*. In this worldview, individuals seek an understanding of the world in which they live and work; they develop subjective meanings of their experiences. These meanings are varied and led the author to look at the levels of complexity that exist within those views. Often, these subjective meanings are negotiated socially and historically; they are not simply imprinted on individuals but formed through interaction with others (hence *social* constructivism) and through historical and cultural norms that operate in their lives (Creswell & Plano-Clark, 2011).

The author used qualitative methods of enquiry due to being concerned with what subjects are *doing, saying* and *thinking*.

Much of the research that has been generated in Management Science has followed the logic of theory testing through the scrutinisation of hypotheses, an approach considered to be “deduction” (Eriksson & Kovalinen, 2008). Deductive reasoning initially appears to be a straightforward and linear process. An author will move from an understanding of theory to

hypothesis testing; after a hypothesis has been confirmed or rejected, a revision of the original theory may occur (Bryman, 2015).

In practice, there have been a number of instances where research has not been completely linear. Consideration has been given the well-known 1920s case of the Hawthorne Studies, where a deductive approach produced so many unexpected findings that the author had to transition towards a more qualitative approach in order to gain a more rounded explanation of what was being observed (Schwartzman, 1993). The study made a significant methodological contribution to social and psychological research in the workplace and, by influencing a combination of *inductive* and *deductive* approaches, generated critical knowledge about the relationship between managers, workers and performance (Jones, 1990; Rainey, 2003).

Induction has recently taken a foothold in business research, partly because of the number of authors that are viewing theories to be the *output* of empirical studies and not something that should *follow* it (Eriksson and Kovalinen, 2008). Debates about the relative strengths and limitations of both approaches have existed for some time. The main criticism of an inductive approach is that it is “methodologically incomplete” (Hume & Mulcock, 2005); it is incomplete because every observation that people make are “past occurrences”, it breaks the main convention of any empirical science-prediction and generalisation (Ketokivi & Mantere, 2010).

Noting the transitions that had to be made in the Hawthorne Study, and the ongoing debate about generalisability and rigor, there was a compulsion to use *abduction* as the basis for the research logic. Abduction is the logical process of data exploration or, as it is more commonly known, “inference to the best explanation” (Shearer, 2015). Abduction consists of piecing together or discovering explanations on the basis of an interpretation of collected data (Reichertz, 2009). This approach (combining inductive and deductive elements) was deemed suitable for uncovering the “surprises” that may be restricting MSB performance; a key research goal was always to remove as much subjectivity as possible from the research process.

4.6 Qualitative data and research.

In its strictest sense, data can be described as the “direct consequence of observations” (Takhar-Lail, 2015). Whilst quantitative data usually refers to what is expressed in numbers, qualitative data refers to data that is expressed in words (Corbin & Straus, 2008). It should be noted, however, that *qualitative* data could be transformed into something that is considered to be *quantitative*. This transformation may take place through the process of coding and counting verbal information (Krippendorff, 2004). It is recognised that transformation can take place both ways, where numerical indicators are verbalised or when theory is built upon a factor analysis (Takhar-Lail, 2010).

The debate about whether there has been a complete “polarisation” between qualitative and quantitative data has long been debated, analysed and catalogued (Lee & Lings, 2008; Bryman, 2015). Corbin & Straus (2008) offered that a study should be called “quantitative” when the results are based on a statistical analysis and “qualitative” when the data is analysed using non-mathematical means or “inductive procedures”. It was concluded that predominately qualitative methods of enquiry would provide the best insights into the research question. To reiterate, the overall aim of this study was to:

- Investigate the factors that are restricting growth in MSBs; exploring the implications for management education and MSB leadership.

This is a complex aim and one which the author did not wish to move away from, despite its challenging dynamics. The complexity stems from the exploration of a number of different, and sometime opposing, factors. Economic, human and societal factors may require a more holistic research approach. Achieving such an aim has helped to make a small contribution to knowledge by gaining new insights into how certain challenges can restrict MSB growth, with an emphasis on how the Theory of Administrative Behaviour may be further developed and adapted for the nuances of the MSB market.

One should remember that a “perfect” approach to research development does not exist and, whilst there are immense positives to take from any approach, there will always be various degrees of strength and limitations when it comes to looking at optimal (rather than “perfect”) research approaches (Lee & Lings, 2008). Qualitative research presents a number

of advantages and also a number of problems, it can result in the production of a large amount of “awkward” data, due to the reliance on prose from interviews and field notes (Bryman, 2015).

If research work that is purely qualitative in nature is studied then it is reasonable to assume that the majority of authors should agree that a key aim is the generation, or enhancement, of theory (Gummesson, 2005). Whilst it is also accepted that quantitative research can also generate theory, it is less naturally suited to do so (Robson, 2002).

As a social constructivist, someone who asserts that “reality” exists within the minds of social actors who are operating in a given context (Lee & Lings, 2008), the author was concerned with how the various actors in MSBs (Managers, Directors, customers, suppliers, policy makers and stakeholders) *think, act and behave*. For the social constructivist, it can be seen that “language” is central to the creation and dissemination of knowledge and language (in all of its guises) facilitates a continuous process of creation, understanding and refinement (Galbin, 2015).

Such a philosophical perspective frames the notion of reality as being both fluid and subjective, the social constructivist researcher, therefore, will always be inexorably connected with the “reality” that is under consideration. The process of providing a deep, objective analysis of each actor’s thoughts, feelings and behaviours (from as many different perspectives as possible), has provided a necessary level of rigor to be applied.

This ontology is considered to be the foundation of most of the qualitative approaches (Hackley, 2003), therefore using multiple techniques (that can be managed in a coherent and consistent way) has offered a number of opportunities to deliver a rigorous and scientific approach to both knowledge capture and knowledge creation.

At this point, it should be underlined that a full and expansive analysis of the “language” patterns deployed by the different categories of MSBs was beyond the boundaries of this thesis. The exploration of whether different language patterns are being deployed by both successful and declining organisations represents the outer boundary of the study.

The process of entering a new marketplace, or finding oneself in a turbulent environment, can be exceptionally challenging. A new entrant to a market might try and adopt new “languages”,

in order that the business becomes part of their new surroundings. In periods of significant change, people will naturally gravitate to using the communication models that surround them; this “knitting together” of communication techniques underscores the major impact that linguistics has had on cognitive science and many other decision-based fields (Ajerman, 1984).

Language and communication can impact on a person’s identity, shaping the style that they use and the interactions they have on a daily basis (Djenar, 2015). It was not the author’s intention to develop a full analysis of business discourse, moreover, an identification of the nuanced differences that may exist between high-growth organisations and those in decline.

An opportunity may exist for future research studies to investigate fully whether the use of language can be a predictor of future business performance in a variety of sectors. Within this single study, a multiple-method approach combined more than one type of qualitative enquiry including: case study evaluation, key-informant interviews and observation.

Critics of qualitative methodologies may point to some general weaknesses, including a perceived lack of generalisability. The flaws that are evident within each method are not, however, identical. Combining a number of methods will combine their individual strengths and also compensate for their specific limitations. Fundamentally, it is a powerful strategy that aims to “attack a research problem with an arsenal of methods that have non-overlapping weaknesses in addition to their complementary strengths” (Brewer & Hunter, 2006).

4.7 The development of the research journey.

The initial objective was to work with a small number of MSBs over a period of 2 years, developing rich insights into what changes were taking place within those organisations. These changes would then be analysed to evaluate the correlation between activities and performance (both negative and positive).

A series of meetings and observation sessions was agreed with the Directors who were directly responsible for achieving growth targets within 7 case study organisations. The broad aim of the longitudinal study was to establish the evolving “story” behind their challenges and successes.

Organisations participating in this study have been afforded anonymity at their own request; a summary of each organisation (sectors, approaches to utilising management education etc) follows.

4.7.1 Initial case study organisations.

Selected with the aid of a stratified random sampling approach, MSBs were selected to form part of a longitudinal case study. Each MSB had either a visible desire to grow (as stated in their corporate objectives and mission statements) or had experienced challenges with achieving growth.

The pool of MSBs did not compete with each other, helping to address and potential issues with conflicts of interest.

1. Longitudinal Case Study MSB 1: “Industrial West Midlands”.

Industrial West Midlands are one of the worlds’ leading suppliers of industrial measurement devices, process control software and preventative maintenance support. Based in the West Midlands region, the organisation boasts a lengthy heritage (it has been in operation for over 200 years) and has clients that operate in a wide variety of industries.

The organisation has stated aims of growth and has experienced a number of environmental, structural and ownership changes in recent times. Employing over 6,000 people in the 1970s

and being the market leader, it now employs (2019 figures) 580 people and is now a wholly owned subsidiary of a global, industrial conglomerate. It operates, however, as a standalone entity with a high degree of autonomy and decentralised decision-making. Whilst there is access to a large repository of information, talent and business process models, the organisation retains a large amount of experience within its management teams (The average length of service for a manager is 17 years).

Recruiting managers with MBA qualifications, along with providing MBA development for existing staff, is a proven operating model for its Human Resources unit.

2. Longitudinal Case Study MSB 2: “Recruitment South East”.

The organisation is one of the leading multi-disciplinary healthcare recruiters (as measured by financial turnover) in the UK. Nearly two decades old, the organisation has strong connections with the National Health Service; Recruitment South East works with over 90% of NHS trusts (staffing doctors, nurses and other healthcare professionals.)

Growth objectives have been met in recent years, however, restructuring of local healthcare authorities, issues presented by Brexit and an uncertain outlook for the availability of candidates, has meant that the organisation is looking to new income streams to achieve growth targets.

The organisation serves its clients from three main sites in the UK, with the main site based in the South East. Education plays a key role in the development of the organisation; it routinely provides training and development for candidates that include the broad principles of MBA education. MBA graduates have been recruited in recent years and the qualification is valued highly by Directors.

3. Longitudinal Case Study MSB 3: “Cereal”.

The organisation has seen a substantial amount of organisational change in recent years, moving in and out of private equity ownership after being a family-owned business for over 50 years. It is now supported by (but remains autonomous in its decision-making) by a technology and foodstuffs specialist that is based in the United States. The organisation exports its

manufactures solely in the UK and distributes its products to over 80 countries worldwide. According to its Chief Executive Officer, it was originally a “manufacturing business that learned how to do marketing”.

The business was founded by two entrepreneurs who formed an organisation that would innovate in terms of its products and the way in which it manufactured them. Innovation and creativity (especially in the development of new product ranges) has seen 10 new, innovative products launched in the last 5 years. Management now preside over what they determine to be an “innovation-led culture”.

The organisation funds MBA training for senior executives; recruiting MBAs or training middle management with MBA knowledge (normally reserved for Senior Management) is an established practice within the business.

4. Longitudinal Case Study MSB 4: “Logistics”.

The organisation has over 100 years’ experience of operating in the transport and logistics sector; initially the business operated as a small family enterprise and has seen steady expansion over the years. Expansion has seen the business develop its expertise, from agricultural transport to warehousing and international freight.

The most significant changes in the organisation’s history have all come in the last decade; acquisitions have added international operations to its portfolio and purpose-built sites now provide a base from which to develop its operations internationally.

Training and education have largely been aimed at junior members of staff and there has been a significant investment in driver development and apprenticeships. There is a history of employing MBA graduates; a major motivation for doing so has been to incorporate operational management skills.

5. Longitudinal Case Study MSB 5: “Asset Finance”.

Asset Finance largely focuses on the UK market and provides asset finance and specialist leasing products across both private and public sectors. The organisation has grown its operations mainly through acquisitions and employs over 150 people in the UK and has a turnover in excess of £390m.

Whilst the organisation has traded in its current form for a little over 10 years, there is a considerable amount of experience within its management structure. Board members, especially those tasked with growth, have a combined 300 years’ experience in running MSBs and large corporates.

There is a clear focus on recruiting and developing talent who have been exposed to MBA education or who possess MBAs from leading (World ranked top 50) Business Schools.

6. Longitudinal Case Study MSB 6: “Financial Consult”.

This accountancy, auditing and advisory group deals primarily with the healthcare sector and works closely with public sector bodies and independent consulting firms.

The organisation has grown through acquisition and franchising of its operations, delivering double-digit growth in the first 15 years of its trading history. The environmental and structural challenges within the sector, according to the leadership team, have meant that growth targets have been missed for 3 out of the last 5 years.

Over half of the employee base (86 consultants) possess an MBA and the leadership team views the qualification in a very positive light.

7. Longitudinal Case Study MSB 7: “Creative Agency West Midlands”.

The organisation is 30 years old and operates as a creative and multi-media design agency. As an integrated agency, the organisation employs over 200 people in a variety of contrasting roles. Creative designers (advertising focused), copywriters (“content” focused), client managers (relationship focused) work in one “holistic” unit in the West Midlands.

Historically, clients have been predominantly located in the automotive sector, however, the organisation has shifted (over the last 4 years) to a more balanced client portfolio. The creative sector is experiencing significant change, moving away from a traditional, “siloesd” way of doing business to more of an integrated, “one stop” business model. Management education, especially in the form of an MBA, is an integral part of training programmes for senior managers. Creative designers are not required to undergo management education.

4.7.2 Case study amendment.

Case study research (CSR) was deemed to be most applicable for the beginning of the study because it centres on the description, explanation and understanding of both the external and internal elements affecting management teams. The author was drawn to CSR partly through Yin’s (2012) notion that it is “an empirical inquiry that investigates a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident”. Given the author’s philosophical position, the opportunity to present the variations in the “real-life context” was particularly attractive.

Prior to beginning the intended observational work, semi-structured interviews took place with each MSB. Interviews were a logical research tool as they deliver an understanding of the world from the respondent’s perspective. Interviews are essentially designed to uncover the true meanings of people’s experiences in order to uncover their “real world” perspectives (Kvale, 1996). The author recognised that interviews can be a valuable means of data collection when the analysis of management motivation and opinions are a central part of the research study (Keats, 2001).

Another objective for carrying out interviews within the CSR was to identify thematical links. There are accepted rules when determining an optimal number of interviews to conduct. Some authors conducting qualitative studies have taken a more positivist position, assuming that by increasing the interviews that are carried out, the more *scientific* the study would be (Kvale, 1996).

The alternative view is that, within an interpretivist framework, an author will only need enough data to explore, analyse and document the necessary number of themes (Travers, 2001).

This view helped to determine the chosen number of MSBs and the number of interviews which were to be completed across a period of 18 months.

Close attention was paid to the suggestions of Cassell & Symon (2009), who advocated a structured approach to design, minimising the practical issues that can occur when conducting interviews. Semi-structured interviews were conducted (A detailed description of the design process is found in the appendix). The inherent flexibility of a semi-structured interview is one of its major advantages (Babbie & Mouton, 2011). When the interview “flows” and is more flexible, there is an expectation that the views of the respondent will be more “open” and freely expressed. This is in contrast with formal, regulated interviews when the author is confined to a standard set of questions (Flick, 2002).

Interview questions were structured around the themes which arose from the literature review of MSBs, decision-making and the use of management education tools.

The author noted that it is not always possible to follow a schedule exactly. An interviewer may have to deviate in order to follow interesting “threads” of data and extract more information from an interviewee (King, 2004). The use of a semi-structured interview, using similar questions for each respondent, is justified in multi-CSR, as there is an appropriate level of structure to ensure cross-case compatibility (Bryman, 2015).

4.8 Utilisation of content analysis.

The assessment of the initial interviews utilised content analysis, a methodology that forms the main part of the evaluation framework that is used within the thesis. Content analysis is an established research method, one that has been used in various areas of business research for over 50 years (Neuendorf, 2004).

Two software packages were utilised side-by-side to ensure that the content analysis was driving the data and that the author was not being led by the software; results should be broadly similar across both software packages, with visual representation being the only key difference. The author selected the two leading qualitative data analysis software packages, NVivo and MAXQDA.

Widely acknowledged to be an authority in the area, Krippendorf (2004) defines content analysis to be a “research technique for making replicable and valid inferences from texts (or other meaningful matter) to the contexts of their use.” Content analysis can be extended to forms of communication beyond the written word. All communication (verbal, textual or images) carry symbols that can be investigated using the technique.

Content analysis is understood to be an overarching method that contains three distinct approaches, *basic* content analysis, *interpretative* content analysis and *qualitative* content analysis (Drisko & Maschi, 2015). Content analysis fits with the author’s epistemological position. It is able to blend frequency analysis with theme identification and theory elaboration (Wang & Gao, 2016). Krippendorf (2004) suggests that making a distinction between the qualitative and quantitative elements of content analysis may not actually be of any significance, arguing that the “reading of text and symbols is ultimately all qualitative, regardless of whether text is converted to numbers at some later point”.

Basic content analysis, which was applied to the initial interview set, often draws on themes and ideas from literature, is commonplace in multi-disciplinary research and it is predominately deductive (Drisko & Maschi, 2015). A researcher will develop areas for investigation (For example, preliminary codes) ahead of data collection (Weber, 1990). Weber goes on to explain that basic content analysis is best used when a researcher wishes to identify and articulate themes that will form the basis of a long-term topic of interest.

Krippendorff (2004), however, argues that authors will use findings as a platform for linking observation with hypotheses. In the case of the initial CSR interviews, the author intended to explore the strength of the growth ambitions stated by the key informants.

There is a clear distinction between what constitutes *basic* and *interpretative* content analysis. The interpretative approach takes a deeper look at data and moves from the *descriptive* (*What* happened, *what* was said) to the *inferential* (*Why* it happened and what it *means*). It enables a “richer understanding of the meanings of content” (Baxter, 1991). Whilst the literature contains little epistemological debate, Drisko & Mashi (2015) show that readers are able to “interpret and make meaning of the presented content from different standpoints, or from cultural backgrounds with very different purposes than those of the content analyst, appearing to be a social constructivist epistemological position”.

Qualitative content analysis is clearly differentiated from the basic and interpretive approaches by its use of a series of techniques for “the systematic analysis of texts of many kinds, addressing not only manifest content but also the themes and core ideas found in texts as primary content” (Mayring, 2010). As a rule, it does not have to follow any process of statistical analysis, making it distinct from all other qualitative research methods.

4.8.1 Amending the methodology.

The outputs of the initial CSR work with “Logistics” and “Cereal” provided the author with a cause for concern, prompting a necessary change in direction. Both businesses stated at the outset that they were required to grow significantly, to ensure both their survival and to provide value to their shareholders. Initial interviews revealed charismatic and authoritarian leadership styles at work in both organisations. Whilst the stated aims were to achieve high growth, it was clear that the corporate rhetoric did not correlate with strategic activities and both leaders requested interventions and action research that the author was unable to provide.

Each interaction yielded very similar results and, because issues were being highlighted by the MSB, there was an increasing expectation that the author would intervene and provide some form of Business School-led consultancy.

It was clear that a longitudinal study of this type would jeopardise the relationship between author and informant, thus necessitating a different approach to be undertaken. The other businesses selected for CSR were also starting to exhibit similar signs. It was apparent, however, that the organisations were unable to implement long-term strategic plans due to an obsession with short-term objectives and the minutia of day-to-day management.

Both organisations had recruited MBA graduates (with varying degrees of success) and faced challenges with decision-making, planning and problem solving. A common theme was not being able to understand *how* to keep strong managers working effectively and to limit a decline in managerial effectiveness in new recruits (further insights are to be found in the results section). The author learned that the skills required for achieving growth were being “diluted” in some way and an amendment to the study was made in order that this could be fully investigated. A clearer understanding needed to be obtained about what makes successful MSBs grow, in addition to understanding the barriers that low-growth (or non) MSBs face.

The study was duly modified to include an analysis of pre-selected, high-performing MSBs (in terms of profitability and revenue) from a pool of the “top 50” mid-market companies.

Fig 1. The Initial Research Process:

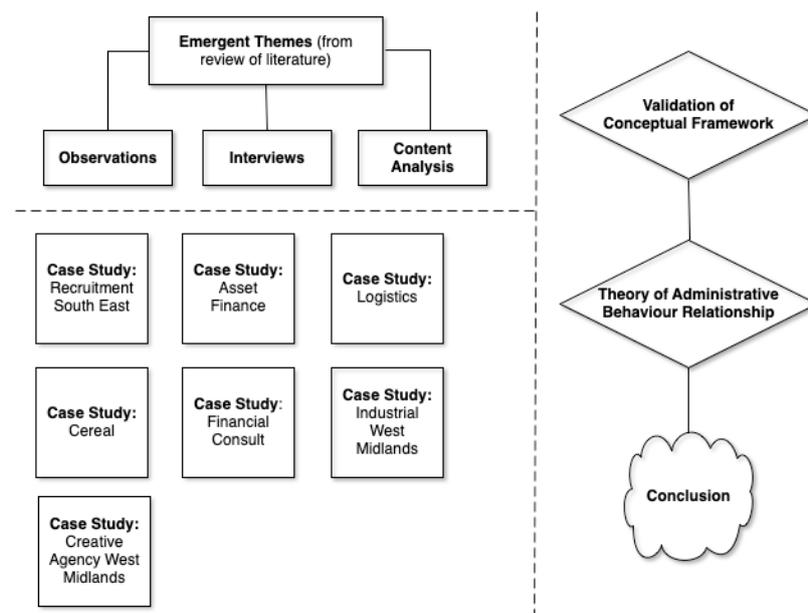
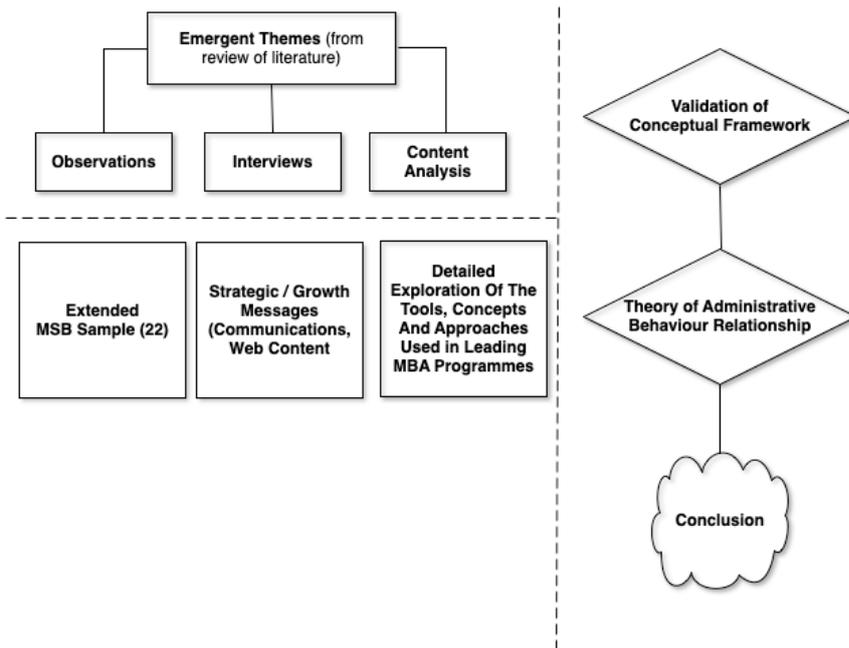
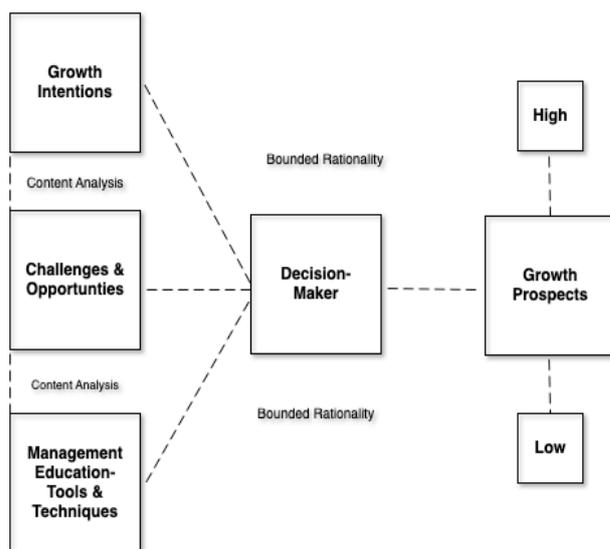


Fig 2. Revised Research Process:



The chosen process of abduction took into consideration the observations made from the initial case study interviews, for example the “dilution” of managerial skills, and develop a hypothesis that can be tested with the following conceptual model.

Fig 3. Conceptual Model:



4.9 Developing key informant interviews with the extended sample.

A qualitative research interview attempts to deliver an understanding of the world from a respondent's point of view; interviews are designed to uncover the true meanings of people's experiences in order to uncover their worldviews (Kvale , 1996 Qualitative research interviews will enable an author to understand the topic from the perspective of the interviewee (King, 2004).

Interviews are an effective and efficient means of data collection, especially when the analysis of management decision-making and opinions are a central part of a research study (Keats, 2001). This was the case within this study. In accordance with the RQs, interviews were carried out with each of the case study MSBs. Following the amendment to the original research plan, key informant interviews were also held with a sample of the top 50 fastest growing MSBs in the UK and MSBs who have had documented issues with achieving their growth objectives:

1. Additional Sample MSB 1: “Energy Producer South East”.

Energy Producer South-East are a diversified, distributed power producer who primarily focus on extracting value from methane rich gas sites, such as landfill facilities. The standard operating platform of the business is to develop operating capabilities in captured landfill methane, coalmine methane and power response.

The organisation states that its growth objectives are to be achieved through the adoption of an “operational excellence” strategy, working with internal and external partners to develop a high level of in-house commercial expertise and engineering capabilities.

The organisation operates a large portfolio over 150 of geographically dispersed generating plants and employees over 300 people in the UK. It originated as a venture capital spinout business and has seen sustained levels of organic growth during the last decade, and as a result of strategic acquisitions in the energy sector.

Energy Producer South East have a clear vision of *what* their talent can achieve and where it can be developed further. They will seek to employ MBA graduates, though there is a distinct requirement for employees to possess the following, key characteristics:

- A willingness to “go the extra mile” for the business and for this effort to be unsolicited.
- Be able to engage in regular, clear communication with both internal and external stakeholders.
- To be determined to support the training and development needs of themselves and others, ensuring that all employees are quickly up to speed and effective in their jobs.

2. Additional Sample MSB 2: “Manufacturing West Midlands”.

Manufacturing West-Midlands manage a portfolio of commercial and residential heating and hot water products, providing integrated solutions that include boilers, electric water heating, solar thermal, combined heat and power, controls and digital applications.

The organisation employs over 500 people and generates over £400m in revenue, demonstrating consistent double-digit growth during the last 5 years. Growth has been achieved through a combination of acquisition and organic development.

As a group, there have been challenges “blending” the different cultures that exist in the different businesses. Different working practices have existed, and these have been steadily combined into a single platform in recent years.

The organisation does not have a specific policy to recruit MBA graduates into leadership positions, however, a number of senior leaders do possess the qualification and it is (generally) seen to be beneficial. There is more emphasis on recruiting talent who possess open and clear communication skills and the ability to work effectively in teams.

3. Additional Sample MSB 3: “Energy Re-Seller South West”.

The organisation has been in operation for just over a decade, established originally by an entrepreneur and a team of just 3 managers. In 2019, there are over 400 employees that operate out of regional offices across the UK. The business has realistic aspirations of delivering a £600m plus turnover by 2021.

The CEO of Energy Reseller South West aims to take a “three pronged” approach to doing business; looking after employees, achieving positive growth and behaving in an ethical way are the principles that underpin their activity.

The organisation aims to provide 100% renewable power and has set an objective to offset all associated lifecycle carbon emissions involved in the production of electricity. They aim to achieve this by purchasing all energy products from renewable sources such as wind, solar and hydro.

4. Additional Sample MSB 4: “FMCG West-Midlands”.

FMCG West Midlands are one of the biggest handlers and distributors of fresh produce that are based in the UK, specialising in the procurement of produce from around the world for sale in the UK and continental Europe. The organisation has seen consistent growth in its 30-year history and is on course to turnover £600m in 2020, with realistic aims of becoming a £1bn business in 2030. The organisation incorporates associate produce companies in the UK, Spain and Netherlands. The business owns its own distribution fleet, part of an in-sourcing strategy that reflects their aim to provide a world-class service in the procurement, supply and distribution of imported goods.

“Integration” is a theme that runs throughout the business, the management team is dedicated to the continuous improvement and development of products and sources to meet the demands of an increasingly sophisticated marketplace.

5. Additional Sample MSB 5: “Training Company London”.

Developed out of a scientific interest group, this sales and performance focused training company has built a business model that works with different organisations to improve results and maintain a competitive advantage through their sales talent.

Taking a continuous improvement approach to doing business, Training Company London aims to be the world leader in two key areas:

Alignment. The leadership team recognises that business growth comes from ensuring that the right *people*, the right *roles* and the right *channels* are all in place. In addition to having the right skills incorporated into a tea, aligning sales efforts with innovative incentives and assessment programmes helps to drive talent towards delivering tangible business results.

The organisation also supports agile sales functions at an organisational level by benchmarking across industries and staying focused on technology changes; technological innovation helps to ensure that clients are leveraging their most valuable digital assets.

Execution. The business offers specific skills programmes, coaching and reinforcement to develop powerful sales content for their clients.

6. Additional Sample MSB 6: “Automotive Retailer South-East”.

Automotive Retailer South East are a multi-marque car dealership group that has been in existence for over 100 years. Headquartered in the South East of England, they sell vans and cars and have sites across most of the country.

The organisation specialises in the sale of new vehicles from its key franchises and used vehicles made by these marques alongside a wider range of other brands. It conducts MOTs, has servicing and maintenance facilities and provides a car and van rental service.

The organisation is independent, a status achieved following a management buyout in 2001. The management team has delivered considerable organic growth and has maintained the organisations status as one of the largest independent dealership groups in the UK.

7. Additional Sample MSB 7: “Wine Producer South”.

Wine Producer South are a wine, beer and spirits producer who supply to corporate and private clients, both in the UK and internationally. The business was formed by the current CEO who, whilst spending a large amount of his career managing corporate wine producers, had a self-confessed “entrepreneurial streak”, that made him want to “develop an innovative, start-up venture”. The business produces a world-class range of sparkling and still wines, using the “traditional Method” (the same as Champagne), from fruit that is sourced from the South East of England.

8. Additional Sample MSB 8: “Pharmaceutical South-East”.

Pharmaceutical South East were founded in the 1950s to develop alliances to license, develop and market medicines that improve patients’ lives, whilst also providing attractive options to

financially constrained healthcare systems. It is a privately-owned organisation and has a network presence in over 100 countries, with R&D and strategic teams based in the South East of England.

The organisation has UK revenues in excess of £490m. The management team considers the organisation to have an entrepreneurial heritage, one that aims to challenge conventional wisdom to find creative and innovative solutions. The organisation has established a portfolio of medicines that create value for patients, consumer and wider healthcare systems across important therapeutic areas such as diabetes, respiratory, oncology, pain and biosimilars.

9. Additional Sample MSB 9: “Brewing West-Midlands”.

Brewing West Midlands was established in 1983 and is one of the leading brewers in the UK. The business has a production and packaging facility in Birmingham, orchards across Hereford and Worcestershire and additional production and packaging facilities in Devon.

The recently developed site in Devon has received significant private equity investment that has helped to transform both its capacity and capabilities. £10m invested in the last 5 years has enabled it to double both the volume of production and employment, making Brewery West Midlands a cider manufacturer of some considerable scale. Additional fruit processing and pressing facilities have been added recently, representing further investment to support the growth of the business.

Expansion has been supported through the development of a multi-million-pound deal to create a state-of-the-art logistics facility at the West Midlands production site. In order to support further growth, in July 2014 the business announced a multi-million-pound deal to create an outstanding logistics facility at a new site just three miles from the Aston production site. The business currently exports a range of their ciders to more than 20 countries including America, Russia and a number of countries in Africa.

10. Additional Sample MSB 10: “Waste management London”.

Waste Management London is a family run private organisation that specialises in the processing and management of construction and demolition waste. The organisation crosses

over a number of sectors and offers total waste management and recycling solutions. With multiple sites in London and the Home Counties, the business has experienced continuous growth in the last decade and is recognised as a leading force in the industry in terms of innovation, sustainability, safety and best practice.

11. Additional Sample MSB 11: “Strategy London”.

Strategy London are strategy and marketing business that aims to help its clients to “grow their revenues and profits faster, better and more sustainably than anybody else”. Strategy London do this by optimising their client’s strategy, marketing, pricing and sales. The business has over 30 years’ experience in creating top and bottom-line growth strategies that deliver measurable results.

12. Additional Sample MSB 12: “Insurance West-Midlands”.

Insurance West-Midlands was founded in Birmingham over 150 years ago. In recent years, it has developed a highly successful business model providing tailored financial advice and products to select professional groups, notably GPs, hospital doctors, dentists, teachers and lawyers and a range of commercial financial products for the organisations in which they are employed. Each segment is served by dedicated Financial Consultants who work only within that segment and thus build-up specialist knowledge of their professional customers.

The organisation has a long-standing heritage of providing a full range of financial products and services exclusively for medical and dental professionals. The business provides specific finance to educational institutes for investment in assets such as vehicles, buildings and IT. It also offers a range of commercial finance products to SME's that cover long to short term loan and lease products to fund expenses such as Tax and VAT bills, insurance premiums, IT and other asset acquisitions.

13. Additional Sample MSB 13: “Healthcare South-East”.

Healthcare South-East provides specialist mental healthcare, including neuropsychiatry and autistic spectrum disorder, with the majority of patients referred to the organisation from the NHS. Founded over 100 years ago, the organisation has experienced major changes in the

provision of healthcare. Over 350 employees work in roles that are deemed by the board to be “essential to the delivery of growth targets and expectations”. The organisation provides an MBA-linked management education programme for its senior management team.

14. Additional Sample MSB 14: “Motorsport Technology”.

Motorsport Technology is an organisation that operates at the intersection of technology, data and human creativity to identify and exploit commercial opportunities in four key sectors: Motorsport, Automotive, Public Transportation and Healthcare.

The organisation has enjoyed considerable growth in the last two decades, moving from SME classification towards the top end of MSB turnover. The business operates a flat management structure in an environment where insights are taken from the field of motorsport and developed into transformative products and solutions that harness the organisations expertise in electronic systems, electric drive, telemetry, predictive analytics and design.

The overall recruitment strategy for the organisation includes recruiting MBA graduates, though there is the explicit requirement that new hires must be “proactive, passionate and have a desire to continuously innovate in a collaborative environment.”

4.10 Key informant interviews.

Key informants at each MSB under evaluation were senior managers or Directors who had explicit responsibility for delivering the growth objectives of the organisation.

The structure of the interviews was guided by the outputs from the case studies. Establishing a clear picture of what was happening within each MSB was important and the use of in-depth interviews helped the author to identify thematical links.

It was the author's intention to conduct a maximum of 2 interviews when conducting sessions with some of the top-50 fastest growing MSBs, this was to enable a consistent comparison with the same "rank" of key informant and because of the logistical implications of travel across the UK. Implications such as these are often overlooked during the research design phase (Kvale, 1996).

The foundations of in-depth interviews lie primarily in psychoanalysis; in psychoanalysis work, the data normally "flows" from the interviewee, instead of being driven by the interviewer (Lee & Lings, 2008). The medical link is one that the author really connected with; a psychotherapist's first intervention is usually to conduct an unstructured interview, one that gives a flexible and adaptable approach that is focused firmly on the interviewee.

The importance of this to clinical practitioners is clear as it provides an unparalleled level of richness in the data and often allows the interviewee to follow their own thoughts, tangents and feelings to better reach the core problem or issue. A key aim in this thesis was to uncover how a respondent is *thinking* and *feeling* about a particular situation.

Because human behaviour is so complex, emotion and experiences play a key role in the decision-making process of individuals and teams (Schiffman & Kanuk, 2003). Uncovering emotion requires an interviewer to possess valid soft-skills, technical knowledge and training. This reliance on the personal capabilities of an author has led to some questioning whether unstructured interviews are more "art" than science (Nesca & Dalby, 2013). The question of validity has been repeatedly raised about unstructured interviews as well (Kubinger, Wieseflecker & Steindl, 2008).

It is Wispe (1954) who makes a valuable, early contribution to the debate and his observations resonated with the author; “it is the selection of the proper categories and the proper units of measurement that are two of the basic problems in the analysis of the protocols of unstructured interviews: “Ultimately, the investigator must make his decision based upon the categories and units of measurement most commensurate with the purposes and goals of the research”.

When analysing MSBs and their respective challenges, the author investigated what “growth” really means, the complexity and risk associated with each challenge and how decision-makers “felt” about their own situations. Prior to when the interviews were being conducted, the author paid close attention to the suggestions of Cassell and Symon (2009) who advocated a structured approach to interview design, in order to minimise the practical issues that occur when conducting a qualitative research interview.

1. Defining the research question:

The research question should focus on how the participants view and understand the different aspects of their working lives. The goal here was not to quantify any individual experience or frame MSB growth to be “good”, “bad” or “indifferent”, but to understand how a person is positioned within the business and views the challenges that are being presented. An understanding of how management teams view challenges will provide one perspective; understanding how multiple perspectives serve to create a business-wide view of a challenge will provide more powerful insights.

2. Creating the interview guide:

A qualitative research interview should use a “guide” that lists the topics that the author wishes to cover; it is not based on a rigid structure of questions to be delivered verbatim (Cassel & Symon, 1994).

This approach to design provided the author with three sources for interview topics: the initial literature review, the on-going understanding that the author had about the businesses / industry and unstructured interactions with other people in the area.

3. Recruiting participants:

All participants were assured of confidentiality and data taken from interviews was stored on a secure server. Paper records were minimised wherever possible. All participants were clearly informed about why they were being interviewed; the overall purpose of the research and it was made clear that they could stop the interview process at any time.

The topic of confidentiality was vitally important to this study; respondents might unwittingly be restricting growth within their own organisation, and it is critical that the author is the sole user of the data that is obtained. This was ensured throughout the study.

4. Carrying out the interviews:

The most important factor to consider when carrying out any qualitative research interview is “flexibility” (Cassel & Symon, 2009). A standard question may open each interview, however, after that the author should be able to move freely within the guide so that they can pursue topics as they arise.

The study involved interviews being undertaken at a senior manager / Director level. The author was mindful of being able to position himself at an appropriate level when working with senior managers and Directors. The themes for the interview schedule were structured around the themes arising from the literature relating to MSBs, decision-making and the use of tools from management education.

The author recognised that a schedule may not always be followed in exact order, in order to pursue useful lines of inquiry and extract greater details from interviewees (King, 2004). Following the guidance of Easterby-Smith, Thorpe and Lowe (2002), the author aimed to cover all of the key themes that emerge from the interviews.

Each interview lasted from 40 minutes to one hour and after they were concluded, reflective notes were made as soon as practically possible. Each interview was recorded, and the recording preserved on a secure, encrypted, cloud-based system. Each interview was transcribed by the author into MS Word and then imported into NVivo. This process allowed for an additional opportunity to reflect on the content of each interview.

4.10.1 Limitations of unstructured, qualitative interviews.

Open-ended qualitative data sources are extremely useful for authors wishing to capture the experiences of people. Unstructured qualitative interviews, however, often require additional processing time in order to prepare them for analysis. Recordings need to be transcribed and edited and field notes corrected, because the data represents a text that has been constructed by the author. Once data has been put into words, it will be the author-constructed text that will be used in the analysis.

As Miles and Huberman (1994) wrote, “behind the apparent simplicity of qualitative data there is a good deal of complexity, requiring care and self-awareness from the author. In this sense too, qualitative research is similar to quantitative research; in both forms, the author will always bring something to the data (Punch, 1998).

4.11 Use of NVivo.

The use of qualitative data analysis software (QDAS) is now commonplace, although the platforms that were developed in the 80's and 90's have now evolved beyond recognition. In the early 90's, QDAS packages were framed around the various approaches they supported – Structural analysis, content analysis, interpretational analysis, text retrieval and theory building. Evolution was fast becoming revolution and it was Tesch (1990) who reflected that the pace of development (along with the usual, lengthy process of publishing) meant that most software guides were out of date before they were even read. This view is reflected in the creation of the Computer Assisted Qualitative Data Analysis (CAQDA) networking project in 1994. The project established a leading repository of QDAS knowledge. Miles and Huberman (1994), building on the CAQDA's work, were able to compile a list of 24 programmes widely used at the time.

Over the course of the next decade, the “revolution” continued and by 2005 only 9 packages were used extensively by the qualitative research community. In 2011, the top 5 packages (Atlas.ti, Cassandre, MaxQDA, NVivo and Trasana) performed consistently in a wide range of situations, meaning that QDA software had reached a point where it was more comprehensive, more homogenous and applicable to a wide range of methodologies.

NVivo is now considered to be the “standard” platform for early career authors and experienced Professors alike. NVIVO was chosen by the author as the primary platform (in addition to MAXQDA) due to the number of features that are on offer (Such as website integration and social media capture), and the significant level of textbook and online support (Bazely, 2013).

During the development of the study, NVivo was used to *support* the author with data analysis. The author established a preliminary set of cases prior to analysis and the key factors were drawn from a review of the literature. These elements helped to inform the initial structure of the NVivo “project”. A hierarchy of themes became apparent as the analysis was carried out, and a subsequent analysis of this hierarchy was conducted to detail any common threads running throughout the themes. This data then resulted in the production of an overall summary-theme-structure (The summary themes are covered in detail in the subsequent chapter).

NVivo is an invaluable tool to store data in nodes (themes) and categories. It also allows the author to display the data, helping to visualise patterns as they emerge. It is recognised that NVivo does not replace the process of analysis taken by the author (Easterby-Smith et al, 2002). The analysis of the annual reports, websites, marketing collateral and other relevant communication from the investigated MSBs was carried out using content analysis techniques.

4.12 Observations.

Social constructivists make clear that official ideologies about objectivity and scientific method are particularly bad guides for how scientific knowledge is actually made. Justice for the rest of us, what scientists believe and say they do and what they really do have a very loose fit. The only people who end up actually believing and, forbid, acting on the ideological doctrines of disembodied scientific objectivity enshrined in elementary textbooks and techno-science booster literature are non-scientists, including a very few trusting philosophers. -

Haraway, 1988.

In order to develop insights as deeply as possible, one must connect with research subjects on a number of levels, primarily using participant observation. A (case study) business that has generated the most relevant themes is used to provide context, additional insights and another layer of rich data from which to better understand both the dynamics and mechanics of what is happening in real situations. In addition to gaining insights through key-informant interviews, the author was able to observe decision-makers in their ordinary working environment.

The rationale for adopting the ethnographer's key methodology, participant observation, is that it enabled the author to "be there" and, through experience, gain a greater appreciation of the social actor's "point of view". Participant observation has played a significant role in anthropological and sociological studies for a number of years. Various fields have experienced an increase in the volume of qualitative studies that use participant observation (Bryman & Bell, 2015; Kawulich, 2005).

A debate exists about the number of anthropologists that have carried out ethnographic fieldwork, and to what effect, before Malinowski's heralded work in the 1920s. An attempt was made to standardise *how* to gather data by Morgan (1851), Tylor (1874) and Cushing (1883), however it is Malinowski's work that is often viewed as being novel, innovative and significantly developing fieldwork into what is known as the method of participant observation today (Sanjek, 2013).

Malinowski spent time immersed in the language of his subjects and made a conscious effort to engage with them and experience their day-to-day lives. As he learned the language, he kept detailed field notes of his observations and recorded the language in action that he heard as the

foundations of his ethnography. These field notes were often transcribed and analysed in the field so that they could guide the next part of his enquiry (Malinowski, 1922).

DeWalt and DeWalt (2014) have described participant observation as a method “in which an author takes part in the daily activities, rituals, interactions and events of a group of people as one of the means of learning the explicit and tacit aspects of their life, routines and their culture. Schensul et al (1999) defines the practice as “the process of learning through exposure to or involvement in the day-to-day/routine activities of participants in the author setting”. The link between exposure and the learning process is where most of accepted definitions of participant observation meet (Gans, 1997; Malinowski, 1922)

Whilst ethnography, as a practice, maintains that an author must be able to keep a degree of distance from a subject, they may need to get close enough to combine the views of both an insider and outsider (Hulme & Mutlock, 2005). This contradiction is echoed by Bernard’s (1994) perspective; Bernard noted that the practice requires a degree of deception and management of people’s impressions. Deception provides its own ethical issues and considerations, whilst impression management is also considered to be a critical step in the process of conducting the research.

4.12.1 Critical steps taken in the process of observation.

1. Developing a valid role within the organisation:

Action research was not a principle objective of this thesis and no interventions were tested. The author noted that the impressions of employees within an organisation must be managed so that they feel the author has a valid position (Bryman, 2015). The author did not receive any key informants into thinking that he was “one of them”, instead he adopted the position of a “trusted advisor”, “consultant” or expert author”. This was not a natural position and the “awkwardness” associated with such an approach had to be hidden.

The work of Hulme and Mutlock (2005) is acknowledged here, as it recognises the “awkwardness” of this type of fieldwork; the author was placed inside social situations that he would not ordinarily inhabit. Whilst this was uncomfortable at times, it provided opportunities to reflect on the obvious and subtle differences in the environment.

The reflective nature of several critical reports that are referred to over recent decades (Hammersley & Atkinson, 1995; Powdermaker, 1966) shows that the potential emotional “cost” of placing oneself in uncomfortable situations is greatly outweighed by the level of intellectual insights that can be gained.

Writing a reflective diary provided a sense of detachment from the data and, whilst also being cathartic, enabled the process of identifying emerging themes and concepts to develop more effectively. Listening is a critical part of reflection and was the next key step in the process.

1. Listening:

Whilst interviews played an important role in the later stages of the research, true ethnography begins by listening to language as it occurs. In the initial stages of participant observation, the author needed to establish a connection with the key informants and familiarise himself with the environment. Here, there was a number of topics and situations that needed to be absorbed. It is only when the research “funnel” becomes narrower that a author can become more selective about *what* to listen to and *where* to listen to it (Agar, 1980).

2. Interviewing:

Interviewing, as an ethnographic process, can be problematic. Difficulties may arise as a subject might feel compelled to adapt, re-interpret or modify past experiences in order to fit the present situation, subconsciously wanting to satisfy the perceived demands of the author. Summarising the processes advocated by Agar (1996) and Sanjek (2013), the author adopted this approach:

- a. The author started the interviewing process by entering “discussions” as a speaker and shifted topicality around his interests. As the author became more “connected”, significant theories began to emerge. There was always an attempt to direct discussions through the introduction of significant questions and suggested topics for responses from the key informants.
- b. After an initial period of observations/fieldwork, pre-arranged interviews began. This series of events was potentially quite disruptive; key informants were removed from an

environment in which they were naturally comfortable to a different location (e.g. meeting room or office). In such open-ended or discovery-bound interviews, the key informants were encouraged to move the conversations forward according to their own experiences.

- c. In later interviews, the author began to assert a degree of control. At this stage, general topics should always be introduced, allowing the key informant to expand freely upon their own points of view, knowledge and experiences. In more structured ethnographic interviews, topicality is more firmly shaped and guided by the author. Key informant responses now moved away from orations and free commentaries towards a more considered response to questioning.
- d. When the interviewing is at its most focused, the author should control both the topic and the environment as fully as possible. It may be appropriate to use questionnaires and interview schedules if the objective is to obtain a particular piece of data. This could include psychological tests, reports of disputes or even encompass repeated sessions to secure lengthy and robust life histories. Here, the author guided the subject according to the pre-set standards of scope and comprehensiveness, making use of interview schedules ahead of utilising questionnaires.
- e. At this point, whilst it may not be a major part of ethnographic practice, an author may be able to ask direct and pointed questions in an attempt to secure precise/focused pieces of data for recording. The author was required, at times, to ask direct questions.

It is noted that interventions of this type are potentially dangerous – the inappropriateness of such data capture in everyday settings may be upsetting, and therefore damaging, to research subjects and would directly conflict with the ethical considerations outlined at the beginning of this thesis.

4.12.2 Advantages and disadvantages of participant observation.

The most obvious disadvantage of participant observation is the length of time taken to conduct the research. A second disadvantage is the level of difficulties that can sometimes arise when documenting and recording the data. Recording information at the same time as conducting an

interview will always be challenging and mistakes can happen if one were to be over reliant on memory alone. By using data recording applications such as “Evernote”, dictation software like “Dragon” and digital recording devices the author reduced the possibility of recording inaccurate information.

It is recognised that participant observation will always contain a degree of subjectivity, as an author will never be completely able to remove themselves emotionally from the situation that they are part of.

A significant advantage that participant observation has over alternative data collection approaches is that it affords the author the opportunity to view and experience unscheduled events that would elude surveys, tools that purely capture a “snapshot” in time (Kawulich, 2005).

4.13 Secondary sources of information.

As previously noted, triangulation of sources can provide rich levels of data that provide additional depth to a study (Easterby-Smith et al, 2004; Flick, 2002). The creation of a theory benefits from embracing non-traditional modes of enquiry (Fillis, 2000). Annual reports, websites and marketing communications from each MSB were utilised, along with data from providers of MBA education, in order to provide a broader perspective of organisational behaviours.

4.13.1 Annual reports.

Annual reports for each MSB were analysed (including the 2-year period prior to the CSR). Organisational documentation of this type is particularly useful in business research; they can be evaluated to help develop a fuller picture of an organisation and its history (Hussey & Hussey, 1997). Naturally, there is always danger of bias, as annual reports are written for a particular audience and purpose (Bryman, 2015).

All of the MSBs under review had comprehensive websites. As will be discussed within the analysis section, there is some variation in the level of development of websites between each of the MSBs. Some have considerable scope for interaction and dissemination of information, others less so. MSB websites were reviewed regularly throughout the study. Due to the ease and speed with which websites can be changed, it was appropriate to store updates within NVIVO.

4.14 The 5-level Qualitative Data Analysis Method

The 5-level qualitative Data Analysis Method enables a researcher to identify small-scale analytic tasks , “ completely independently of the software’s features, and using a translation process to match the task not to the big-picture features of the programme, but to the low-level components of the software” (Silver & Woolf, 2015)

Fig 4. Project summary of 5-level Qualitative Data Analysis Method.

Analytic Planning Worksheet	PROJECT: Theory driven investigation of the critical factors enabling effective decision-making and growth within Medium -Sized Businesses (MSBs)- Implications for MSB leaders and Management Education.	
Level 1: OBJECTIVES & METHODOLOGY	Analysis Phase: Research Questions /Other Objectives: Do differences in managerial thinking, outlook and approaches separate high and low performing MSBs? To what extent does the development of MBA curricula address the complex challenges that MSBs face? Are decision-makers in MSBs ultimately “bounded” by the cultural and human dynamics of their organisations?	Principles Guiding QDA Qualitative Content Analysis, “Making replicable and valid inferences from data to their context, with the purpose of providing knowledge, new insights, a representation of facts and a practical guide to action (Krippendorf, 1980)”.
	CONCEPTUAL FRAMEWORK See <i>Conceptual Model diagram</i> . The validity of an MSB’s intention to grow, the challenges and opportunities which they face and the managerial tools and techniques they deploy will ultimately restrict or enable a Manager’s ability to make effective, growth-related decisions. The likelihood of future growth being achieved will be driven by this level of “boundedness”.	
Level 2: OVERALL ANALYTIC PLAN	PRIOR COMPLETED: (Phase 1) Review critical literature. (Phase 2) Develop conceptual model and establish the theoretical framework. (Phase 3) Case study and key informant interviews. (Phase 4) Exploration of Management Education. (Phase 5) Coding.	
	CURRENT(Phase 6) Content Analysis NEXT ANTICIPATED (Phase 7) Thematical links to conceptual model, theoretical framework and literature.	
Level 2: ANALYTIC TASKS	Level 3: TRANSLATION	Level 4: SELECTED TOOL (single paragraph) Level 5: CONSTRUCTED TOOL (numbered)
Incorporate interview, observation, corporate and MBA data into NVivo.	ST UNITS Transcripts, Observation notes, reflections, Social Media Feeds, Corporate Communication. PURPOSE Evaluate how MSBs think, act and behave in relation to growth. Explore the relevance of MBA curricula to MSB challenges. POSSIBLE COMPONENTS : Pattern based auto coding CHOSEN COMPONENTS : Coding	Level 4: Automated Coding, including coding by sentiment.
Group codes to establish relationships	See Translation Worksheet	Level 5: Social Network Analysis.
Create analytically meaningful sets of data for future analysis	See Translation Worksheet	Level 5 “Egocentric diagrams.
REFLECTIONS: Need to consider the connections and insights with the output of the systematic literature review in mind.		

4.15 Ethical considerations.

There are a number of ethical issues that need to be considered when conducting research in the areas of business and management. A lack of informed consent is an ethical issue not widely debated in the academic literature (Bryman, 2015) and the issue of confidentiality is also very important. The protection of interviewees from any repercussions of the comments being reported to the wider community should be a major concern for any author (Robson, 2002).

Several measures were adopted to address such issues, and to ensure that the research was carried out in a rigorous and ethical manner. The research was carried out in line with the University of Northampton's ethical guidelines, receiving ethical approval from the Postgraduate Research Committee.

Research participants were clearly informed that the information that they provided was to be securely stored and protected against access by anyone other than the author and related supervisory staff for a period of three years. At the end of that three-year period, all participant information will be completely destroyed, paper records will be shredded, and electronic records deleted. All of the participants in this study have been given the opportunity to review transcripts of any conversation that they contribute to.

4.16 Summary.

This chapter provided an examination of the research methodology used within the thesis, including the adopted research philosophy. It was observed that a distinction should be made between approaches to research that are broadly of the positivist / interpretivist dichotomy (Bryman, 2015; Travers, 2001).

It was noted that a perceived fault of qualitative research is its subjective nature (Goulding, 2000), however, this should be viewed as a positive characteristic in the context of this thesis. Initially adopting a CSR approach, as part of a wider multi-method study, was justified as it provided a recognised means of evaluating an organisation within a real-life context (Yin, 2003).

The chapter also included a section on the critical issue of data collection; the research process included a triangulated approach, which aims to provide differing perspectives on the same phenomena from different sources of data (Denzin & Lincoln, 2013). In the context of MSBs, this was particularly useful given the availability and depth of secondary data sources (such as company annual reports, websites and marketing communications). Interviews were viewed as a suitable method for a qualitative approach as they seek to enable the author to understand the reality of the interviewee, providing insight into their perspectives (King, 2004; Kvale, 1996).

Following on from this, it was identified that CAQDAS has become a common and widely accepted research tool (Bazely, 2013). Criticisms were noted, such as inappropriate quantification of the research (Bringer, Johnston & Brackenridge, 2004) and the potential for fragmentation of data (Bryman, 2015). Based on the preliminary set of codes that were generated, and the key factors emerging from the literature, a thematic analysis was conducted on the interviews, reflective notes and secondary data sources. Content analysis was then used to provide a holistic view of each MSB as a method of triangulation.

The chapter concluded with the limitations of the study and the ethical issues that the author needed to consider. The first limitation related to the problems (perceived) with qualitative research itself. It was indicated that these had been covered sufficiently in the discussion of qualitative research and research philosophy.

The other limitation that was noted covered the selection of interviewees; it was pointed out that each respondent should hold a similar position of authority and responsibility. As regards to ethical considerations, the final section established the procedures that were followed, in line with the University of Northampton's research guidelines to address such issues as a lack of informed consent (Bryman, 2015) and confidentiality (Robson, 2002).

Chapter 5

Analysis of Data

5.1 Relating data analysis to the research questions.

Within this chapter, the findings that have emerged from addressing R1 and R3 are presented. There follows an analysis of the accounts that have been provided by Key Informants from both high-performing and low-performing MSBs.

The purpose of R1 is to provide an increased level of understanding regarding how decision-makers in MSBs approach problems, essentially allowing an exploration of how people *think*, *act* and *behave* across in different (from the perspective of performance) environments. A deeper understanding of these factors provides greater clarity regarding the culture of an organisation, rather than being reliant on an assessment of available resources.

The nature of the question (restated below) is one of cognition and connects to the Theory of Administrative Behaviour through the notion of Bounded Rationality; decision-makers within an administrative environment are ultimately limited by their own cognitive abilities, which then limit the organisation itself (Simon, 1947). The aspect of “attitude” effectively responds to Simon’s contention that the theory is “incomplete” without a deeper understanding of the role that “emotion” plays (Muramatus & Hanoch, 2005).

Research Question 1:

R1a. Do high-performing MSBs differ in the managerial thinking, outlook and attitudes, when compared to underperforming MSBs?

R1b. If so, in what ways do they differ?

With regards to R1, accounts provide by Key Informants were examined in order to provide insights into the unique challenges faced by MSB decision-makers and the level of “cognitive dexterity” that they are able to deploy. Within the context of this thesis, “cognitive dexterity” is considered to be the process of dynamic decision-making and the establishing of a framework to provide effective, growth-related decision-making.

The effectiveness of any analytical process will always be dependent on the level of resources that are available to a researcher or a research team, something that is especially true of the level of time and effort that is available to study any phenomenon (Patton, 2002). Taking note of Bengtsson’s (2016) consideration of the optimal process for delivering a content analysis of “real” credibility, the author’s “pre-understanding” of the business environment was taken into account prior to conducting the analysis. This period of reflection helped to minimise potential issues with bias and to identify any conflicts of interest.

As the author has interreacted with MSBs in a previous, professional capacity, considerable efforts have been made to work closely within the research framework (which minimises the risk of preconceptions). In the previous chapters, it was noted that Key Informants representing MSBs from across a wide selection of industries were approached for interview. Organisations were approached that either featured in high-growth league tables, such as the Investec Leading Mid-Sized Business Report, or had recently reported issues with achieving growth. The Key Informants had to be responsible for delivering a significant element of their organisation’s growth strategy, either explicitly (through board level instruction) or via the implementation of a strategic business unit strategy, i.e. someone responsible for the direction of sales and marketing.

It is recognised that the Key Informants are not solely responsible for growth, and growth-related activities, within their MSB. Whilst organisational growth is a team-based activity, the impact that the Key Informants have on growth should not be underestimated; effective decision-making and leadership will result in decision-makers becoming more empowered to help their teams (O’Connell, Doverspike & Cober, 2002).

5.1.1 Reducing “emotional noise.

At the time of conducting the analysis, the UK had not left the European Union, following the triggering of Article 50 and the required withdrawal from the EU customs area. The level of uncertainty generated by the triggering of Article 50 had affected the level of planning for trade integration, restricted overall growth levels and raised the possibility of widespread increases in tariffs (Ansgar, 2017).

The challenges that are faced by MSBs due to the situation in Europe should not be understated, although the context of this study they should also not provide absolute “reasons” for growth or decline in MSBs. One should recognise the importance of decontextualizing any source of data and the beginning of any analytical process; an investigator should be encouraged to familiarise themselves with the data but should also be detached from any “emotional noise” that emanates from the research environment (Bengtsson, 2016).

Acting upon the guidance of Bengtsson, the author reflected on both the current and historical “disruptive” events and the effects that they had on MSB growth prospects. Despite there being significant levels of inward investment in recent decades, with the UK economy experiencing contrasting situations of high-growth and financial crisis, there has not been any significant shift in overall MSB growth levels (BIS, 2018).

No correlation between levels of inwards investment, skills provision and associates impacts on MSB performance was detected, although a full exploration of links between economic investment and business sector performance was outside the confines of this study. The framework of the study sought to enhance the understanding of the factors that impact on decision-making culture and organisational growth and not to offer an assessment of how market environments impact on growth patterns. The thesis reflects, therefore, “administrative” rather than “market” behaviours.

5.2 Data-cleansing and process of transcription.

Prior to the interviews taking place, permission was obtained from the Key Informants to make and store audio recordings of the meetings. Transcription subsequently took place by hand, which enabled a greater connection with the data than automated transcription would have provided. When the transcriptions were completed, the data was then stored in NVivo and a data-cleansing process was then deployed. Data-cleansing (removing duplication or irrelevant content) was a critical part of the analytical process, helping to provide greater insights and clarity. Anything that was either peripheral to the topic under discussion, or simply acting as a “filler” in the conversation, was removed. This helped to leave only those elements that provided significant insights into the interviewee’s point of view.

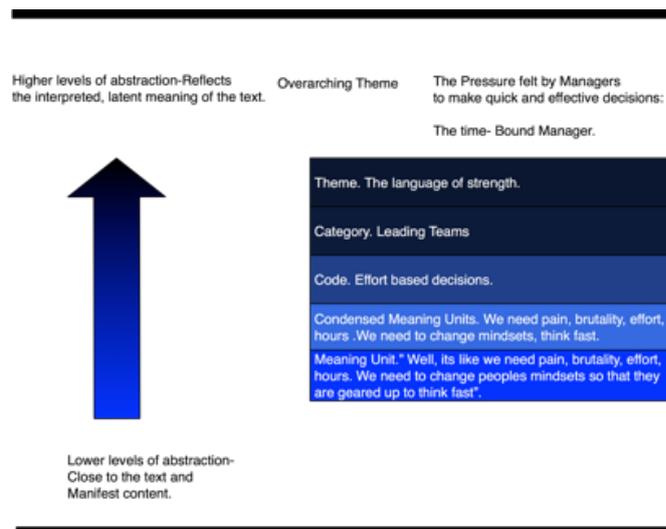
5.2.1 Allocating units of meaning.

Following the process of data-cleansing, each manuscript was examined in detail, thus enabling data to be allocated to distinct units of meaning. A unit of meaning, or “meaning unit, is a clear phrase, statement or element of the data that demonstrates an idea or set of perceptions (Mostyn,1985). The final allocation of meaning units was a result of constant reflection and questioning, a process that continued throughout the analytical stage.

5.2.2 Meaning units and the development of codes.

The meaning units were then further reduced into codes; the process ensured that the core meanings were retained. In order to establish the required level of objectivity, the author closely followed the practice of “Template Analysis”. A “template”, or a selection of codes, represents the key themes emerging from the textual data and enables the prioritisation of the salient points that can then be re-administered in subsequent interviews (King, 2004). An example of the meaning unit reduction process for Transport South East is found below:

Fig 5. Meaning unit reduction process example:



Within this process, the reduction of meaning units leads to the key theme of “language”, in particular how distinct categories of language begin to emerge from the interviews. The emergence of “effort-based” articulations was a significant one as it provided a point of contrast with other MSBs.

5.2.3 The coding of data within NVivo.

Audio recordings and transcriptions were stored in NVivo 12 Plus; this enabled multiple search and refinement operations to be conducted and provided the opportunity to connect the data with field notes and insights gained from diarised reflections. It is recognised that, and qualitative data software platform is only really capable of data organisation, software does not provide any form of substitution for effective *research* and *analysis* (Silver & Woolf, 2017). The clear analytical structure enabled complex coding systems to be developed effectively, providing greater insights, timeliness and sophistication of analysis than would have been achieved through manual operations.

The initial coded text was stored in “free nodes” in NVivo. Nodes in NVivo can be viewed as “storage containers” where material regarding a specific phenomenon can be kept, recalled and interrogated. Content was then coded at a node after evaluating the interviews. Opening a node enables the researcher to visualise all reference points in one location – facilitating reflection about the topic, the development of ideas and a necessary comparison of attitudes and patterns.

5.3 Emergent themes and the subsequent categorisation of data.

An initial template was developed, one that contained the emergent themes (aligned with the RQs), along with the outputs from the synthesis of the systematic review of literature. Subsequent reflections and modifications enabled the progression towards identifying more specific categories within each theme. The cycle of reflection and modification played an important role in developing an understanding of *what* was happening within the organisations.

The utilisation of a hierarchical coding structure enabled the researcher to conduct an analysis of the text at different levels of specificity, providing the opportunity to guide the conversation towards the required insights. King (2004) explained that higher-ranked codes can provide an interviewer with the general direction that the interview is taking, whilst-lower ranked codes provide the opportunity for finer distinctions to be made within and across interview data. Building on King's (2004) approach to coding structures provided the researcher with a degree of flexibility and agility for conducting the interviews.

5.3.1 The development of a thematic template.

Following a process of evaluation, contrasting and moving towards a deeper level of abstraction, the 4 following themes and their associated categories emerged:

1. **“Language” types** affect decision-making and organisational performance. There is a clear, cultural difference between low-performing and high-performing MSBS. Language is a reflection of organisational culture and a key driver of how influencers (and then, ultimately, the organisation in general) approach growth-related challenges.
2. **Skill** deficits and **training** requirements. Skills gaps exist and there is an underlying question for MSBs and management education providers: are we teaching the right people, the right things, at the right time?
3. How individual and organisational responses to being **“time-bound”** affect performance. Being “anchored” firmly in the present, may restrict a decision-makers ability to consider

wider industry dynamics, miss opportunities and ensure that they do not assess the threats from competitors or disrupters in the marketplace.

- 4. The decision-making context** of MSBs are important; the level of “emotional content”, displayed by both a Manager and organisation, highlights the significance of the “gap” in Administrative Behaviour Theory.

Readers will note that there is a natural level of overlap present within these themes, yet they are also quite distinctive and, ultimately, offer an extension to what has arisen from the review of literature. These themes provide a comprehensive view of the author’s perceptions and interpretations of the factors that are enabling / restricting MSB growth, in addition to any implications for both management education and the wider development of theory.

When providing an analysis of the Key Informant interviews, the author did not set out to develop any type of “grand theory”, nor to establish a complete generalisability of conclusions. The author has, moreover, sought to identify the issues that may help with our understanding of how to develop performance and achieve growth to *influence* the design of management education and, therefore, the *enhancement* of theory.

There follows a summary of the analysis and samples of interview data. For clarity, key informants are referred to as “interviewees” throughout the text. Any quotes taken from transcripts are “*written in italics surrounded by double quotation marks*”. This is to clarify for readers that this is not the author’s wording but the individual words and thoughts of the interviewees.

A summary of the data within each major theme is now presented and, in the subsequent discussion chapter, the implications of the analysis is presented in relation to the overall RQs.

5.4 How language types affect decision-making and organisational performance.

A notable emergence from the data is how the different interviewees utilise different language “types”. “Language”, within the context of this thesis refers to the nuances in communication displayed by decision-makers when exploring the requirements (and challenges) to deliver growth in their organisation.

What is inferred from the analysis is that experiences, perceptions and level of emotional content that is present within a decision-maker’s dialogue, all have an impact on how a decision-maker communicates (both internally and with others). As Schwandt (1997) offered, “qualitative inquiry deals with human, lived experience. It is the life-world as it is lived, felt, undergone, made sense of, and accomplished by human beings that is the object of study”.

Here, the ways in which Key Informants utilise different language types are explored and categorised. An analysis of these language *styles* suggests an array of different managerial approaches are utilised within the sample of MSBs; a taxonomy, followed by examples of meaning units, is presented next.

5.4.1 The “language” of growth (Encompassing “Energy”, “Enterprise”, “Denial” and “Defeat”).

Energy:

A fundamental entity of nature that is transferred between parts of a system in the production of physical change within the system and usually regarded as the capacity for doing work-
Merriam-Webster Dictionary.

A simple definition of “energy” is underlined by the “capacity for doing work”. In the context of this thesis, “energy” reflects that ability to “do” and to achieve. It is a pattern of language that is, perhaps, perceived as positive in some organisations. Over three decades prior to this study, the dangers of managing for growth, whilst adopting a high-energy mindset, were outlined by Harry Levinson (1996):

Time constraints on a job are crucial to preventing burnout. Don't allow your people to work 18 hours a day, even on critical problems. Especially don't let the same people be the rescuers of troubled situations over and over again. Understandably, managers tend to rely on their best people; but the best people are more vulnerable to becoming burned-out people. The over-conscientious, in particular, need to take time off from the demands of their role and to spend that time in refreshing recreation. The military has learned this lesson, but management has not.

As Levinson forecast, expanding energy has some negative by-products. This distinct style of language deployed by the interviewees emphasises how, in direct contrast with the other styles, decision-making and growth are perceived to be things that are *fought* for and *earned*. This is often at the expense of great personal investment or deployment of organisational resources.

Here, MSB leaders are driven to recruit staff who are “*comfortable at the coal face, those that are resilient enough to come back for more and don't mind getting their hands dirty when they solve problems*”. This will naturally represent a challenge for any recruitment enterprise, as young people will mostly “*lack real-life experience and do not naturally have to have the ability to make decisions within them.*”

Emerging from this language style is the premise that effective recruitment is achieved through hiring managers who have “*stacks of energy*”, people who can “*take everything in their stride*”, to fulfil the requirements of leaders who want decision-makers with “*a lot of personal drive*”- people who “*will always go the extra mile*”.

Interviewees noted that they “*want people who have some fire in their belly, something we can ignite and will make a difference between our competitors and us. They may be good technically but if they haven't got that fire, they are just going to be harder to manage. Tellingly, a leader who deploys this language type would rather dampen people's thoughts than motivate people-it's just so energy sapping*”.

There is a visible and distinctive use of “Strength Descriptors”. The implication is that problem solving, and decision-making requires physical energy, that there is a “battle” that has to be won and that (by logical deduction) the individual / organisation will eventually be depleted of that energy.

Enterprise:

The quality or activity of thinking of new ideas and activities in business and making them successful despite the risks involved -Cambridge Dictionary.

Through a process of synthesis, a different response was elicited from interviewees from entrepreneur-founded organisations, those who have an entrepreneurial background or have consistently demonstrated entrepreneurial traits.

Here, MSB leaders are viewed as “*challenging, unpredictable, inspirational- entrepreneurs and innovators*”. The energy and strength descriptors make way for a more *creative* language style. Leaders want decision-makers to have a “*high-degree of passion and enthusiasm- the ability to stand up and to get things done*” but, in conjunction with them accepting that they are “*part of a team*”, utilising “*creativity and mental agility with none of the ego that goes with it.*” The sense of entrepreneurial language is not restricted to MSBs who operate at the smaller end of the turnover scale. At the other of the spectrum (closer to £500m turnover), growth is often viewed as “*exciting*” due to the organisation having a “*small business mentality. The people are all “people- people” and the subtle feel of a long-term, family-run enterprise filters all the way down through the business*”.

A different emphasis on “*effort*” is apparent here. An interviewee noted that “*if you screw someone over, they will always remember it. It won’t work for you in the long-term. I have realised that it is not about effort and money; it is just as much about growing as a person, engaging with your workforce and being able to give back to the community*”.

The inference is that there is something distinctive and creative about decision-making behaviour when it comes to growth, especially if a decision-maker’s internal drive stems from an entrepreneurial mindset.

Denial:

A refusal to admit the truth or reality of something (such as a statement or charge)-Merriam- Webster Dictionary.

Denial is viewed by some to be a defence mechanism, established as the result of an individual's experiences, the environment that they find themselves in and how successful they have been previously in challenging situations (Ogden & Biebers, 2010). For an MSB decision-maker, denial will represent another level of boundedness.

Here, Key-Informants may talk positively about achieving growth objectives and making decisions. It was noticeable, however, that for MSBs who have well-articulated goals, but few achievements, there is an unconscious desire to say what they feel *ought* to be heard.

The use of metaphors, clichés and “management speak” dominates their language structure. When pressed about how their organisation is reacting to the demands placed upon it by the leadership team, a notable response was: *“We describe the business sometimes as being like a spinning ball. Occasionally we change the direction in which the ball spins. The ball remains the same and the game remains the same, but the main difference is direction. We have taken new people onboard and invested in new products, although this hasn't had any impact on growth or profitability”.*

Here, it should be noted that the language is different to that which focuses on “defeat”. Defeat, in this context, describes the interviewees perspective that *nothing* is in the decision-maker's sphere of influence to change and that growth is an external factor that cannot be affected. Decision-makers are resigned to the *fact* that they are on the periphery of what is happening, becoming more *reactive* and losing the ability to be *proactive*.

Defeat:

The fact of losing against someone in a fight or a competition, or when someone or something is made to fail”. – **Cambridge Dictionary.**

This language style is distinct and appears to permeate every aspect of the organisation's culture. How does one approach growth here? - *“I think we probably need some entrepreneurial input from a new owner in order for us to grow. We need some innovative thinking as we have probably plateaued in terms of growth and ability”.*

We see an MSB who has already been “beaten” in the quest for growth. They are waiting for a new leader to emerge, an external investor and some alternative thinking to arrive. There is a “holding pattern” in play that feels almost inevitable.

It is clear that there needs to be a dramatic shift in terms of *how* change is implemented, although when considering whether anyone can achieve it, the interviewee knows that “*there has to be someone who is capable of doing it. Who they are, I don’t know? I suppose I would ask what Amazon would do? If the existing model could be disruptive that would lead to growth, maybe someone will come along and deliver that.*”

This type of narrative, one that lacks certainty and positivity, are subsequently explored further through the organisation’s broader communications (media interviews, corporate statements, marketing communications and use of images.) Given that negative attitudes are “contagious” within certain environments (Duhcek, Zhang & Krishnan, 2007), there is the possibility that a defeatist approach to growth may permeate throughout the business.

5.4.2 Associated categories.

Further analysis of the language “types” demonstrates where the relevant associations are within the language used by the Key Informants. The following table shows the weightings of each category, along with the associated concepts, highlighting how a particular typology is created. It is notable that “activities” and “action” appear as the highest recurring category.

Table 6: Associated Categories

<u>CATEGORY</u>	<u>Count</u>	<u>Weighted %</u>	<u>Concepts</u>
Activities/ Action.	1134	0.67	Energy, capability, capacity, change, creation, demand, energy, enterprise, enthusiasm, leadership, ownership, struggle.
Change.	941	0.62	Adapt, adjust, advance, death, decline, development, disruption, improvement, innovation, speed, transformation.
Management.	269	0.31	Achieving, direction, flexibility.
Critical Events.	989	0.53	Competition, compromise, conflict, leadership, motivation, responsibility, training.
Planning.	270	0.30	Design, organisation, preparation, strategy, tactics, thinking.
Growth Attributes.	417	0.26	Adaptability, analytical, creativity, empathy, evaluation, flexibility, creativity, structure, methodology, leadership, vision.

The emerging themes and their associated categories and concepts were then mapped to the individual MSBs. The process of mapping identified 4 clear classifications that were specific to the growth/ decision-making capabilities of the organisation, identified through their different uses of the “language of growth”. There is a clear correlation between approaches to decision-making and performance against objectives, outlined in table “MANAGERS”:

Table 7: Mapping Language, Concepts and MSBs.

<u>Identifying Classification</u>	<u>Primary Language of Growth</u>	<u>Concepts</u> *Denotes negative perspective.	<u>MSB</u>
Achieving growth objectives.	<ol style="list-style-type: none"> 1. Enterprise. 2. Energy. 	Adaptability Capability Change Creativity Enthusiasm Enterprise Ownership Empathy Vision Speed Transformation	“Automotive South”, “Manufacturer Midlands”, “Retail South”, “Pharmaceutical South East”, “Energy Reseller South West”, “Wine South”, “Insurance West Midlands”.
Striving to reach growth objectives.	<ol style="list-style-type: none"> 1. Energy. 2. Enterprise. 	Change Enthusiasm Struggle Methodology	“Financial Analysis South”, “Waste Management South”, “Asset Finance”, “Automotive Retailer South East”.
Restricted in their ability to grow.	<ol style="list-style-type: none"> 1. Denial. 2. Energy. 	Decline Disruption Struggle Flexibility * Adaptability* Vision* Conflict Enthusiasm	“Cereal”, “Brewery West Midlands”, “Recruitment South East”, “Logistics”, “Healthcare South East”,
Lacking the genuine desire to grow.	<ol style="list-style-type: none"> 1. Defeat. 2. Denial. 	Leadership* Adaptability* Innovation Struggle Enthusiasm* Vision*	“Energy Producer South East”, “Creative Agency West Midlands”, “Financial Consulting London”.

5.5 How language drives the decision to join a specific MSB.

Outside of the daily decisions that are taken within an MSB, it was observed that *how* managers made the decision to join the organisation was often unorthodox.

A sample of the interview transcripts taken from key Informants (below) from those MSBs who were achieving their growth objectives highlights the concepts of “transformation”, “creativity”, “adaptability” and “vision” at work.

5.5.1 Key Informant insight sample- Retail South.

The samples of dialogue that follow represent how the key themes emerge from the data.

The passage below is part of an exchange between the researcher and the commercial Director of Retail South. The commercial Director has a clear mandate to deliver the overall growth objectives for the organisation and is responsible for the recruitment of management teams and decision-makers. The exchange took place at Retail South’s headquarters (quotes taken from transcripts are “*written in italics surrounded by double quotation marks*”).

Researcher: “How did you first get involved with Retail South?”

Commercial Director: *“I joined Retail South, it’s a funny one really as I originally went for their graduate scheme just because there weren’t any jobs. Then, I just joined the sales office and worked my way through. I am pretty driven individual, and I wanted to prove a point that I would be ahead of all of the graduates that they took on, which I did pretty quickly. I think I always have a point to prove.*

I moved through the business, managing a number of branches in my first 10 years and then became an Area Director, which is directly managing 20 people. I [then] joined the central team to be a category manager. It was something a bit different, it was to create a new business. Effectively, that is what I have been doing for the last five or 6 years. I was asked to look at another business and another business and then became business development Director for Retail South, so I sit on the Retail South leadership team. It’s a very different role but it means that you can be more of a visionary.”

The “unplanned evolution” suggests that there is a highly flexible and innovative organisational culture. This is, however, counter to the wider perception of the organisation. Retail South exist in a mature, highly competitive and commoditised marketplace. No evidence existed to suggest that graduate recruits were more effective than their non-graduate counterparts, although the organisation perceives there to be a benefit from management education, such as the MBA. Recruiting new team members with a pre-determined skill set was vital for the success of new divisions; however, the skill set did not mirror the typical components of MBA programmes.

Researcher: “What are the characteristics of a successful management team at Retail South?”

Commercial Director: *“In our biggest Sales team, which is roofing, which has 40 heads. They are Business Development Managers. From a numbers point of view, we took it from £51 m and this year we will do £125m. We have also tripled the profit at the same time. That makes us very interesting as a business unit. What’s different about that sales team is that we started it from scratch, it was a piece of paper with a proper 3-year strategy, getting the board to approve it (which they did) and turning that into reality. If you start from scratch, it means that you can hand pick your people. If you can hand pick your people, it’s a very easy win.*

To start with, as it was a new sector that we were going after, it was essential to import the knowledge. We didn’t have the right knowledge and that’s what I needed. The individuals I needed had to have an understanding of the market, an understanding of the customer and an understanding of the product. Not necessarily...their day-to-day selling skills. It was more important that they can work in a team. If you don’t have the right attitude and aptitude to do that, then it is impossible to work here. “Lone Wolves” don’t work for me as it is about the long-term goal.”

The Commercial director talks of “knowledge”, “attitude” and “aptitude” as being interchangeable. Individuals were to be recruited that understood relationships and marketplaces, were self-motivated but also were driven to work as part of a team. Some latitude, understanding and trust from the board was required to allow the Commercial Director to put the strategy into motion.

The corporate culture at Retail South, however, is not one of total flexibility. The response to the Corporate Director's strategy suggests that there is not always complete harmony when decisions are made:

Researcher: "What's it like to manage [the shifting] corporate cultures-has there been any resistance?"

Commercial Director: *"Resistance? From internally. Yes! The internal customer always seems to be the most difficult to satisfy. We do a lot of training on "influence over authority". I set my team up (Area Directors) deliberately so that they do not report directly to me. If you look at the organisation chart on a piece of paper – I have zero authority over them. The reason I did that is because I wanted to integrate them into the overall team as quickly as possible, so that the "ownership" and "performance management" over them is driven by Operations. The reason that I did that is because I wanted Operations buy in from what I wanted to do. If they have their "own person" in the operation that they are expected to manage, then they are more likely to make it successful. This has certainly born fruit."*

An absence of direct control and authority of subordinates has empowered staff and provided them with the tools and environment in which they can be more successful; how commercial decisions are approached at Retail South is indicative of an approach more akin to an entrepreneurial, family-orientated environment.

Researcher: "It sounds like you have more of a small business approach, more entrepreneurial than most the size of Retail South? Overall, is that deliberate?"

Commercial Director: *"Very much so. I don't think that it matters about the size of the organisation, as long as it moves as a unit. Of course, the bigger the organisation gets, the tougher it becomes [to make decisions] but every team within that unit has to become as tight as a drum. Our development has worked really well. Everyone gets it and supports it whilst you are growing [internally and externally]. It seems that, from a cultural perspective, the UK loves an "underdog", they are passionate, and they support you whilst you are growing."*

When we were held up as a shining light in the industry, then everyone wanted to shoot us down. It's a cultural thing, a British thing and I hate it! It's shocking...

I had to turn the communication “tap” off to the outside world when we started to get some success. To the team (internally) that sense of success, community and shared vision stays. We have to slow down what we shout about outside of the team.”

Maintaining a “small-business mentality” has helped to alleviate some of the challenges that growth can bring to an organisation. The notion that decision-making speed and effectiveness decreases in line with growth is interesting, especially as the organisation adopted an “underdog” status and retrenched when it came to public statements about growth.

5.5.2 Key Informant insight sample – Energy Reseller South West.

Like Retail South, Energy Reseller South-West has enjoyed a sustained period of growth and is a profitable MSB, competing successfully against bigger players in the energy sector. Employing over 200 people and turning over in excess of £300m, the decision of the Sales & Marketing Director to join the business echoes the decision made as Retail South. As a marketing-led organisation, the Marketing Director has the overall responsibility for growth. The exchange below took place at the headquarters of Energy Reseller South-West.

Researcher: “How did you get involved with Energy Reseller South-West?”

Marketing Director: *“It was interesting; I had been working with an energy supply business in Cardiff with my husband and, out of the blue, had been made redundant. I decided to take a bit of time out and explore something new that I could do. It looked like, at the time that energy retail would be the next big thing and that is where I thought I would end up.*

I was also in touch with an employment agency that suggested that I get in touch with Energy Reseller South West. At that time, I couldn't find anything about the company anywhere. There was no listing, no website, nothing at all. You could find a supply licence on the OFGEM website, but really there was nothing.

I ended up meeting with the Managing Director in an empty office in a barn conversion in the middle of the Cotswolds. They had no people, no furniture, no computers... Nothing.

-I remember thinking, “what's the worst that could happen? “There was obviously some risk, it was “interesting”, and I had family members and friends try to convince me that it was a bad idea. Luckily, I chose to ignore them!”

Joining what was essentially an entrepreneurial, family-run start-up business, the decision to move to Energy Reseller South West required vision, an assessment of risk and also some consideration for what the manager could do for the businesses, in addition to being career orientated. With no mention of benefit packages, corporate benefits or the attraction of a recognised brand name in the industry, the manager needed to see something else in order to connect with the opportunity.

Decision-making is part of the fabric of the organisation. Whilst Energy Reseller South West has MBA graduates as part of its workforce, their recruitment seems to be in spite of the qualification and the knowledge that it brings.

Researcher: “Can you describe the ideal Energy Reseller South-West employee? What characteristics do they have?”

Marketing Director: *“Well, we apply the same recruitment opportunities to recruiting customer care staff as we do to recruiting for a Head of Commercial role. They have to be bright, value driven, customer focused.*

It is hard to distil what makes an ideal fit! I guess we need to balance the people with little commercial experience with those who have experience in working for a large-scale corporate. Because it feels like a smaller business, with more latitude for making decisions and getting things “done”, some people can find that a little uncomfortable and unsettling.

We want people who can adapt to the pace of the organisation quickly. Those that come from larger organisations often struggle to do that. There is a big difference to how we solve problems. We want people who can solve problems creatively.”

Researcher: “Do you want the skills that a manager with an MBA would bring?”

Marketing Director: *“We value creativity more. Decisions are made in different ways than how they were in the past (even recently). We haven’t got time to analyse lots of data and spend many months to make decisions. 6 months is a long time in our world.”*

For Energy Reseller South-West, decision-making should be fast, fluid and effective and the responsibility of the manager. The inference is clear; the larger the organisation, the slower the pace of decisions – it is the organisation that ultimately contributes to how decisions are made and how effective they are. Recruits should already possess a high degree of intelligence; however, the Sales & Marketing Director is acutely aware that this can be diluted by the business.

5.5.3 Key informant insight sample: “Automotive South”.

Automotive South was born out of the motorsport activities of a leading Formula 1 team, an operation that had for decades been guided by the entrepreneurial skills of its founder. The CEO was recruited to replace the leadership of the (outgoing) founder, with the remit to transform the once £5m a year organisation into a £1bn corporate entity within a decade.

The below exchange took place at the UK headquarters of Automotive South.

Researcher: “So, you come in and have a very “hands on” Chairman that was intent on joining two businesses together (one mature and immature). How did you approach deciding on what you had to do first?”

CEO: *“Well, those two businesses were at war with each other. He (Chairman) had told them that they were coming together before I arrived. They had a good 9 months of knowing this before I arrived. There was plenty of animosity and rivalry between the two before I walked in the door. It was jostling, competition.”*

Researcher: “A big resistance to change?”

CEO *“No more than what there would normally be, I think. I don't think that here would be more or less than the average that you would find out there in industry.”*

At the end of the day, the first thing I had to do was to figure out who – because it's all about people, the more I do and the more I get involved in, it all comes down to people. Everything else is circumstantial. It all comes down to the particular group of individuals that you have around you at that point in time. I quickly had to work out who was up for and capable of the challenge that the Chairman had set (becoming a technology business) – who had the stomach for it. Then work with those people to work out what it was that we had – what was unique, what was powerful and would take us forward in the marketplace and would differentiate us and create something that we could trade on or increase trade on.

Both parts of the business were a going concern, were profitable although had started something of a small decline. They were there because of who they were. They would either have a customer call and ask them to do something or had “X” call then and say, “I’ve had an idea, can you do this?”. So, it was a group of very clever people who would respond when someone threw a problem at them. In some respects, it’s not what I call a business – it’s an organisation who responds to problems. It’s not something that will drive forward and look for opportunities, they are waiting for the phone to ring. I’m summarising but they were clever people who hadn’t had the time to be proactively thinking about the future and approaching the market. Their responses were very clever, but had no direction, strategy or vision of the future.

The “Thinkubator” was almost the opposite; it was all about getting to market with thought leadership and ideas. They were selling £50k feasibility studies into lots of places but never making a repeat sale – a small group of clever people having some fun, almost the University of Automotive South.”

Researcher – “How do you define the key characteristics of your leadership team?”

CEO – “The common theme is a high degree of passion and enthusiasm – the ability to stand up and give everything to get things done. Clearly, they need their own core functional abilities depending on their roles. Energy, passion, will, vision and a belief in what they are doing.

Most importantly, a willingness to accept that they are part of a team. We incorporate a lot of F1 ideas, physiology, mental agility but none of the ego that goes with it. Beyond everything, that's what equates to growth."

Speed of thought is important for Automotive South, however, in the early days it was not deemed to be proactive enough. "Getting things done", an edict given by the CEO and without the "ego" of Formula 1 may seem like an impossible combination when one considers the glamorous and highly marketable world of professional motorsport. This lack of "ego", however, is something that is very noticeable when one tours the Head Office facility.

There are unwritten rules, such as "nobody is allowed to publish material that just recognises their own achievements". The language used by all staff is dominated by team-based phraseology – "we" dominates "I". This is helped by an exceptionally flat management structure where there is a board-level position and then "employees". Managers are "firsts amongst equals", unable to command other employees to action something, moreover, they must persuade and compel others to act through creative and dynamic decision-making.

5.5.4 Key Informant insight sample- Insurance West Midlands.

Insurance West Midlands are a more established organisation than Automotive South, Energy Reseller South West and Retailer South. It operates in the Financial Services market, a sector that is dominated by procedures and regulation.

There are similarities between Insurance West Midlands and all four organisations; the group has a stated aim to grow into a £1bn organisation by 2022. Difficult decisions, however, have had to have been made in recent times and decisions are taken daily about the future orientation of the business. The below exchange took place at the headquarters of Insurance West Midlands in Birmingham.

Researcher: "Where is the business right now?"

CEO: *"If you went back into the 1990s and before that, we used to have the guys that would call at the door with their cloth caps and bicycle clips collecting money and marking it up in a book etc. That model wouldn't work anymore so there was a business model that had worked*

for many, many years but clearly wouldn't work in the future so we were faced with a number of choices. So, we chose that a small, mass-market player was a bad place to be, so we chose to play somewhere else. Our business model changed rapidly since that time (1995). 1995 we changed the business, we down-sized the sales (collection) force and we went up-market in terms of our approach, and we recruited better quality salespeople etc. etc.

It was 1997 when we made our first moves into very niche markets, which was where we wanted to be. We will have, for instance, the details of 80% of graduating medics in their final years. We sign up about 50% of graduating doctors and dentists and we have commercial products with about 40% of GP practices. We have a fairly successful business operating in that space. You won't hear about our brand or see us publicised in very high-profile spaces, unless we are winning awards, or we have good investments returns coming in. That's because it is pointless for us. What is the point in advertising to the entire market when we only service this niche? In our marketplace, we have 90% brand awareness.

Newer markets to us are the teachers and the lawyers, where we are still developing our approach. So, one part was to develop our markets and the other part was to develop our products and services.

So, that what we did from.... 2005 to 2013, we increased our new business streams by 500%. In this period of double-digit growth, in 2005 we had 600 staff, now we have 1600 staff. We had double-digit growth throughout the recession, a model that has been constantly developing. We had that growth throughout the recession. We achieved our 10-year transformational plan two years early. So, we took a new transformational look, imagining if we had a new CEO coming in – what would we do. Would we sit on our arses or say, “that's not good enough, what could we do next?”

Where we are now is seeing where we can get better, We have 300 people working on projects, mainly IT development (that has been going on now for 4 years) – making sure that our infrastructure is capable of dealing with our next phase of growth, and also about efficiency, making sure that we can achieve that growth without incurring additional fixed costs in the process. The next push for growth is on the next 5 years; currently we are looking at what the world will look like post 2020.”

Researcher: “How do you do your job, with all this complexity, the different projects and characters... how do you manage the pressure and responsibility?”

CEO: *“It’s exciting, that’s why you do that. You have to have the type of personality that wants to make things better and want to change. You have to have the courage in the first instance to take performance down...even your good people that you bring in will not perform at their potential for a year, so everyone starts off as a cost. We have to understand what we are doing, why we are doing it and stay massively focused on that.”*

Continuous development, challenging each other and not focusing exclusively on the present are all critical themes of the dialogue with Insurance West Midlands.

5.6 Management decision-making at low-growth MSBs.

The study shows that informants at MSBs who are not experiencing high levels of growth can have different perspectives about effective decision-making. By comparing and contrasting the different uses of language, how problems and decisions are perceived and, by examining the “type” of decision-maker that is recruited, a link between decision-making capability and performance is established.

5.6.1 Key Informant insight sample- Industrial West Midlands.

Industrial West Midlands is the most mature MSB within the study. It is the 2nd biggest supplier of its type in the UK, with aspirations to double turnover by 2021. As part of that objective, it promoted from within, making the Head of Sales the New Divisional Head, tasked with delivering growth objectives.

The below exchange took place at the headquarters of Industrial West Midlands.

Researcher: “Is the business in general more product orientated now or is it open to trying ideas?”

Divisional Head: *“We have changed things around considerably in the business. We now have three key divisions, industrial, product and special projects. Industrial contains most parts of the “old” business. Heavy industrial fits here, Calpine etc, this sells mainly weigh bridges. Product becomes more important and I have a particular focus on this part of the business. In essence, the focus here is on what happens inside the factory.*

Funnily enough, we talked today at a senior meeting about Industrial West Midlands being described as being like a “big spinning ball”. Occasionally, we just change the direction in which the ball spins. The ball remains the same and the game remains the same but the main different is direction.”

Researcher: “Is that a good thing or a bad thing?”

Divisional Head: *“I think it's a good thing. We need to be more customer-centric; we need new products. If Industrial West Midlands is a body, by way of analogy, then my division is the lungs. We need fresh air in the form of new people and new products driving the business.”*

Researcher: “What difference has that made to growth and profitability?”

Divisional Head: *“At the moment, it hasn't made any difference. It will change because we haven't been customer centric before. We are strong versus the competition. A challenge has been our contract base which we also have to stop the rot on this and make some improvements. We haven't won because we haven't given customers what they want. Our set up now should now enable us to do that. I suppose we have been guilty over time of imposing our “will” on our customers. We are an old creaky business that takes time to move.”*

There is a real distinction between this MSB and those that are achieving a higher level of growth. The language is dominated with “management speak”, being “customer-centric” and both activity and product focused. This is despite the Divisional Head’s acknowledgement that this hasn’t made any difference to the organisation whatsoever. The “feel” of being anchored in the present, whilst struggling to see a solution to the future is mirrored in the analysis of Logistics.

5.6.2 Key Informant insight sample – Logistics.

Logistics are a management buyout of a family run transport and logistics business. There are aspirations to treble turnover, however, the Managing Director admits that there are few opportunities to do this as they are preoccupied with the challenges of the present.

The below exchange took place at the Headquarters of Logistics.

Researcher: “What’s happening in the business?”

Managing Director: *“Well, we now have the latest strike action to get through. Its gridlocked in Calais, which affects everything else we have to deal with. Then there will be the French holiday season, so all in all it's a bit of a f***ing nightmare.”*

Researcher: “How are you getting through that?”

Managing Director *“We are getting through it but it’s difficult. We have fuel issues, driver issues and then the immigration challenges. There are 7000 refugees a week coming to Europe on our routes. Drivers are attacked, and it slows our process down considerably. Most of our trucks won’t go near the French routes now. If you look at the trucks parked up near Calais, most of the drivers are not British...”*

Researcher: “What happens if this remains the same?”

Managing Director: *“We just pull out of France as a route. This will have a knock-on effect for our client relationships. If we can’t make deliveries on time for clients like Argos, then we get charged or lose the value of the contract. Argos don’t care about logistics, it’s just a cost to them. They aren’t interested in Strikes, fuel costs or anything else. They just want their products delivered on time. We are faced with big economics and I wish I knew how to fix it. What’s softened the blow for us is the introduction of European labour. We have 30 percent of our staff Polish and Romanians. This is a short-term fix however, because they will want to go back. That’s why I want to focus on driver training, to make sure that we have a ready supply of drivers.”*

Researcher: “So, are the complications / challenges mainly people related, or strategy related?”

Managing Director: *“[Its probably] a combination. We have new regulation being thrust on us each day. Pallets and volumes increase the risk of certain products like hand gel. It’s a problem now when you move 1 tonne of it as it is classified as a hazardous good. These changes seem to be happening almost daily now, so we really have to stay on our toes and try and anticipate the next change.”*

Researcher: “What do the top 5% of people in your industry do at the moment?”

Managing Director: *“They just have an attitude that means they can keep up with the pace of the industry and are reliant enough to not fucking well fold at every opportunity. Maybe it’s an education thing, maybe it’s a cultural thing but we (society) just seems to be getting worse and worse at it.”*

Researcher: “How do you get the right people in?”

Managing Director: *“We have tried but have failed in some cases to get the right people into the business, the right personality type. Those who are comfortable at the coal face, those who are resilient enough to come back for more and don't mind getting their hands dirty when they solve problems.”*

There is a real “anchoring” of growth related thinking in the present; the challenges that are being faced appear to weigh heaviest on the Managing Director, who has (by his own admission) been able to effectively delegate or trust decision-makers to be as “invested” in the organisation as he is.

5.6.3 Key Informant insight sample- Creative Agency West Midlands.

The future of creative marketing agencies has been a source of debate for some time. The future is a potential cocktail of technological advances, in-sourcing and increasing pressure on margins.

Creative Agency West Midlands has transitioned across a number of MSB categories in the last decade. A high-growth MSB in the late 90s, it has grown to provide advertising and creative work to major brands such as Jaguar Land-Rover. The organisation was hit hard in the aftermath of the global financial crisis, when revenues declined and the organisation was faced with a need to reposition itself and appeal to a broader selection of sectors, thus rethinking its value proposition. The appointment of the key informant to the board, an MBA from a top 20 (UK) Business School, was intended to crystallise the strategic plan and provide a growth platform for 2020.

Researcher: “I'd like to start by trying to understand your views on what strategy is...”

Strategy Director: *“My focus on strategy is to look at our client's strategies and get insights into where they can be improved, and I suppose this differs from a “normal” Strategy Director's approach of looking at the general strategy of the business. Initially I came here to do the “consultancy bit” of the agency process. I tend to have an outward facing outlook rather*

than be inward focused, though in saying that as being part of the leadership team, I am probably the one with the most experience of operating in broader business environments.

I probably provide the most strategic input [into the management team] and understand both the agency side and client side of the business but I don't necessarily see myself as being the Director of our strategy."

Researcher: "What is it you think that stops people from "changing the game"? There are those who know doubt have the potential to but are stopped by something."

Strategy Director: *"There really shouldn't be anything to stop players like this. It should be about where they are on the curve. Barriers could be that they have something that only appeals to a particular segment of the market and not as much as they originally thought.*

People who have the time, skills and inclination to engage with new markets are more likely to do well. Going back to the asset management business [that we deal with], you are now more likely to buy a loan or financial product online. If you look at how that market has changed it is significant. It used to be that you would buy a cd online because it would be perceived as low risk and investments required more risk / more thought. Now consumers are more open to taking risks.

There are lots of disruptors coming into the market to use technology platforms to disrupt the market."

Researcher: So, established players are less likely to use disruptive technology to influence growth?

Strategy Director *"Yes, Kodak didn't see the threat / opportunity that was occurring when the market moved from film to digital. Sometimes people don't see what is right in front of them. Did the marketplace really see Amazon as a threat? Especially when for years and years they didn't make a profit.*

A lot of the problem lies with group think and time frames. Typically, the tenure of a CEO is a few years and if you are going to radically change the fabric of a business that is quite expensive and risky – something that doesn't really happen on a Chief Executives watch.

A CFO at a business we work with has an interesting view. His view of the world is that all economic models are wrong (though he is an arrogant sod!) Economic models shouldn't be

used as an indicator of the current & future performance of the economy – GDP etc. He would look at shifts in asset prices instead, what I mean by this is that in many industries there is the established way of thinking, that’s the established view of the world, that is the way that things work and quite often [if you look at the financial crisis for example], it stops you from seeing what is going to happen next.”

Researcher: “So, people involved in strategic thinking are either complacent or insular because they are looking at a window of 3 years?”

Strategy Director: *“What drives most decision makers is what the budget forecast is for the next 12 months? I do think that in a lot of businesses, middle to senior management strategy / strategic thinking is something that you do to get out of the way, something that you do until you get on with the “real” job. My personal view is that few businesses have their tools to work out what is likely to be happening in the next 5 / 10 years or longer. They haven’t got the capability or the credibility to look that far into the distance.”*

Researcher: “What are the main tools that you think people are missing?”

Strategy Director: *“Maybe not specific tools, maybe it’s the process. Perhaps the experience of having gone through it before and knowing what it feels like. Whilst there is a lot of SWOT analysis carried out in businesses, there isn’t a lot of serious scenario planning being done. There isn’t a lot of work being done to imagine situations where disruptive situations are visualised.*

I also have a view that any change, whatever that change might be, takes longer to happen than the timeframes of most forecasts, but has a more devastating effect.

Change happens more slowly than technologists and futurologists predict [which is why people maybe don’t look so far ahead]. The internet for example, if you look at why it was invented – it wasn’t for the sort of things that it is used for today – another reason perhaps why people do not look at long term scenarios.”

It is apparent at Creative West Midlands that there are internal and external constraints that are holding back the organisation from making major changes to its strategy, although *thinking* (especially creative thinking) is still considered to be the primary “tool” at work.

5.7 The analysis of emotional sentiment, language and MSB characteristics found within the Key Informant interviews.

Following the analysis of emotional sentiment levels in each interview, the categorisation of MSBs was developed further. This will provide future research studies with the opportunity to segment / profile MSBs, providing a platform for forecasting and assessing the growth potential of each MSB and evaluate their attitudes towards achieving growth.

Evaluating the sincerity of each interviewee's intentions was deemed an essential measurement. It is known that decision-makers who confidently articulate the strategy of an organisation at the expense of acting on the day-to-day functioning of the business, and who demonstrate a genuine belief in what needs to be achieved in both the short and long-term, can have a negative effect on performance (Rowe, Hawkes & Houghton, 2009).

In order to add greater depth to the evaluations of what decision-makers at MSBs were *doing* about their growth strategies and what they *felt* about it, "sentiment analysis" was utilised. Sentiment analysis is the study of analysing responses to specific entities from the perspective of their attitudes, sentiments and emotions. The field is often described as "opinion mining" and is sometimes considered to be a catch-all for "opinion analysis, opinion extraction, sentiment mining, subjectivity analysis, affect analysis, emotion analysis and review mining (Liu, 2015).

By embedding this approach within the analytical process, the intention was to identify the extent of positive and negative sentiments, along with their position in the responses. Excessive levels of positive sentiment may indicate respondents being overconfident in their abilities or a masking of their true intentions; high levels of negative sentiment on the other hand may highlight a lack of belief in the ability to achieve strategic goals or close a skills gap. A recognised and widely used research tool, sentiment analysis has been successfully deployed in autoregressive modelling, developing latent semantic models as a predictor of future performance (Liu et al, 2007; Mischne & Glance, 2006).

Here, sentiment analysis has been utilised to explore whether excessive negative or positive language correlates with the levels of growth performance at different MSBs. It may be

possible, within future studies, for a predictive model (growth opportunities derived from MSB's internal and external communications) to be developed in some detail.

5.7.1 The refinement of sentiment analysis to establish clear language categories.

There are four clear categories of MSB, based upon emergent language types, level of emotional content and overall performance: “**Growth Achievers**”, “**Growth Strivers**”, “**Growth Restrictors**”, and “**Growth Agnostics**”. These categories are based on the financial achievements of the MSBs during the last 10 years and the thematical analysis of the Key Informant interviews.

Growth achievers are those MSBs that are achieving their stated aims of growth. Growth Strivers represent those MSBs who are facing barriers to growth but are still achieving part of their growth objectives. Growth Restrictors are those MSBs who are unable to achieve their stated aims and unable, although willing, to rectify the situation. Growth Agnostics represent those MSBs who state that they wish to grow but, in reality, have no real intention to grow.

1. **Growth Achievers:** “Automotive South”, “Manufacturer Midlands”, “Retail South”, “Pharmaceutical South-East”, “Energy Reseller South-West”, “Wine South”.

The language utilised by those MSBs that achieve their stated aims of growth (Financial or Market Share) share some interesting characteristics. The language used by key informants when discussing growth, the business environment and capabilities is not overly positive. Content which can be described as “moderately positive” accounted for more than double that of “very positive” language.

Language that is “very negative” is marginally less prevalent than that of “moderately negative” language. This highlights a lack of extreme emotional thought when considering the challenges of growth, suggesting greater rationality of thought and more practicality when it comes to problem solving and decision-making. The primary “language of growth” here is “enterprise”, supported by “energy”.

2. **Growth Strivers:** “Financial Analysis South”, “Manufacturer Midlands”, “Retail South”, “Pharmaceutical South-East”, “Energy Reseller South-West”, “Wine South”.

Within those MSBs who are striving to achieve growth (yet are facing complexities in their organisation / environment that may ultimately restrict it) there is a greater positive, emotional sentiment used in the language of key informants. “very positive” sentiment is used more than double that of “moderately negative” or “very negative” language. This highlights that more, extreme emotional thought is used when it comes to considering the challenges of growth, suggesting less rationality of thought and less practicality when it comes to problem solving and decision-making. The primary language of growth here is “energy”, supported by “enterprise”.

3. Growth Restrictors: “Cereal”, “Brewery West Midlands”, “Recruitment South-East”, “Logistics”, “Insurance West Midlands”, “Healthcare South East”.

Of those MSBs who find themselves restricted in their efforts to achieve growth (due to a lack of resources, absence of technical skills or changes in the marketplace) there is a near equal distribution of “moderately positive” or “moderately negative” sentiment emerging from the language used by key informants. This highlights that, whilst emotional content is less extreme than the preceding categorisations, there is a high level of conflict within the decision-making processes used within the organisation. This is reflected in discussions being anchored in either the present or the past, with little emphasis placed on future planning and anticipation of issues. The primary “language of growth” here is “denial”, supported by “energy”.

4. Growth Agnostics: “Energy Producer South East”, “Creative Agency West Midlands”, “Financial Consulting London”, “Industrial Manufacturer West Midlands”.

Here, we have a section of MSBs that *state* that they wish to grow, yet this may deflect attention away from the fact that there has been no evidence to suggest that they have the capabilities or true intentions to grow. Language may be dominated by “management speak” and a desire to reiterate the intentions laid out in mission statements, yet they are without the strategic planning abilities to see them through to fruition.

Here, the language used is emotionally inconsistent. There is, however, a near consistent distribution of “moderately” and “extremely negative” and “extremely positive” sentiment used. This highlights a combination of uncertainty and apathy which can ultimately lead to inaction. This is reflected in discussions being more “detached” when compared with the other

categorisations and devoid of accountability and measurement, but full of good intention. The primary “language of growth” here is “defeat”, supported by “denial”.

5.8 The critical gaps that exist between high-performing and low-performing MSBs (Change Management, Communication, Critical Thinking, Emotional Resilience).

The content analysis highlights how the Key Informants and MSBs (at a strategic level) approach change management, communication, critical thinking and the establishment of emotional resilience. Their differing approaches have a noticeable influence on “language” and decision-making. The associated concepts and depth of the themes are highlighted below:

Table 8: Impacts of language.

<u>Skill / Knowledge Gap</u>	<u>Count</u>	<u>Weighted Percentage (%)</u>	<u>Concepts</u>
Change Management.	2007	1	Advancement, consolidation, culture, differentiation, dynamism, outcome orientated, reduction.
Communication.	747	0.5	Contribution, demonstration, measurement, message, tell, teach.
Critical Thinking.	813	0.4	Analysis, assessment, change, consideration, evaluation, forecasting, planning, measurement.
Emotional Resilience.	1896	2.4	Analysis, experience, empathy, acceptance, uncertainty (ability to deal with), challenge, doubt.

5.9 Change Management.

The collective dialogues with Key Informants reveal a near constant emphasis on “change”; how to adapt to it, the impact of change on the organisation and individual lives, how to anticipate it and an underlying search for what to *do* when change happens. Here, there is a need for MSB leaders to “*have an understanding of the marketplace and understanding of what is changing in the customers world*” if they are to “*get ahead and maintain a level of advantage.*”

It becomes clear that, when interviewees discuss “change”, they refer to it either from a *team-based* (and one that is consistently *positive*) perspective, or from an *individual* (one that is consistently *negative*) perspective. A high-performing MSB would consider that a decision-maker has to “*have the right attitude and aptitude levels to deal with change, where growth is achieved through partnerships, rather than hitting people with sticks*”.

Achieving successful change management here, stems from the “consequences of having a clear, common vision”, decision-making is often devolved, and the organisation takes “*more of a small business approach, something that is more entrepreneurial than the rest of the competition*”.

Change management for MSBs who are achieving growth requires decision-makers to adopt an outcome-related focus. Instead of change being a reactive process, change is something that can be “*measured by the impact on bottom line results and the difference that it makes to management, togetherness and the overall ethos of the team*”.

High-growth MSBs require employees that can “*adapt to the pace of an organisation quickly*”, respond to changes through “*innovative approaches and understanding what is happening at a customer level*”. There is evidence of senior leaders involving staff, at all levels, in a process of change; working across different time horizons anticipating multiple, alternative scenarios and making “change” become a by-word for “*ambition, clarity and getting a combination of people working together who are comfortable dealing with challenges as it is a part of the organisational culture*”.

There is a distinct difference in how change is perceived at low-growth MSBs. Here, interviewees refer to change as something of an aspiration. Leaders struggle to “*bring the right people in who can cope with change, they lack the real-life experience needed and they are not equipped to make decisions quickly, if at all*”. When faced with the challenges of change management, leaders “hope for improvements in sales to be made” and refer to themselves as “old, creaky and unable to respond quickly”.

5.9.1 Communication.

Extending the process of synthesising the data revealed that “excellence in communication” is a sought-after skill at the best performing MSBs; excellent communication is vital as, “*when it is clear, it helps to extend a sense of community and maintain the cohesion of a singular vision for growth*”. Excellent communication requires balance, expertise and is “*difficult to teach*”. It is crucial to success, however, because *how* decision-makers communicate within their organisation “*translates into how the business behaves, approaches a high-performance culture and ultimately, impacts on results*”.

Key Informants who are faced with growth challenges reveal that communication is not viewed as a soft skill, but a “function”. These MSBS “*inform clients and employees about key developments*”, whilst they “*would like to have a voice of influence and knowledge, guiding clients through changes and complex times*”.

5.9.2 Critical thinking.

For the high-performing MSB, critical thinking is a “*mind-set that Directors want employees to have, where they stop and think and consider what is really required*”. Thought processes are objective, aspirational and contain less emotional content. When considering growth, a leader in a high-performing MSB is more likely to think about growth targets as “*something that we expect to be achieved*”, making an objective assessment of “*what is different, what is happening in the future and what can we do that will have a positive impact?*”

This approach to thinking contrasts markedly with that of low-growth MSBs, where the approach is more subjective; decision-makers state that they “*think we know what is happening with our clients and think that they get what the business (MSB) is all about*”.

5.9.3 Emotional Resilience.

This skill is perhaps the most significant to emerge from the data synthesis. Significant change, new economic landscapes, increased workloads and the dynamic nature of business, have been shown to put incredible psychological demands on today’s employee. Emotional resilience considers a person’s ability to adapt to very stressful situations or problems. The more emotional resilience that a person has, the more adaptable they will be to adversity. The less emotional resilience someone has, the more likely it is that they will struggle to respond positively and effectively to change (Goleman, 2008).

Whilst different perspectives on building emotional resilience abound, such as being a set of social skills that can be adapted to help an individual deal with the pressures of everyday life (Bar-On, 1996), there is general agreement that the characteristics of the emotionally resilient Manager can be trained and developed (Mathews, Zeidner & Roberts, 2002).

5.10 Conclusion to Chapter 5.

The analysis reveals a typology that is specific to distinct categories of MSBs. There is a “language of growth” that has emerged, consisting of “**Energy**”, “**Enterprise**”, “**Denial**” and “**Defeat**”. This “language” combined with a subconscious amount of sentiment correlates with differing levels of, and attitudes towards growth.

There exists a greater level of introspection within “Growth Achievers”. The analysis demonstrates that there is a high degree of positive self-appraisal, analysing limitations and then seeking decisive actions. This is displayed best in how “Automotive South” responded to dramatic changes in their operating environment. When existing markets began to decline, the CEO instructed all staff member, not just the management teams, to build unrestricted, growth-related conversations into their everyday language. “How can we become better?” “What opportunities could we capture if we knew that we couldn’t fail?” This type of questioning became the norm throughout the organisation, enabling new ideas to be shared and, importantly, no ideas were off limits or to be criticised (“critiquing” became distinct from “criticising”).

When this type of attitude is contrasted with the response of “Industrial West Midlands” to a similar shift in their operating environment, where the business could see that customers and competitors were transitioning from product-led strategies to solutions-led consultancy, there is a significant difference. Only management teams were privy to strategic discussions and these conversations culminated in staff being challenged to cut costs, to defend existing revenues and cut back innovation expenditure to focus on core products. The timeframe that the business language referred to was very much about “ensuring short-term safety and stability ahead of playing with long-term risks”.

One can see the distinct differences in language, in approaches to innovation and how rational (what can we do to be better?) thinking and irrational (fear of failure and fear of change) thinking present themselves in these different organisations. This underlines the importance of Administrative Behaviour Theory to the study, providing a relevant framework for understanding differences in decision-making behaviour; differences that make an impact are not necessarily resource based.

Both its importance and relevance are underlined further when one considers how Simon approached the “idea” of an organisation and its structure. Simon (1947) described an organisational system as a “complex pattern of communication and relationships in human beings”. Given that the key concern of Administrative Behaviour Theory is with the “boundary between the rational and the non-rational aspects of human social behaviour”, it would appear prudent to identify *how* the various actors communicate, whether their communication and characteristics of communication impact on behaviour leading towards (or against) growth, be that rational or non-rational.

Chapter 6

Evaluation of management education and relevant grey literature.

6.1 Introduction.

Within this chapter there is a broad evaluation of management education, focusing on MBA programmes, examining how the skills and techniques that are offered may help or restrict MSB performance. There is also an evaluation of the relevant grey literature; this holistic assessment enables the themes that have emerged to this point to be explored from a deeper perspective.

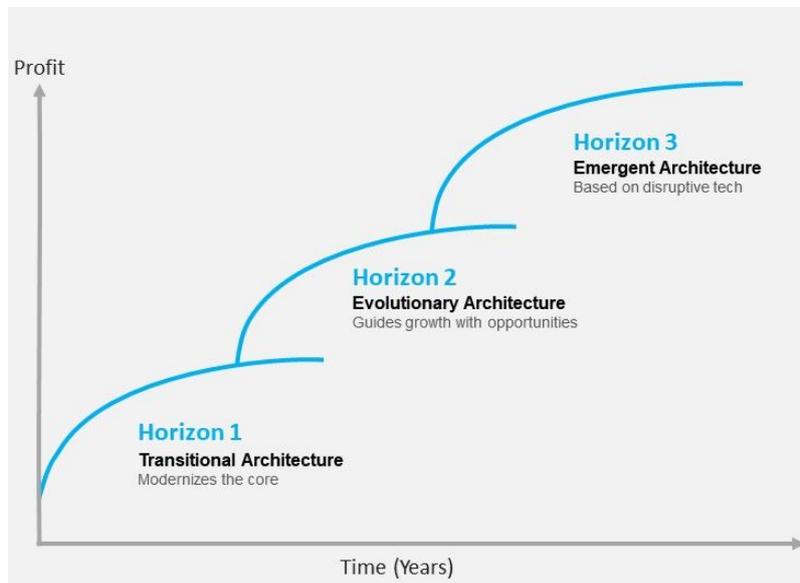
It has been shown in the preceding chapter that there is a correlation between language, emotion and performance; the correlation has enabled the development of different categories of MSB. By evaluating how closely aligned management education is to the challenges faced by MSBs, research questions R3 and R4 are addressed.

Multiple factors impact on an organisations' intentions and skills to achieve growth, along with how resilient decision-makers are in times of uncertainty and pressure. The ability to effectively conduct strategic decision-making in multiple time horizons, work with flexibility and adaptability and adopt a dynamic, creative culture, are all essential contributors to any organisation's success (Eisenhardt & Martin, 2000).

The three horizons framework, first proposed by Baghai, Coley and White(1999), argues that by constantly focusing on what is happening in the present (the first time horizon) business performance will ultimately decline as levels of innovation ultimately decline without considering the medium-term and long-term (the third time horizon). It captures the notion that nothing truly transformational can be achieved without an individual / organisation reaching the understanding that the tools used to achieve short-term objectives have limitations and there will be a need to abandon current ways of thinking if medium-term and long-term goals are to be achieved.

Fig 6. Three Horizons Framework – Adapted from the work of Baghai, Coley and White,

The Alchemy of Growth 1999:



Horizon 1:

In Horizon 1, efforts are normally focused on cashflow and those activities that reflect the organisations core capabilities in the short-term.

Horizon 2:

In Horizon 2, successful organisations are focusing their efforts on developing emerging opportunities, paying close attention to ventures that are require more “entrepreneurial thinking”. Within this time horizon, opportunities may represent good levels of future profit yet may require comparatively high levels of time and resources. A different type management thinking is required here.

Horizon 3:

In Horizon 3, a different type of management thinking, and culture is required. Future growth will be realised in this time horizon but will require extensive levels of imagination and innovation. New capabilities may be realised in order to take advantage of (previously unimagined) opportunities, or to deal with the threat of disruptive innovators.

Reflecting on the themes that emerged from the key Informant interviews, enabled consideration to be given to models that support help to explain the “boundedness” that exists within MSBs. The three-horizons framework is relevant as it reflects the thinking and language utilised by the different categories of MSB. Key informants from low-growth MSBs often used dialogue that is centred within the first-time horizon. High growth MSBs utilise language that is more akin to Horizon 3.

The study shows that something other than resources (e.g. the availability of finance, products and personnel) has either a positive or negative affect on performance. The analysis in chapter 5 puts forward the notion that a decision maker, and therefore the organisation, can be bound by language. Addressing R 3 and R4 has enabled the author to show whether management education contributes further to the level of boundedness.

6.2 Management education as a facilitator of performance management for MSBs.

It was acknowledged in chapter 1 that MSB leaders have long been able to access management education (the study examines management education in the form of an MBA), along with the decision-making expertise that it brings, by employing MBA graduates or through importing some of the skills and knowledge that is generated from MBA programmes at a selection of Business Schools.

Both the exploratory and systematic reviews of the management literature recognised that the global marketplace for management education is an increasingly diverse and competitive one. Both management practitioners and academics alike do acknowledge that Business Schools are not just competing with each other, but they are also experiencing competition from specialist training providers and numerous online and traditional for-profit institutions (Lorange, 2005; Perriton & Reynolds, 2018; Scalberg, 2013).

This highly competitive marketplace has different categories of supplier, some are “top-tier”, internationally renowned organisations that serve the needs of corporate business and some are niche providers that deal with specific markets / industries (GMAT, 2018). It is feasible, however, that all operate with the goal of providing value to their shareholders and growing their organisations. Not all will have the specific requirements of MSBs at the forefront of their thinking.

Whilst the author has sought to understand more about whether there might be synergies between MBA curriculums and the different categories of MSB, it should be noted that a critique of MBA programmes (in terms of either their relevance or value) is outside the boundaries of this thesis. Instead, an exploratory examination of how management education is aligned with the challenges faced by the MSBs under investigation (and how that may differ across different programme providers) provides insights into how effective management education can be in addressing both the “boundedness” of MSBs and their decision making.

For the purpose of the exploratory examination, a sample of three categories of MBA provider was explored. These categories included “top-tier”, “high-ranking UK” and “low cost UK” providers, selected to explore whether any broad differences in provision, communication and “fit” with MSB challenges (growth-related) existed.

The sample contained 30 MBA programme providers; 20 “top tier” and “high-ranking UK” programmes were randomly selected from the 2018 FT MBA ranking list and 10 “low-cost UK” programmes were randomly chosen from UK institutions that provide an MBA for less than a £12,000 annual fee. The programmes have been anonymised for the purpose of this study, as the intention of the research is not to provide a deep critique of MBA providers.

General media outputs from these providers, including institutional programme guides and recruitment / promotional material were subjected to a process of qualitative content analysis; emergent themes were subsequently overlaid with the MSB themes that were documented in chapters 4 and 5 to identify areas of consistency/ difference. Each MSB key informant was questioned separately regarding the likelihood of their organisation recruiting talent from one of the three categories of MBA provider

After evaluating material from across the 30 providers, the sample produced 6 emerging themes. Content analysis was able to show that, despite the differences in provider type, all share similar discussion topics, albeit from 3 very different perspectives. For comparison, the 6 emerging themes arising from the content analysis included:

1. **“Management”**. Distinct elements of this theme include the management of teams, information and budgets. The “actions” of management are quite clear; management is both a role and a unique set of activities, either serving the interests of an individual decision-maker or the business itself.
2. **“Leadership”**. Whilst leadership and management are sometimes used interchangeably (Azad et Al, 2017), there is a clear distinction in this content analysis. Leadership varies from a position that managers can aspire to hold, to an essential element of self-development and a philosophy that drives long-term success.
3. **“Career Development”**. Career development is, not surprisingly, a significant theme. A key component of MBA ranking criteria is the post-graduation impact that the MBA has on salaries (Financial Times MBA Salary Analysis, 2018). Within this theme emerges the different perspectives of career development as enhancing leadership skills, increasing levels of confidence and the abilities to move into senior positions in corporate organisations.

4. **“Skills Development”**. The development of managerial skills features highly and covers proficiency of learning, entrepreneurial approaches and the personal drive / motivation to obtain them.

5. **“Course Content”**. Naturally, providers will outline the content of their programmes within literature and general communications. The emerging themes show course content to be either syllabus focused (e.g. duration of modules and topics), what is internationally recognised (e.g. impact on league table performance) and how modules are assessed.

6. **“Student Experience”**. Student experience can be viewed as either extra-curricular activities that impact on student well-being and happiness, being purposeful and grounded in the “real-world” or as something that can, ultimately, have an impact on a business. In order to provide a meaningful comparison across each provider, the weighting of each theme and difference in perspective are shown in detail:

Table 9: Content analysis of MBA provider comparison.

Emergent Themes	“Top-tier”	“High-ranking UK”	“Low-cost UK”
“Management” weighted percentage (count).	1.43 % (356)	1.32 % (527)	2.20 % (578)
“Management” themes.	Supervision of others, results orientation, the development of management careers.	Improving the practice of management, management as science and function.	Administration of people, management as an aspirational role (status driven).
“Leadership” weighted percentage (count).	1.12 % (276)	.73 % (293)	.82 % (291)
Leadership themes.	Leading teams, leadership as a long-term skills development.	Emphasis on self-development and leadership as a personal responsibility.	Activity driven, aspirational, essential element of successful management.
“Career Development” weighted % & (count).	0.62 % (134)	0.50 % (200)	0.40 % (200)
“Career development” themes.	Career enhancement, increased prospects post-graduation.	Career development linked to leadership skills, essential for any aspiring MBA graduate.	Greater confidence and skills lead to greater opportunities.

“Skills Development” weighted percentage & (count).	.54 % (165)	.42 % (169)	.88 % (295)
“Skills development” themes.	Proficiency, expertise, self-drive required to develop skills.	Entrepreneurial skills, application of new skills and knowledge testing in the workplace.	Accomplishment, results, proficiency in learning, practicality of experience.
“Course Content” weighted percentage & (count).	1.64 % (356)	.76 % (303)	1.28 % (308)
“Course content” themes.	Assessment method.	Internationally recognised, reflected in league table positions.	Syllabus, assessment method, programme duration.
“Student experience” weighted percentage & (count).	.72 % (196)	.48 % (192)	.64 % (164)
“Student experience” themes.	Experiencing new things, getting new tools, <i>receiving</i> and <i>giving</i> valuable knowledge.	Real-world, purposeful.	Linked to personal happiness, focus on extra-curricular activities.

It can be clearly seen that the weighted averages of the content identify “management”: as the dominant theme that emerges from both “low-cost UK” and “high-ranking UK” MBA providers. Each MBA programme does have a similar structure (in terms of subjects taught and timeframes taken to complete), we can see that “low-cost UK” programmes consider

“management” to be a position that people should aspire to, one that holds a superior level of status over non-management roles.

When one considers the recruitment language that this category of MBA provider uses, we see that the language is designed to “inspire you to build on previous work experience to enhance your career and professional standing”, to give you the “confidence to lead change” and to be a “gateway to a world of opportunities” (“Low-cost UK” provider recruitment media, 2018).

An assessment of the imagery that is used by this category of provider are *purposeful*, *powerful* and *dynamic*, portraying managers in a highly positive light; images and language are strength-orientated, e.g. – “without the MBA , I simply wouldn’t have been able to take up the UK-wide role I now have” (low-cost UK” provider student feedback, 2018). When the themes that emerge from “high-ranking UK” institutions are considered, one can see a notable difference, there is an emphasis on “management” being both a *science* and a *function*, where “learning theories, tools and techniques are complemented by acquiring the skills to apply them in real business situations” (“High-ranking UK” MBA Brochure, 2018).

An evaluation of the “leadership” theme shows (as with “management”) that there is a greater “aspirational element” at “low-cost UK” programmes when compared with “high-ranking UK” programmes. A “high-ranking UK” programme places more emphasis on self-development, rather than leadership development being driven by activities, e.g. “equipping them with products and services that are fit for the market, but also efficient and effective (“low-cost UK “MBA brochure, 2018).

“Career development” has a similar weighting across all 3 types of provider, again with 3 distinct perspectives. Analysis shows that a “low-cost UK” provider aims to improve the confidence levels and develop the skillsets of students, in order that they can move on to a better career with more opportunities to increase salary levels. Both “top-tier” and “low-cost UK” providers adopt a more long-term narrative, considering prospective students to be a more advanced stages in their careers before commencing their studies.

The narrative “shift” continues when “skills development” is examined. A “top-tier UK” and “high-ranking UK” programme apply more emphasis to entrepreneurial skills and how students

can *test* them in the workplace, in contrast with “low-cost UK” programmes that will focus on the learning experience, rather than practical applications.

There is a significant distinction to be made between the “student experience” messages that emerge. A “top-tier” provider is more likely to approach student experience from an “equipping” standpoint, considering how a graduate might disseminate the knowledge they receive. A “low-cost UK” provider places greater weight on the personal happiness of students and the availability of extra-curricular activities.

The author examined whether each MSB has recruited a graduate from each of the different categories, comparing the “language” categorisation of each MSB. It was seen that an MSB with a particular “language” type may be inclined to recruit from a particular category of MBA provider. This may have an impact on the “boundedness” levels within the MSB:

Table 10: Existing MBA recruitment

MSB.	Have (or would) recruited from “top-tier” programme.	Have (or would) recruited from “top-ranked UK” programme.	Have (or would) recruited from “low-cost UK” programme.	MSB Mapped Language.
Automotive South	Yes	Yes	No	Enterprise
Manufacturer Midlands	No	Yes	No	Enterprise
Retail South	No	Yes	No	Enterprise
Pharmaceutical South East	Yes	Yes	No	Enterprise
Energy Reseller South West	No	Yes	Yes	Enterprise

Wine South	Yes	Yes	No	Enterprise
Insurance West Midlands	Yes	Yes	No	Enterprise
Financial Analysis South	No	Yes	No	Energy
Waste Management South	No	Yes	Yes	Energy
Asset Finance	Yes	Yes	No	Energy
Automotive Retailer South East	Yes	Yes	No	
Cereal	Yes	Yes	Yes	Denial
Brewery West Midlands	No	No	Yes	Denial
Recruitment South East	No	Yes	Yes	Denial
Logistics	No	Yes	Yes	Denial
Healthcare South East	No	Yes	Yes	Denial
Energy Producer South East	No	Yes	Yes	Defeat
Creative Agency West	Yes	Yes	Yes	Defeat
Financial Consulting London	No	No	Yes	Defeat

The data shows that MSBs who commonly utilise the language of “denial” and “defeat” have recently recruited graduates from “Low-cost” UK programmes. Whilst this does not represent a complete examination of UK-based MBA programmes, it does highlight that graduates who have been exposed to extensive amounts of “career development” (where management roles

are seen to be “aspirational”) will fit well in an organisation where management exists in a “struggle” and there is an emphasis placed on the individual elements of managerial problem solving and decision-making.

“Growth Achievers” appear more inclined to recruit from programmes that connect more with the values of an “enterprise” type of growth – “Adaptability”, “enterprise”, “vision” and organisational (rather than individual) transformation.

It is possible that there is a conscious / subconscious choice made by high-performing MSBs to recruit managers that have been trained according to their language. “Growth Restrictors” may be increasing their level of boundedness by attracting people who might lack the level of organisational vision required to deliver growth.

6.3 Grey literature – MBA.

In order to establish a broader picture of the environment for MBA programmes, a sample of non-academic literature was inspected; the perspectives of business leaders, recruiters and students supports some of the insights uncovered in the review of literature.

Echoing the insights gained from the systematic review of the management literature, graduates (especially those who have reflected about their personal experiences of MBA education) view career enhancement, increases and greater networking opportunities as the programme's main benefits. This perspective underlines that a gap exists when it comes to discussions by MBA graduates about the impact that their knowledge has on businesses decision-making, and therefore business growth. "Top-tier" Business Schools cite a deficit in the understanding of business ethics and ethical practices in senior management teams as being more damaging to organisational growth than traditional barriers, such as poor access to financial markets.

This deficit is also mirrored in a broad absence of regulatory understanding and a strategic appreciation of the wider legal environments in which business operate, prompting a rethink about the priorities of teaching and learning in Business Schools (Millar & Price, 2017).

Whilst top-tier Business Schools in the UK continue to perform very well in international MBA rankings, there has been some debate amongst employers (traditionally debated amongst students) regarding the criteria used to assess / rank programmes; the implication from business is that the post-graduation salaries of graduates are overemphasised in the rankings (UN Global MBA Report, 2019).

6.4 Grey literature -Business School development.

The ABS “Changing Shape of Business Education Provision” (2019) signalled that the priorities for Business School management education are programmes that will focus on the retraining of managers in order that they can accommodate the technological requirements of industry and be able to adapt strategies according to the increasingly high number of disruptive players in the markets. This is only likely to be rivalled by online degree programmes as a significant source of revenue in the next decade. Notably, “top-tier” providers will be continuing to focus on the development of programmes that embed skills development (increasing and varying the capabilities of participants), as part of a life-long approach to learning which reflects an increasingly ageing workforce and new developments in technology.

Business Schools will, therefore, be facing challenges from the business groups that they seek to serve, along with fresh challenges from established consultancy groups and online management education providers; Business Schools will still have to face the legacy “hangover” of the debates regarding the practical relevance of their research outputs. The backdrop against which these challenges are faced is made more complicated when one considers that the motivation for the majority of students, when considering joining a Business School, is to enhance their careers, to change industries or to build a robust understanding to complement their prior learning (ABS, 2019).

The sector has seen a degree of acceptancy from Business Schools that they are required to adapt elements of their MBA programmes in order meet the technical demands of employers. Recently, there have been increased enhancements to the general provision of technology related management programmes and business ethics, along with a growing recognition that soft-skills development (e.g. interpersonal skills, communication and self-awareness) hold as much value as research-related knowledge.

Flexibility and *adaptability* are key themes for managers, businesses and Business Schools. In the past decade, a number of Business Schools have moved to alter both the duration and content of their programmes. These changes have been to the benefit of business and have also enabled students to a achieve a better/ faster return on their investment. For some employers, and an increasing number of students), an MBA is now seen in some quarters as having parity with a shorter (and more affordable) 1-year Masters programme (QS, 2018).

The Chair of the Chartered Association of Business Schools has identified that the position of a Business School as a thought-leader, one of the main aspirations for a school, has come under considerable threat. This has been due, in part, to both the absence of practical applicability that some Business School research has and just how *embedded* research teams are in the business challenges of the present and not of the future (Collinson, 2018).

6.4.1 Grey literature – Management education.

For some, the essence of management education is to act as a conduit between Business Schools and , students and the organisations that will ultimately employ them; it is management education that will provide a student with the competencies that the Business School considers to be both “important and relevant within an entry-level management job (Batra, Malhotra & Payal, 2019).

6.5 Grey literature-changes to teaching approaches.

Whilst there has been a notable call for teaching approaches to become more flexible and better serve the interest of today's businesses, the investment in global MBA programmes appears to be more centred around delivering attractive environments in which to study in, rather than reinforcing positions of thought-leadership. Academic buildings and student workspaces are, increasingly, being designed in a way that reflects the demands of millennials; flexible learning spaces, business simulations, labs and interactive learning environments are becoming the "new normal".

Projects to examine where innovations and modifications could take place in MBA programmes are not new, although those that are extensive and wide-reaching are rarer. When conducting a review of its programmes purpose and operations, close to a decade before this thesis, the (then) number one Business School in the world had reached the conclusion that soft-skills development (against a backdrop of ever-increasing globalisation, leadership development and experiential learning) was required in order to remain relevant, purposeful and a leader in the future. When conducting an assessment of today's curriculum at Harvard, there is a clear inclusion of training in emotional intelligence and enhancement decision-making embedded throughout.

Aligned with enhanced decision-making, agile management is a key component of a Business School's future success. There is, however, some scepticism regarding whether Business Schools can adopt the reflective practices that are seen in leading, agile organisations. Agile and adaptable organisations have management teams who will readily adopt counter-intuitive practices, regularly question the effectiveness of their behaviour, and are environments where conventional decision-making has been replaced with innovation and creative thinking (Denning, 2018).

Perhaps reflecting on what is happening in the private sector, "top-tier" MBA programmes are undertaking a more "digital" approach to teaching and learning, allowing students to absorb information more dynamically and effectively (De Rue, 2018).

A joint study into the emerging talent management and acquisition practices at clients of Business Schools, commissioned by the Association to Advance Collegiate Schools of

Business , the Executive MBA Council and the Executive Education Consortium, identified that there is often no discernible value of an MBA to a sponsoring business and that team skills and practical problem solving and decision-making experience are their essential recruiting requirements. This a sentiment that is echoed by some Business School professors who state that improved teaching in the area of strategic and conceptual skills would help graduates relate to *why* and *what* they're doing, and why that is important to the overall business (Executive Core, 2015).

There is a clear gap in both the grey literature and scientific reviews when one considers the measurable impact of an MBA qualification on business performance, especially when one considers the depth and breadth of material that covers student satisfaction and general issues with Business School education.

Whilst widespread, visible and measurable impacts on business growth from MBA education may be scarce, leaders of “high-ranking UK” Business Schools have long acknowledged that more work needs to be done when it comes to collaborative programme designs with businesses, working with senior management teams instead of operating in isolation (Alexander, 2007). Top-tier professors exude the virtues of not conforming to the expectations of a particular sector, advocating “destruction” as an appropriate mind-set (Gino, 2018). This is an interesting mindset to adopt, especially when the sector has been shown to be slow to adapt to change.

6.6 Grey literature – Decision-making and leadership.

Transforming a workforce will be a challenging process if there is little or no engagement with staff from all levels within an organisation; an “upward-spiral” of decision-making, whereby decision-making is delegated downwards and the “front-line” have the tools and capabilities to commit to action, will help an organisation to transform from being a “reactive organisation to being a responsive organisation” (Galbraith, 2018). The implication here is that management education, especially covering decision-making and leadership, should be cascaded throughout an organisation and not just be delivered to management teams.

It was demonstrated in the systematic review of literature that subjectivity is not ideal when making decisions of strategic importance. Whilst there is still a place for subjective, “gut feel” decision-making, increasingly, business leaders are basing more strategic decisions on data (Tuohey,2018). This an approach that is more *objective* in design than *subjective*, however, this narrow approach may result in less expansive thinking.

The “action-element”, the *doing* part of a decision-making process is just one part of many, especially as the majority of decisions that people make are nothing more than inconsequential ones, and the vastly important element of the decision-making process is persuading others (and yourself) that you are right (Chamorro-Premuzic,2014).

Decision-making, both as a science and as a practice, can demand too much of the “wrong” type of thinking. An “obsession” with decision-making (especially when one attempts to always make the “right decisions” has seen an interesting and worrying rise in one particular trait of MBA graduates -anxiety. An effect of the global financial crisis of 2008 was an increase in the level of uncertainty that is met by business leaders; in a world of uncertainty people will be more inclined to make mistakes and this contrasts with the myth that good leaders are somehow immune to making “bad” decisions (Hazlehurst, 2019).

There are more than psychological elements at work in decision-making; impacting negatively on the anxiety levels of managers and their decision-making performance are physiological factors, such as the amount of sleep that management teams achieve. Sleep deprivation can lead to decision-makers taking longer to reach an objective level of decision-making in a “fast-

moving crisis”, with decreased levels of performance the norm for those who do not regularly achieve the optimum nightly levels (DiSalvo, 2017).

Dealing with the physiological implications of growth-related decision-making and thinking appears to be somewhat overlooked in MBA curriculums. It is important, therefore, to understand the different decision-making styles that often exist in a big team; along with an “avoidance of the common errors that exist in thinking”, a “style of decision-making” can change a reliable decision-maker into one that can deliver strategically on growth related issues (Alexander, 2007).

Intuition has long been debated by management writers, economists and psychologists, all of who have a relatively consistent view of what constitutes intuition. High-performing managers can exhibit high-levels of intuition. Intuition itself can be viewed as the “subconscious, reflexive and fast-learned response to a cue, or series of cues”. In this instance, one may view “intuition” as an embedded level of expertise, something that becomes familiar when regularly deployed (Morrish, 2012).

Much of the grey literature considers decision-making to be situated in the “here and now”. Teams that do not work strongly together may find performance targets more challenging than “close-knit” teams. Close knit teams, perhaps those tasked with delivering performance targets, can become social groups that share “mental maps” with each other. Teams that “can’t or won’t see, let alone discuss, things that well-informed outsiders- such as their subordinates- know are important” (Fitzsimmons, 2018). Working in isolation may lead, therefore, to the degradation of team effectiveness.

6.7 Grey literature – Emotion.

Much has been written about the benefits of managing emotions. It has emerged as an unexpected theme during the study and is interesting and relevant as significant deficits in business performance can be attributed to the wellbeing of staff. Wellbeing will, in turn, create either negative or positive emotions. Hundreds of billions of dollars are lost annually across the globe because of poor performance due to negative wellbeing/ emotion (Seppala & Cameron, 2015). Seppela and Cameron's views are relevant to this thesis, establishing that performance metrics are not always valuable if they solely focus on administrative measurements.

Measuring how staff respond emotionally to events (changes in the marketplace, new growth-targets, or simply just *change*) can be a vital tool for senior leaders. Whether a response to an event / challenge is accompanied by positive or negative emotions can have either a positive or negative impact on the strength of decision-making. If a leadership team wishes to ensure that a manager makes good decisions, then they must be mindful of the emotional responses that exist; a connection that has been developed further in the Affective Events Theory model (Cropanzo, Dasborough & Weiss, 2017).

The model is reflected in numerous workplace studies on emotional intelligence, that Sabatier (2013) notes covers 4 main areas:

- 1. Self-awareness.** This is one's ability to recognise the impact that emotions are having on one's own thoughts, actions and wellbeing. The greater the level of appreciation and awareness, the greater the level of objectivity one has when considering personal strengths and weaknesses.
- 2. Self-management.** This refers to one's ability to manage and maintain feelings and behaviours and be able to "follow through on commitments".
- 3. Social awareness.** Social awareness covers one's ability to understand other people's point of view; being able to appreciate the emotions, needs and behaviours of others demonstrates

empathy and an ability to see the “bigger picture” (a key tool for achieving growth-related aims).

- 4. Relationship management.** Covers the ability that one has in using their levels of social awareness to create and maximise strong and productive relationships- this level of communication is another key tool that is required for delivering on growth-related targets.

Studies have shown that emotional intelligence may be one of the most important skills that a manager can possess, showing that highly emotional intelligent managers perform consistently better than their less emotionally intelligent counterparts. Unlike IQ, the general intelligence quotient, it is something that can be measured, improved and maintained (Goleman, 2008).

Surprisingly, few organisations have been able to move away from the “cognitive culture”, performance management environment. Whilst the facets of a cognitive culture are very important, what Barasade and O’Neil (2016) describe as the “shared intellectual values, norms, artefacts, and assumptions that serve as a guide for the group to thrive”. Setting the tone for “how employees think and behave at work- for instance, how customer-focused, innovative, team-orientated, or competitive they are or should be.” An emotional culture is even more so, albeit it is a culture that is conveyed by non-verbal means (as opposed to the verbal means of a cognitive culture), utilising nonverbal cues such as micro-expressions and body language techniques.

Whilst greater levels of emotional intelligence impact positively on decision-making, knowledge, specifically the transfer of knowledge within a complex organisation is a key asset when it comes to gaining and maintaining a strong level of competitive advantage. There exists the possibility that there is a link between decision-makers with high overall emotional intelligence and the likelihood of sharing knowledge within the organisation. These highly emotionally intelligent individuals do not see any negative impacts from sharing such information; interestingly, if the individual’s general well-being is also high, then the “willingness to share knowledge” is greater still (Obermayer & Kovari, 2016).

Whilst it has been observed that decision-making does not dominate MBA programmes, either as a facet of the curriculum or an attractiveness factor for students, studies have shown that “individuals with high emotional intelligence are able to obtain high levels of learning

adaptability, and high academic achievement” (McCann et al, 2020). This is important as MBA and management education programmes could provide students with the tools to help them master their own emotions whilst building a higher level of empathy.

6.8 Grey literature – Language and business.

Language, in its many forms, constitutes the “essence” of *doing* business; it frames the everyday decisions that contribute to organisational performance. Recruiters of MBA graduates should pay attention to the “international “aspect of language. International work and study is actively encouraged in the management education / MBA sector; for an MBA student has failed to master a language well, then “cognitive processes such as judgement and decision-making” are adversely affected – seeing a decline in a “individuals ability to process thoughts in a logical, sequential manner” (Tietze, 2014). It is challenging for any organisation to adopt a “common language”, due to size and increasing levels of internationalisation.

A typical “managerial approach to reduce potential negative effects of language diversity has bene to adopt a common language”, shared language can increase levels of group cohesion and performance, although there may be a negative impact on levels of creativity and innovation (Lauring & Klitmoller, 2015).

A business can ultimately be viewed as the intersection of multiple “conversations”, customers will be taking to the business, managers to employees, customers to managers, and so on. Our perspective is that these discussions ultimately become the “language” of the business: language shapes behaviour, attitudes and guides decision-making; should performance be a result of a collective attitude and language then it’s language will correlate with its ability to succeed.

6.9 Corporate communications by type.

For organisations that genuinely wish to grow and achieve success, a brand is more than just a selection of communication tools, imagery and logos, a brand will mirror the personality of a business; branding in commercial websites offer an immediate insight into what an organisation is really like (Batra et al, 2010).

The concept of brand personality has long had a connection with the Big Five Personality Traits that Freud effectively introduced to psychology patients, “openness to experience, conscientiousness, extraversion, agreeableness and , lastly neuroticism”, something that brand managers translate into the themes of : “Sincerity, Excitement, Competence, Sophistication and Ruggedness” (Ivens, 2010).

Brand development is not a topic that is solely the domain of marketers and digital communication specialists. Outside of the brand development world, economists have begun to see the idea of personality as being a dynamic, “non-cognitive” skill that can have a significant impact on decision-making (Cobb-Clark & Schurer, 2015). If MSBs are looking to achieve and maintain a level of competitive advantage, in order that they can achieve their growth aims, attracting the wrong or right “personalities” may have a negative impact.

Studies into brand personalities indicate that there may be a cycle of “connection” – “attraction” and “boundedness”; personality traits that a brand exudes can have a major impact on whether existing or future employees will be able to trust the organisation. Organisations who achieve high levels of trust , do so by leveraging the “brand personality trait of *sincerity*; *organisations hoping to obtain a competitive edge in attracting highly talented professionals will profit from increased attention to applicant perceptions of employer brand personality characteristics that foster employer brand affect and trust*” (Rampl & Kenning, 2014).

Naturally, fostering a brand personality is a good way for a business to develop some form of competitive differentiation / advantage; if employees (future and present) were to view brands in the same way as consumers, then those brands that have “unique and exciting personalities may be more *qualified* to be partners” (Japutra & Mollino, 2019).

Malar et al (2014) note that (inspired by Mintzberg) that “if the intended brand personality (what consumers should think and feel about the brand) differs from the realized brand personality (what consumers actually do think and feel about the brand), then there can be negative consequences for the brand. If MSBs have a clear vision for how they wish their “brand” to be perceived, it will attract the “right” calibre of future employee, thus perpetuating a cycle of “boundedness”.

6.9.1 MSB website communication – Personalities.

A content analysis of each MSB’s brand personality, as communicated via their digital communication indicates some more, significant differences.

Growth Achievers, Communication sample:

Automotive South East: When a guest interacts with the corporate website, they are met with short, confident and clear statements, e.g. “fearless pursuit of advantage” there is a clarity about what is being delivered, they apply to other businesses “what they would apply to themselves”. Content reflects next-generation, forward-thinking products. There is an emphasis on partnerships, collaboration and innovation.

The history of the organisation shows that the recruitment of the top-team had focused on “integration”, “innovation” and a combination of reflective activities and a focus on the future. The “about” page only looks at the present / future, there is only a small link to the heritage of the past.

Industrial West Midlands: Initial communication is product driven; first line focuses on product specification, features and benefits. Cliched language – “global company with a local presence”. Large focus on history, heritage – not forward looking in its language or approach. Recruitment focuses on “enthusiasm, driven and self-motivated people”. “Busy and engaging” place to work.

Energy Reseller South West: “More than just one of the UK’s largest, independent energy suppliers”. A clear approach to establish themselves as being something other than just a

product-led organisation. Similar to “Automotive South” with the nod towards innovation on their first page. Communication also looks toward the future. Person spec looks like “hard work”, yet a creative approach – “find a way”. Approach to education is clear – “People take courses at college to learn what you’ll learn at “Energy Reseller South West” every day”.

Chapter 7

Concluding remarks and implications for Administrative Behaviour Theory.

7.1 Introduction.

This chapter contains discussions regarding the findings that have been made following the investigation of MSBs, the insights from Key Informants and the tools and techniques that are provided by a relevant sample of MBA programmes. The findings support the recommended enhancements to the Theory of Administrative behaviour, which represents the concluding element to this thesis.

The study set out to achieve a greater understanding of what restricts and enables growth within the MSB sector in the UK, evaluating the link between effective decision-making and organisational performance. Against the backdrop of a substantial theoretical framework, one that represents the best opportunity for understanding behavioural differences in an administrative environment, the author has been able to establish an alternative line of enquiry for this business type; making the proposition that achieving growth targets (that are both sustainable and profitable) is dependent on more than just the levels of resources that are made available to the organisation.

It has been shown that MSB management teams operate in extremely challenging and complex environments, facing challenges that include funding, technology and talent acquisition. Whilst these challenges have had a significant impact on MSB performance levels, they may also have obscured some of the reasons why certain MSBs outperform others.

Administrative Behaviour Theory, whilst a seminal piece of work that has influenced numerous studies over decades, is used as part of a novel approach to understand organisational behaviour in this unique sector. Emerging from the review of literature were the relevance to MSBs of management education (Boyatzis, Stubbs & Taylor, 2002; Navarro, 2008; Rubin & Dierdorff, 2009; Samuelson, 2006; Mintzberg, 2005) and the importance of speed, and adaptability in managerial decision-making (Dean & Sharman, 1993; Homburg et al, 2008; Nemkova et al, 2015; Vera & Crossan 2005) particularly vital as the general MSB environment is highly

flexible and fast moving. Taking the novel approach to evaluate and analyse managerial decision-making from the perspective of language and organisational characteristics (MSBs and management education providers), has provided insights into how high-growth and low-growth organisations might be identified and classified.

A significant level of the MSBs under review provided data that enabled the author to establish that the “language” that is utilised by high-performing and underperforming MSBs is a clear differentiator, and one that can be developed into an analytical framework that may be able to provide intelligence for forecasting the likelihood of long-term success for the sector. At the outset, it was not anticipated that language would play such a significant part in the investigation; this important element emerged through the systematic investigation of the literature and structured analysis of Key Informant insights.

There is no suggestion that “traditional” (which we consider to be predominately an economic, resource-based approach) methods of analysis are ineffective, moreover, the thesis provides a clear indication that the characteristics of high and low-performing MSBs are so nuanced that they cannot be effectively explained solely through the use of economic frameworks. The author contends that access to finance, the strength of a brand and the size of the workforce that is deployed, may not have as much of a bearing on organisational decision-making (and therefore on performance) as how both an organisation and its managers *think, act and behave*. Insights into MSB performance and development may have a significant impact on the economic performance of the UK, furthermore, there exists the opportunity to refine a groundbreaking study into organisational performance. The study, therefore, has been justified due to the achievements made in these areas.

The review of the relevant literature has demonstrated that basic insights into MSB performance are readily available. By virtue of their size and structure, MSBs are different to SMEs and large-scale corporate entities. Whilst this difference will be immediately clear to most observers of business performance, it should be noted that this unique profile of business will be likely to come under less scrutiny in the Management Science literature than the other two categories. By attempting to address this level of imbalance, this thesis shows that both successful and unsuccessful MSBs can be characterised by the type of language that is used within it, its approach to innovation and how constrained or empowered its decision-makers are by the overall culture of the organisation.

Through an enhanced level of understanding about how this “language” manifests itself, the level of dynamic capabilities that are in play and an awareness of the extent to which “emotion” permeates decisions, there exists an opportunity to better understand MSB decision-making behaviour and its links to effective performance (growth). Ultimately, it is seen that a deeper understanding of an organisation’s challenges and its characteristics, allied with the level of “fit” between decision-maker and how “bounded” the organisation is, may provide the ability to predict future performance.

The Theory of Administrative Behaviour has provided the author with a theoretical structure that has helped to frae some of this behaviour, giving greater clarity of whether SMB decision-makers are with empowered or “bounded” by their organisations and the management education that they may have received. The resulting, revised framework of organisational “boundedness”, which has the capability to provide managers, investors and analysts alike with a growth-related forecasting model, is presented later in this chapter.

7.2 Research conclusions.

It is recognised that the MSB sector is a tremendously important part of the UK economy. It is this importance, combined with a historical interest in business performance and managerial decision-making, that drew the author to consider whether the disparities that exist in growth-related performance could be influenced and, in particular, “bounded” by different approaches to decision-making and different types of organisational culture.

MSB decision-making, in a cross-section of organisations, has been subjected to extensive evaluation through content analysis. The analysis of Key-Informant insights has facilitated the creation of four independent categories of MSB. A divergence in language utilisation attitudes to growth, depth of emotional content and how “change” is perceived, has enabled the designation of:

- 1. “Growth Achievers”.**
- 2. “Growth Strivers”.**
- 3. “Growth Restrictors”.**
- 4. “Growth Agnostics”.**

The characteristics of each of these groups are now explored in detail.

7.2.1 Growth Achievers.

Growth Achievers represent those MSBs that achieve (or exceed) their stated aims of growth. An MSB that is situated within this category is more likely to utilise language that is neither excessively positive nor negative. It is this level of emotional consistency that the author contends provide a level of balance and a platform for achieving its performance objectives. It has been demonstrated that a consistent approach to managing the “emotional content” that is created by a team, will ultimately help leaders to maintain positive levels of performance (Naseer et Al, 2011).

It is noted that a lack of “emotional content” does not signify that the organisation and its managers lack self-awareness. The contention is that, for an organisation of this type, there exists a higher level of *practicality* and *rationality* than within the other three categories.

The use of “enterprise” related language and thinking enables a Growth Achiever to be more adaptable when faced with a complex and faced-changing business environment. There is a level of empathy that mirrors the characteristics of a family-owned concern, although an MSB of this type can have any ownership structure. What is critical to how a Growth Achiever *thinks*, *acts* and behaves, is the notion of “speed”; high-performing MSBs will demonstrate a natural level of enthusiasm for responding to short-term issues, whilst committing to investing for the longer-term.

7.2.2 Growth Strivers.

It has been shown that the majority of MSBs are not able to grow to the level of a large-scale corporate entity or, significantly for this study, do not achieve their stated growth targets. The Growth Striver category may encompass a number of these MSBS; these are the organisations that are trying to achieve growth but who are also facing challenging trading conditions, new entrants into their marketplace, decline in products or, simply too much “noise” to make an effective decision. Again, it is seen that “language” proves to be the key differentiator and that decision-makers in this category of MSB will be more inclined to utilise language that is more “emotionally extreme”.

Discovering highly “emotional” content may be an indicator of a lower level of rationality, however, this is likely to be driven by a desire to be more “energetic”, to “try harder” and to “force a victory”.

7.2.3 Growth Restrictors.

When one considers the Growth Restrictor category, the level of divergence between those that achieve their stated aims of growth and those that do not, are even clearer. On the surface, these are the organisations that are facing *genuine* challenges in terms of resources (be they financial, technical or knowledge-based). It may appear that any organisation might wish to have more of what they have in order to drive performance. On closer inspection, an almost neutral level

of emotional content reveals that there is an element of resistance in the various decision-making processes used within the organisation. Resistance to developing more effective processes is further compounded by a reduced level (compared to the preceding categories) of future planning.

This type of organisation will be firmly rooted in the present and “bounded” by current events. This may become the beginning of a destructive, negative cycle. Current events may create a culture of denial about the strength of current events or the risks / opportunities that could exist in the future.

7.2.4 Growth Agnostics.

The discovery of the final category of “*Growth Agnostics*” highlights a type of organisation that has taken “denial” a step further; decision-makers will often operate in their own self-interest and have little connection with the broader organisational objectives. Whilst both the organisation and individuals may state that they wish to grow, there is little to support this conviction. There is a direct correlation between the emotionally inconsistent language that they use and levels of uncertainty and apathy, which combine to increase the risk of inactivity in times of change and complexity.

It has been demonstrated that different MSBs display differing characteristics, however, they have ready access to the same decision-making tools and talent. A barrier to these tools and talent exists in terms of knowledge regarding the correct “cultural fit”, rather than from a lack of economic resources. The divergence in *thinking*, *actions* and *performance* indicates that it is neither talent or the organisation that is solely responsible for shortcomings in performance; it is likely that performance stems from a combination of knowledge and cultural fit that requires greater understanding, anticipation and forecasting.

The importance of these classifications is clear, providing management education (including theories, tools and techniques) in a general way may have a negative impact on performance. A Growth Agnostic is unlikely to respond to management education, enhanced decision-making skills and deal with the “emotional content” of business growth strategies in the same way that a Growth Achiever would. Management education, MBA programmes and public investment funds are unlikely to offer MSB specific (or MSB sector specific) tool. There is a

significant gap in the provision of truly bespoke managerial decision-making support, prompting an important question for future studies- “How does tailored management education differ from generic programmes, in terms of organisational performance and individual impact?”

7.3 Considering the Theory of Administrative Behaviour.

As noted in the introductory chapter, the author has previous experiences of leading senior teams in MSBs. These experiences underlined that, due in part to both their size and structure, strategic choices can be made across multiple levels within the organisation.

This type of “inclusive” environment was recognised by Simon to be a network of decision-makers where “administration revolves around decision-making” (Simon, 1997). Evaluating how decisions were made (within the scope of the MSB sample) reinforced the author’s initial assessment and echoes Simon’s (1947) sentiment that “a successful organisation is one in which the behaviours of decision-maker can be fitted into a predictable pattern and can influenced / shaped in the future.”

It has been identified that MSBs (of all categorisations) have corporate communications, product launches and strategic meetings that are designed to shape actions and behaviour. The study set out to establish why only a few MSBs achieve high growth levels, along with understanding whether an organisation is either “bounded” or empowered by its own environment and the decision-making expertise that it brings into the organisation.

The Theory of Administrative Behaviour has been, therefore, the most applicable and relevant theoretical framework for this thesis.

7.3.1 Shifting from a rational behaviour perspective.

The review of literature has revealed that there has been a consistent level of dialogue from those who are fundamentally opposed to the notion of “completely” rational behaviour. Whilst not joining this broad chorus of opposition, especially as the notion of completely rational behaviour was never intended to be a perfect model for enhancing organisational understanding, the author has clear reservations about the level of (classically) rational behaviour that MSBs display and what can be used to explain discrepancies of growth between those who achieve their growth objectives and those that do not.

It is proposed that rationality and self-serving behaviour can only go so far towards explaining variances in performance levels. The impact that emotion has on an individual’s ability to make

decisions (in particular how it can constrain behaviour), and the level of “fit” between organisational culture and management education, emerge as the cornerstone of this thesis.

7.3.2 Emotion and bounded behaviour.

Demonstrations of emotion emerge not as expressions of desire but as responses to growth-related challenges and a reflection of the background and intentions of the decision-maker (Moore, 2012). If levels of “desire” are an unrealistic indicator of leadership skills and decision-making performance, perhaps it is more realistic that “emotional consistency”, levels of self-awareness and the ability to work across multiple timelines are a more reliable indicator of future success.

Simon’s final reflections regarding the Theory of Administrative Behaviour showed his recognition that much more has to be understood about the role that emotion plays in organisational structures, from both an economic and psychological perspective, before a more robust model of administrative behaviour (and by connection, bounded rationality) can be established (Simon, 19970).

The ability of a decision-maker to reframe situations (Gross & John, 2003), along with Panno, Lauriola and Figner’s (2013) perspective of *how* a change in mindset can have a significant impact on decision-making effectiveness, are striking examples of how “emotion” transcends psychology to be directly relevant to both the Management and Natural Sciences. Kahneman, Slovic and Tversky’s (1982) work on the levels of uncertainty within an organisation perhaps captures this standpoint best of all; Kahneman identified that it was the over-reliance of decision-makers on “subjective probabilities: and heuristic principles that ultimately lead to significant errors in judgement when making (potentially growth-orientated) decisions.

A number of questions must be put forward when assessing the decision-making ability, and therefore potential to achieve growth targets, of an organisation. It is proposed that these questions should be considered when recruiting new talent and measuring whether any existing team members have “shifted” emotionally in their response to decision-making:

- **What types of decisions does the organisation deal with on a day-to-day basis?**
 - Clear, pressurised, time-bound, vague, performance related?
 - What language characteristics does the organisation display?

- **How does the individual approach decision-making and personal learning?**
 - Do they adopt performance-orientated goals?
 - Do they adopt learning-orientated goals? (Can we combine here, the Incremental Theory of Intelligence).

- **What levels of emotional resilience does both the organisation and the individual demonstrate?**
 - Organisation – dealing with conflict, uncertainty, empathy with client needs, sensitivity to future changes in the market, historical successes / failures with new product launches and new markets.
 - Individual – Elements of emotional intelligence and resilience (empathy, self-awareness, mental acuity under pressure).

- **How strong are the levels of innovation-led thinking?**
 - In this context, does the individuals or organisations process of innovation contain more forward-thinking or backward-looking language?
 - Are there examples of looking for futures-thinking opportunities or are they “trapped in the bubble of the present”.

- **What are the existing levels of extreme emotion (“anger”)?**
 - Propensity to feel anger in difficult situations – cite Fenton-O’Creevy et al (2010) who argue that making decisions in a negative mindset can create a false impression of the benefits of short -term outcomes (higher than they should be).

- **How Dynamic is the organisation / individual?**
 - If an organisation is to achieve a level of competitive advantage, the review of literature indicates that a DC approach is preferable to the RBV.

- Defining the level of DC within an organisation is aided by Barratto's (2010) assessment, looking for the "potential to solve problems systematically and let go of current tools and resources".
- **How much data exists within a decision-making process?**
 - The greater the level of data analysis that is incorporated into decision-making, the greater the level of agility that is ultimately displayed.
 - Is there too heavy a reliance on heuristics? Can the level of "cognitive bandwidth" be measured?
- **What is the level of situational awareness?**
 - Link between higher levels of situational awareness and ability to manage multiple inputs (multi-tasking) over a long period of time.
- **What are the speed levels of (effective) decision-making?**
 - Along with the ability to evaluate alternatives.
- **How developed is the ability to challenge authority?**
 - Less of a challenge culture may lead non-conforming members to "go along" with the group decision and cause a decrease in performance.

The study has explored whether MSBs are "bounded" or empowered by their decision-makers. Developing these questions further, through the development of a combined (organisational / individual) psychometric evaluation, may provide further insights. The evidence from this study suggests that a decision-making team's cognitive abilities, use of appropriate tools and techniques and their organisational characteristics, will ultimately empower or restrict the organisation's performance. The greater the level of "boundedness", which can be framed through the analysis of language, the less likely the organisation will be to achieve its growth objectives.

7.4 The implications for management education.

The field of management education, in particular how it might empower or restrict effective decision-making within MSBs, has been explored in this study from the viewpoint of an MBA programme. Whilst this study has not provided an extensive investigation into the value of such a programme, there have been some important differences identified between high-ranking programmes and “low-cost” programmes, in terms of their impact on decision-making expertise.

Each type of programme that has been sampled will likely attract a particular “character” of student. The motivation for undertaking an MBA will naturally differ from candidate to candidate, from enhancing earnings potential to improving academic ability and gaining practical skills. The validity of these motivations is not disputed, moreover they highlight another gap in the Management Science literature: How does recruiting an MBA graduate, or importing the skills and knowledge that MBA programmes provide, impact on decision-making quality and, ultimately, add to the organisation’s growth achievements?

The study highlights that low-performing MSBs are more likely to recruit from “low-cost” UK MBA programme providers. There is no suggestion that “low-cost” equates to “low-value”, but it does identify a set of characteristics that are taken into lower performing businesses and that, ultimately, may not help them. A “low-cost” UK provider of an MBA is more likely to position the practice of management and decision-making as the “administration of people”, rather than adopting the results focused content of “top-tier” providers and more “high-ranking” UK providers.

If the attraction of completing an MBA at a “low-cost” MBA provider is to achieve a qualification, reach an aspirational level of status or to enhance a career, then this may cause a problem for a “Growth Agnostic”. One might witness a “bounded loop”, where an organisation that possesses a “denial” style of language recruits a manager with the same communication style and the decision-making ability of the organisation is constrained accordingly. The notion of such a “bounded loop” is supported by the cognitive research community:

Managerial communication drives relationships and frames the attitudes and behaviours of employees in the workplace. Attitude has three components: affective, cognitive and

behavioural. While the cognitive component represents the evaluation of stimuli in the mind, behaviours are actions or reactions that occur in response to those stimuli. In measuring attitudes, only affective / feeling components are assessed in connection with communication, organisations, managers, and situation. Positive attitudes manifest in well -adjusted behaviours and negative attitudes lead to the reverse.

-Dasgupta et al 2013.

As Dagupta et al (2013) contended, management team members will practice a variety of communication styles, although there is usually just one communication style that will become dominant. An aggressive communication style, for example, would not suit a “Growth Striver”. In an aggressive style, managers express their feelings and opinions and advocate for their needs in a way that violates the rights of employees. While passive managers are unable to convey the full thrust of their message, causing irritation, delays, and work, aggressive managers tend to be less concerned with moving things along than preserving their own status and power of employees, though they may have been successful in achieving long-term goals (Johnson & Klee, 2007).

7.5 Proposed enhancement of Administrative Behaviour Theory: Bounded Performance Theory.

All businesses are different, from their operating environments, to their product ranges and customer bases. Some MSBs achieve considerable growth and some do not; the proposition of this thesis is that these differences in performance are not solely due to a difference in resource levels; differences may be attributed to variances in decision-making ability, how the challenge of growth is approached and the characteristics that organisations and managers possess.

Ultimately, a business needs to attract the right “type” of decision-maker, provide an environment in which they can flourish and not be constrained, incorporate knowledge that improves overall decision-making capabilities and, importantly, pays close attention to the role that emotion plays in the decision-making process. It is proposed that these capabilities are predictable; anticipating the level of boundedness experienced by a business will lead to an objective classification. It is the use of “language” that has enabled these classifications to be created.

There are noticeable distinctions between how language is used in high-growth organisations and those who are yet to achieve the growth that they state they should. It is theorised that, no matter what the cost or initial value of an MBA or depth of managerial background, if a decision-maker is placed in an organisation with a poor organisational (“language”) fit, then their personal characteristics may change over time. The more bounded the organisation or / and individual, the quicker this process will be.

A “Growth Achiever” utilises a “language” type that encourages innovation and the belief that challenges should be viewed as opportunities. Making time-pressured decisions does not impact negatively on performance; decision-makers are able to change and *manage* change through being comfortable thinking across all critical; time horizons.

The detailed analysis of MSB performance levels and decision-making clearly show that an organisation is ultimately bounded by its use of emotion, as part of both language and the decision-making process, and how well knowledge from management education “fits” their cultural model. “Growth Strivers”, “Growth Restrictors” and “Growth Agnostics” are “bound” by layers of restrictive thinking. By recruiting a poorly suited MBA graduate or through the

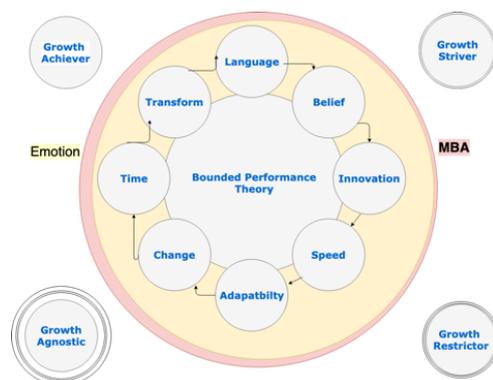
use of an ineffective language style, that ultimately becomes habitual, a “Growth Striver” has the potential to become a “Growth restrictor” or “Growth Agnostic”. Management education has the potential to damage organisational performance; education providers and hiring managers alike do not openly present the “risks” associated with connecting managers, organisations and education that are incompatible.

The intention from the outset of this study has not been to question the relevance of MBA programmes or the applicability of one of the most significant theoretical frameworks of recent times. The research makes its contribution to knowledge through the enhancement of the framework to reflect the internal characteristics and the external environments of MSBs.

Figure 7 identifies the series of contributory factors that impact on the performance of an MSB. The dual contributions of management (MBA) education and emotion (Simon’s aforementioned gap in Administrative Behaviour Theory) affect the decision-making process. The extent to which it has a positive or negative impact on performance is reflected in the level of “fit” between each component. An MSB’s performance is “bounded” by its collective cognitive limitations, “emotional” language and the compatibility of decision-makers, organisation and educational knowledge.

By gaining deeper insights into all of these areas will help to identify where best to position educational tools and industry support and highlight the MSBs where there are greater and more realistic opportunities for future growth.

Fig 7. “Bounded Performance Theory” Model:



7.6 Study limitations and directions for future research.

Whilst the research has focused on a strong, representative sample of MSBs operating in the UK, and generated the required amount of data, resources (investigator time & financial) have meant that a deeper sample was not viable. There has shown to be a distinction between high-performing MSBs and low-performing MSBs that centres around “language types”, “style” of MBA programme that managers are recruited from and how this is , in part, responsible for a negative, self-sustaining cycle that leads to a continued level of boundedness within MSBs.

The work could, potentially, be extended to examine other business types, perhaps exploring the boundedness of SMEs and large corporates in order to give a more direct comparison. Additionally, a non-UK analysis may be useful if one was to understand the impact of cultural differences on levels of boundedness.

The study has provided enough insights to allow a modification / enhancement to Administrative Behaviour Theory, relating initially to MSBs. These insights lead naturally to an analytical framework (organisational and individual-level psychometrics) that will enable researchers to forecast future levels of boundedness, and therefore future performance.

Alongside this potential forecasting tool exists the opportunity to aid talent attraction by aligning MBA “personality” types more closely with hiring MSBs. There are also implications for MBA curricula, based on the gap that exists between MSB issues and decision-making requirements and how subjects are positioned at MBA level in low-cost UK providers. Measuring the impact of MBA education on a businesses’ decision-making ability, overall performance and levels of boundedness may give more relevant information than the measuring of student satisfaction levels and post-graduate increases in salary – potentially an amended ranking framework.

A future study, which will examine the practical applicability of management education frameworks in an experimental situation, is planned. The study will compare non-MBA managers and MBA graduates in a decision-making experiment, evaluating the “cultural fit” that both sets of managers have with the situations that they are presented with.

7.7 Ethical considerations.

The author adhered to the University of Northampton's ethical code for research. Anonymity was requested by a number of Key Informants; to protect the identities of the MSBs in the sample, all MSB names have been altered. No personal details are referred to anywhere within this document. Data has been kept securely and records will be permanently deleted 6 months after the date of publication.

7.8 Reflections on the study.

The development of this thesis has allowed the author to address an “ordinary” business challenge from a novel, theoretically driven perspective. The motivation for conducting this piece of work stemmed from (previously) unanswered questions about business performance, both as an MSB Director and as an MBA Director in a leading Business School.

The overarching goal of the study was to understand why high-performing MSBs outperform others and to develop a framework from which future levels of performance could be forecast. As a result of this study, insights have been gained into the effect that Managerial decision-making has on business performance. Whilst there is always a risk of bias in any study, the author is confident that an open mind, reflective process and analysis of themes emerging from content has minimised any risk of pre-conceived ideas being brought into the equation.

The identification of different categories of MSBs, categorised by differences in language types, attitudes to growth and “personality” was unexpected. The initial review of literature did indicate that more dynamic and adaptable capabilities may be relevant to the sector, rather than a resource-based perspective for analysing the likelihood of success for an organisation.

Many lessons have been learned during the PhD journey; one of the most important has been that *analysing* (rather than *reviewing* literature) and developing an appropriate research framework will greatly reduce any apprehension about uncovering the “unexpected”. Whilst this study has been completed, there is the recognition that there are numerous ways in which it could have been enhanced. This recognition is tempered with the knowledge that enhancements can be directed towards future studies. The wisdom given to the author by the supervisory team, that the PhD journey is that of an apprenticeship, was welcomed throughout the 5 years of study.

It would not have been possible to complete this thesis without the co-operation, time and patience of the Key Informants who took part in the interviews and provided ready access to their organisations.

7.9 Chapter summary

The thesis used Simon's (1947) ground-breaking study into administrative behaviour to understand the challenges faced by MSBs and to theorise why high-performing MSBs operate at the level that they do. The findings revealed that how decision-makers think, act and behave will ultimately be reflected in the culture of their organisation and will add to the level of "boundedness" that the MSB will experience. Findings confirm that there is an optimal "fit" between Manager / decision-maker, MSB and the "type" of management education that is brought into the business.

The stated aims growth for an organisation can be assessed through the language that they use and the characteristics that are shown at a managerial level, and more widely by the business. The findings support the enhancements to Administrative Behaviour Theory that have been proposed. "Emotion", from the level of emotional content in language to its capacity to restrict rational thought, is a critical factor in the development of a Bounded Performance Theory (enhancing the Theory of Administrative Behaviour for MSBs).

The study provides intelligence that may be useful for MSB leaders, recruiters and decision-makers. As MBA programmes are an established source of knowledge and skills for MSBs, MBA Directors may wish to consider the cultural "fit" of MBA graduate to individual MSB and whether existing MBA curriculums reflect the challenges that are faced by MSBs and the differing characteristics of MSB decision-makers.

This chapter highlights the completed processes used by the author to address the research objectives.

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Appendix

1. Exploratory literature search summary.

Utilising the search terms “Medium sized businesses”, “Medium-sized businesses” and “Mid-sized business”, returns over 50,000 results (University of Birmingham database search). MSBs feature in 20% of articles (See sample selection of exploratory literature review returns below), albeit as part of a combined SME / MSB sample.

Article Title	Journal	Date	MSB or SME
Exploring Social Customer Relationship Management Adoption in Micro, Small and Medium-Sized Enterprises.	Journal of Theoretical and Applied Electronic Commerce Research.	May 2020.	SME (“MSB” not fitting BIS definition adopted in this thesis).
Micro-Start-Ups Financial Capital AND Socio-Economic Performance: In A Poor Financial Resource Setting.	The Journal of Developing Areas.	Jan 2020.	SME (With focus on micro-entities).
Leadership Variables and Business Performance: Mediating and Interaction Effects.	Journal of Leadership & Organisational Studies.	Feb 2020.	SME (Small, professional service firms).
Marketing capabilities and international new venture performance: The mediation role of marketing communication and the moderation effect of technological turbulence.	Journal of Business Research.	Feb 2020.	SME (Start-up businesses).
Swedish construction MSEs: simply renovators or renovation service innovators?	Building Research & Information.	Jan 2020.	SME (Micro by turnover definition provided by BIS).

Customer orientation and SME performance in Albania: A study of the mediating role of innovativeness and innovation behaviour.	Journal of Vacation Marketing	Jan 2020	SME
Internationalization of SMEs from emerging markets: An institutional escape perspective.	Journal of Business Research.	Jan 2020.	SME.
Forsaking innovation: addressing failure and innovation behaviour anxiety.	Technology Analysis & Strategic Management.	May 2019.	SME and MSB.
Family involvement, environmental turbulence, and R&D evidence from listed Chinese SMEs.	Small Business Economics.	Dec 2019.	SME.
Embeddedness or Over Embeddedness? Women Entrepreneurs' Networks and Their Influence on Business Performance.	The European Journal of Development Research.	Dec 2019.	SME.
Using the critical process targeting method to improve SME's process understanding.	Business Process Management Journal.	Nov 2017.	SME.
Dynamic relationships between personal resources and work engagement in entrepreneurs.	Journal of Occupational & Organisational Psychology.	Jul 2017.	SME
Antecedents and outcomes of digital platform risk for international new ventures' internationalisation.	Journal of World Business	Jan 2020.	SME (New business start-ups).

Temporality and the role of shocks in explaining changes in socioemotional wealth and entrepreneurial orientation of small and medium family enterprises.	International Entrepreneurship and Management Journal.	Dec 2019.	SME.
Cash holdings and SME performance in Europe: the role of form-specific and macroeconomic moderators.	Small Business Economics.	Dec 2019.	SME.
Cluster ambidexterity towards exploration and exploitation: strategies and cluster management.	Journal of Technology Transfer.	Dec 2019.	SME (Micro).
Entrepreneurial intention and regional internationalization in China.	Small Business Economics	Dec 2019.	SME.
Organization Capital and the Cost of Equity Financing in Medium-Sized Manufacturing Firms.	Contemporary Accounting Research.	Jun 2018.	SME & MSB.
Development of a framework for the integration and management of sustainability for small-and -medium sized enterprises.	International Journal of Computer Integrated Manufacturing.	Aug 2017.	SME
Driving forces and barriers of Industry 4.0: Do multinational and small and medium-sized companies have equal opportunities?	Technological Forecasting & Social Change.	May 2019.	SME (Also large corporate).

1.1 Web of Science: “Management Education Summary:

The Web of Science report (Utilising a “Management Education” search string) identified:

- 5764 publications from 2014.
- 8566 publications from 2015.
- 9,408 publications from 2016.
- 10,377 publications from 2017.
- 10,236 publications from 2018.
- 9945 publications from 2019.

Refining the results further, focusing on the areas of “Management” and “Business” resulted in a total of 2831 articles:



An analysis of the top cited articles (Top 25 sample follows below) indicates the level of interchangeability between “Management Education “and the “MBA”.

Title	Source Title	Publication Date	Publication Year	Total Citations	MBA Focused Y/N
Responding to Institutional Complexity: The Role of Identity	ORGANIZATION STUDIES	JAN 2014	2014	84	Y
Difference in degrees: CEO characteristics and firm environmental disclosure	STRATEGIC MANAGEMENT JOURNAL	MAY 2014	2014	83	Y
Higher education and the digital revolution: About MOOCs, SPOCs, social media, and the Cookie Monster	BUSINESS HORIZONS	JUL-AUG 2016	2016	82	N
Data Science, Predictive Analytics, and Big Data in Supply Chain Management: Current State and Future Potential	JOURNAL OF BUSINESS LOGISTICS	MAR 2015	2015	82	N
Leadership: A communicative perspective	LEADERSHIP	FEB 2014	2014	81	N
University, Ltd: Changing a business school	ORGANIZATION	MAR 2014	2014	75	N
ORGANIZATIONAL DECLINE AND INNOVATION: TURNAROUNDS AND DOWNWARD SPIRALS	ACADEMY OF MANAGEMENT REVIEW	JAN 2014	2014	69	N
A multidisciplinary review into the definition, operationalization, and measurement of talent	JOURNAL OF WORLD BUSINESS	APR 2014	2014	68	N
Competition and strategy in higher education: Managing complexity and uncertainty	BUSINESS HORIZONS	MAY-JUN 2016	2016	61	Y
The integration of project management and organizational change management is now a necessity	INTERNATIONAL JOURNAL OF PROJECT MANAGEMENT	FEB 2015	2015	56	N
Project managers and the journey from good to great: The benefits of investment in project management training and education	INTERNATIONAL JOURNAL OF PROJECT MANAGEMENT	JAN 2015	2015	51	Y
An intellectual capital maturity model (ICMM) to improve strategic management in European universities A dynamic approach	JOURNAL OF INTELLECTUAL CAPITAL	2015	2015	45	N
YOU DONT FORGET YOUR ROOTS: THE INFLUENCE OF CEO SOCIAL CLASS BACKGROUND ON STRATEGIC RISK TAKING	ACADEMY OF MANAGEMENT JOURNAL	DEC 2015	2015	44	Y
Navigating the Institutional Logics of Markets: Implications for Strategic Brand Management	JOURNAL OF MARKETING	MAR 2015	2015	43	N
University choice: what do we know, what don't we know and what do we still need to find out?	INTERNATIONAL JOURNAL OF EDUCATIONAL MANAGEMENT	2015	2015	32	N
Responsible management education for a sustainable world The challenges for business schools	JOURNAL OF MANAGEMENT DEVELOPMENT	2015	2015	30	Y
European management and European business schools: Insights from the history of business schools	EUROPEAN MANAGEMENT JOURNAL	AUG 2014	2014	29	Y
Decoupling Responsible Management Education: Why Business Schools May Not Walk Their Talk	JOURNAL OF MANAGEMENT INQUIRY	JUL 2015	2015	28	Y
UPPER-ECHELON EXECUTIVE HUMAN CAPITAL AND COMPENSATION: GENERALIST VS SPECIALIST SKILLS	STRATEGIC MANAGEMENT JOURNAL	DEC 2014	2014	28	Y
Relevance or 'relevance'? How university business schools can add value through reflexively learning from strategic partnerships with business	MANAGEMENT LEARNING	JUL 2014	2014	27	Y
Philosophical assumptions undermining responsible management education	JOURNAL OF MANAGEMENT DEVELOPMENT	2015	2015	26	Y
Managing the monsters of doubt: Liminality, threshold concepts and leadership learning	MANAGEMENT LEARNING	FEB 2015	2015	25	N
Lean towards learning: connecting Lean Thinking and human resource management in UK higher education	INTERNATIONAL JOURNAL OF HUMAN RESOURCE MANAGEMENT	NOV 30 2014	2014	22	N
Developing wisdom in a business school? Critical reflections on pedagogical practice	MANAGEMENT LEARNING	SEP 2014	2014	22	N
Internationalization Strategies of Business Schools: How Flat Is the World?	THUNDERBIRD INTERNATIONAL BUSINESS REVIEW	SEP-OCT 2015	2015	15	Y

1.2 ABS Journal Summary (Selected for exploratory review of literature).

Journal Title	AJG 2018
Family Business Review	3
International Small Business Journal	3
Journal of Small Business Management	3
Small Business Economics	3
Entrepreneurship Research Journal	2
International Journal of Entrepreneurial Behavior and Research	2
International Journal of Entrepreneurship and Innovation	2
International Journal of Entrepreneurship and Small Business	2
International Review of Entrepreneurship	2
Journal of Family Business Strategy	2
World Review of Entrepreneurship, Management and Sustainable Development	1
Academy of Management Journal	4*
Academy of Management Review	4*
Administrative Science Quarterly	7

2. **Systematic literature review: Quality checklists.**

Qualitative Studies:

Number	Question	Excluded Source	Included Source
1	How credible are the findings?		
2	If credible, are they important?		
3	How has knowledge or understanding been extended by the research?		
4	How well does the evaluation address its original aims and purpose?		
5	How well is the scope for drawing wider inference explained?		
6	How clear is the basis of evaluative appraisal?		
7	How well defined are the sample design/target selection of cases/documents?		
8	How well is the eventual sample composition and coverage described?		
9	How well was data collection carried out?		
10	How well has the approach to, and formulation of, analysis been conveyed?		
11	How well are the contexts and data sources retained and portrayed?		
12	How well has the diversity of perspective and context been explored?		
13	How well have detail, depth, and complexity (i.e. richness) of the data been conveyed?		

14	How clear are the links between data, interpretation and conclusions – i.e. how well can the route to any conclusions be seen?		
15	How clear and coherent is the reporting?		
16	How clear are the assumptions/theoretical perspectives/values that have shaped the form and output of the evaluation?		
17	What evidence is there of attention to ethical issues?		
18	How adequately has the research process been documented?		

Quantitative Studies:

Number	Question	Study Type	Excluded Source	Included Source
1	Are the aims clearly stated?			
2	Does the study allow for the questions to be answered?			
3	Is the sample representative of the population to which the results will generalise?			
4	Was the sample size justified?			
5	Are the measures used in the study fully defined?			
6	Are the measures used in the study the most relevant ones for answering the research questions?			
7	If two groups are being compared, were they treated similarly within the study?			
8	How was the randomisation carried out?			
9	What was the response rate?			
10	Was the denominator reported?			

11	Do the researchers explain the data types?			
12	Are the study participants adequately described?			
13	Were the basic data adequately described?			
14	Are the statistical methods described?			
15	Is the purpose of the analysis clear?			
16	Do the numbers add up across the displayed results?			
17	Was statistical significance assessed?			
18	Is there evidence of multiple statistical testing or large numbers of post-hoc analysis?			
19	Could selection bias arise easily?			
20	Was the RQ answered?			
21	Are the main findings clear?			
22	Are negative findings presented?			
23	If statistical tests are used to determine differences, is practical significance discussed?			
24	Are important effects overlooked?			
25	How do results compare with previous studies?			
26	How do the results add to the literature?			
27	What implications does the report have for practice?			
28	Do the researchers explain the consequences of any problems with the validity and reliability of their measures?			

2.2 Systematic literature review visualisation:

Word	Size	Count	Weighted Percentage (%)	Similar Words
students	8	6040	0.86	pupils, scholar, scholarly, scholars, scholars', student, students, students', students.
MBA	3	3401	0.50	MBA
leadership	10	3911	0.50	lead, leader, leaderful, leaderfulness, leaderly, leaders, leaders', leaders', leadership, leaderships, leading, leads
education	9	1819 5	0.44	breed, breeding, breeds, civil, civility, civilization, civilized, cultivate, cultivated, cultivates, cultivating, cultivation, derivates, derivation, derivatives, derive, derived, derives, deriving, develop, developed, developed', developers, developing, development, developments, develops, didactic, didactive, educate, educated, educates, educating, education, educational, educations, educative, educator, educators, educators', educators', elicit, elicited, eliciting, elicits, enlightened, enlightening, enlightenment, evoke, evoked, evokes, evoking, extract, extracted, extracting, extraction, extractive, extracts, instruct, instructed, instructing, instruction, instructional, instructionally, instructions, instructive, pedagogic, pedagogical, pedagogically, pedagogies, pedagogy, prepar,

				preparation, preparations, prepare, prepared, prepares, preparing, school, school', schooled, schooling, schools, schools', schools', teach, teaches, teaching, teachings, train, trained, training, trainings, trains
individual	10	4481	0.37	identical, identically, identities, identity, individual,, individualism, individuality, individualization, individualized, individually, individuals, individuals', individuals', mortality, person, personable, personal, personalities, personality, personalization, personalize, personalized, personally, persons, persons', private, privately, privatization, privatize, privatized, separate, separated, separately, separates, separating, separation, separations, separator, sever, several, severe, severely, severity, single, singled, singles, singling, singly, somebody, someone, soul, soulful, souls

management	10	1080 7	0.37 accomplish, accomplishable, accomplished, accomplishes, accomplishing, accomplishment, accomplishments, achievable, achieve, achieved, achievement, achievements, achievers, achieves, achieving, care, cared, careful, carefully, cares, caring, coach, coached, coaches, coaching, coaching', contend, contended, contenders, contending, contends, cope, coped, coping, dealing, dealings, deals, direct, directed, directing, direction, directional, directionality, directionally, directions, directive, directives, directly, director, directorate, directors, directs, doable, grappling, handle, handled, handles, handling, manage, manage, manageable, managed, management, 'management, management', manager, managers, managers', managers', manages, managing, management, oversee, overseeing, oversees, realizable, realization, realizations, realize, realized, realizes, realizing, supervise, supervised, supervising, supervision, wield, wielded, wielding, wields
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learning	8	1571 4	0.35	'take, acquire, acquired, acquires, acquiring, acquisition, acquisitions, acquisitive, ascertain, ascertained, ascertaining, check, checked, checking, checks, con, condition, conditional, conditioned, conditioning, conditions, cons, determinant, determinants, determinate, determination, determinations, determine, determined, determines, determining, determinism, discover, discovered, discovering, discovers, hear, hearing, hearings, hears, instruct, instructed, instructing, instruction, instructional, instructionally, instructions, instructive, know, knowing, knowledge, knowledge', knowledgeable, knows, learn, learned, learning, learnings, learns, letter, letters, memorable, memorize, read, reade, reading, readings, reads, scholarship, scholarships, seeing, sees, studied, studies, studies', study, studying, take, takes, taking, takings, teach, teaches, teaching, teachings, watch, watched, watchful, watching
academy	7	2167	0.32	academies, academy
business	8	9395	0.30	'business', busi, business, business', business', businesses, businesses', busy, concern, concerned, concerning, concerns, engage, engaged, engagement, engagements, engages, engaging, interfering, job, jobbing, jobs, line, lines,

				meddlesome, occupant, occupants, occupation, occupational, occupationally, occupations, occupied, occupy, occupying, official, officially, officials
may	3	2013	0.30	may, mays
team	4	1834	0.27	team, teaming, teams, teams'
programs	8	4803	0.25	broadcast, curriculum, curriculums, plan, planned, planning, plans, platform, platforms, program, programmable, programme, programmed, programmers, programmes, programming, programs, programs', schedule, scheduled, schedules, scheduling, syllabus
skills	6	5855	0.25	accomplish, accomplishable, accomplished, accomplishes, accomplishing, accomplishment, accomplishments, acquire, acquired, acquires, acquiring, acquisition, acquisitions, acquisitive, adept, adeptness, attain, attainable, attained, attaining, attainment, attainments, expert, experts, experts', good, goode, goodness, goods, nice, nicely, practical, practicality, practically, practice, practiced, practices, practicing, proficiency, proficient, science, science', sciences, skill, skilled, skillful, skillfully, skills
behavior	8	1995	0.25	behavior, behavioral, behaviorally, behaviors, behaviour, behavioural,

				conduct, conducted, conducting, conducts
positive	8	7587	0.24	advantage, advantaged, advantageous, advantageously, advantages, advantaging, align, aligned, aligning, alignment, alignments, aligns, attitude, attitude', attitudes, confided, confidence, confident, confirm, confirmation, confirmative, confirmed, confirming, confirms, convince, convinced, convincing, convincingly, deposit, favor, favorability, favorable, favorably, favored, favoring, favors, favour, favouring, favours, fix, fix', fixed, fixes, fixing, irrefutable, lay, laying, lays, lieu, locate, located, locating, location, locational, locations, office, officer, officers, offices, overconfidence, overconfident, perspective, perspectiveness, perspectives, place, placed, placement, placements, places, placing, plus, pose, posed, posefully, poses, posing, posit, posited, positing, position, positional, positioned, positioning, positions, positive, positively, positivist, positivistic, positivity, posits, post, posted, posting, postings, posts, postulate, postulated, posture, postures, posturing, prescribe, prescribed, prescribes, prescribing, profit, profitability, profitable, profitably, profiting, profits, put, puts, putting, sets, setting,

				settings, side, sided, sides, situate, situated, situating, situation, situational, situationally, situations, spot, spots, stance, state, stated, states, states', states', stating, status, stead, submit, submitted, submitting, view, viewed, viewing, views
work	4	1250 3	0.21	act, acted, actes, acting, actly, acts, bring, bringing, brings, crop, cultivate, cultivated, cultivates, cultivating, cultivation, deed, deeds, employ, employability, employable, employed, employer, employers, employers', employers', employing, employment, employs, exercise, exercised, exercises, exercising, exploit, exploitable, exploitation, exploited, exploiters, exploiting, forge, forging, form, forme, formed, formed', forming, forms, function, functional, functionality, functionally, functioned, functioning, functions, going, goings, influenc, influence, influenced, influencers, influences, influencing, makes, making, making', mold, molded, molds, operate,

				operated, operates, operating, operation, operational, operationally, operations, operative, operators, opers, plant, planted, plants, play, play', played, playful, playfully, playfulness, playing, plays, process, processed, processes, processing, run, running, runs, shape, shaped, shapely, shapes, shaping, solve, solve', solved, solving, sour, studied, studies, studies', study, studying, turn, turned, turning, turns, work, work', worked, working, workings, workplace, workplace', workplaces, works
power	5	3385	0.20	abilities, ability, baron, barons, force, forced, forcefully, forces, forcing, index, indexed, indexes, king, king'scollegelondon, might, office, officer, officers, offices, potent, power, powered, powerful, powerfully, powering, powers, right, rightfully, rightly, rightness, rights, strong, strongly, superpower
organizational	14	1341	0.19	organisation, organisational, organisations, organiz, organizational, organizationally
2005	4	1281	0.19	2005
2002	4	1224	0.18	2002
schools	7	4763	0.18	school, school', school'sarchives, school'scontribution, school'smission, schooled, schooling, schools, schools', schools', shoals
social	6	2314	0.18	enculturated, encultured, sociability, sociable, social, sociales, socialism,

				socialization, socialize, socialized, socializing, socially, societal, societally
results	7	6891	0.17	accompanied, accompany, accompanying, answer, answered, answering, answers, answers', attend, attendance, attendant, attended, attending, attends, concomitant, concomitantly, consequence, consequences, consequences', consequent, consequently, effect, effected, effecting, effective, effectively, effectiveness, effects, ensue, ensued, ensues, ensuing, event, events, incidental, incidentally, issue, issued, issues, lead, leading, leads, leave, leaves, leaving, outcome, outcomes, resolute, resolution, result, resultant, resulted, resulting, results, solution, solutions, terminal, terminally, terminate, terminated, termination, upshot
academic	8	1130	0.17	academ, academe, academia, academic, academically, academicians, academics, academics', academics'
2004	4	1127	0.17	2004
experience	10	4638	0.16	experi, experience, experience', experienced, experiences, experiencing, experiment, experimental, experimentalism, experimentally, experimentation, experimented, experimenter, experimenters, experimenting, experiments, feel, feeling,

				feelings, feels, gets, getting, haves, know, knowing, knows, live, lived, lively, lives, living, receivable, receive, received, receiver, receivers, receives, receiving, seeing, sees
effects	7	4388	0.16	accomplish, accomplishable, accomplished, accomplishes, accomplishing, accomplishment, accomplishments, burden, core, effect, effected, effecting, effective, effectively, effectiveness, effects, efficacious, efficacy, efficiencies, efficiency, efficient, efficiently, essence, establish, established, establishes, establishing, establishment, establishments, force, forced, forcefully, forces, forcing, gist, good, goode, goodness, goods, impress, impressed, impression, impressions, impressive, potency, strength, strength', strengths
2001	4	991	0.15	2001
many	4	990	0.15	many
journal	7	1908	0.14	diaries, diary, journal, journaling, journalism, journals, journals'
important	9	3834	0.14	authoritative, authoritatively, consequence, consequences, consequences', consequent, consequently, crucial, grand, grandes, implicate, implicated, implicating, implication, implications, import, importance, important, importantly, importing,

				imports, meaning, meanings, meanness, means, moment, moments, significance, significant, significantly, signification, significations, spell, spelled, spells
need	4	5553	0.14	'take, ask, asked, asking, asks, demand, demanded, demanding, demands, inevitable, inevitably, involve, involved, involvement, involves, involving, motivate, motivated, motivates, motivating, motivation, motivational, motivations, motivator, motivators, motive, motives, necessarily, necessitate, necessitated, necessitates, necessitating, need, needed, needing, needs, postulate, postulated, requir, require, required, requirement, requirements, requires, requiring, requisite, take, takes, taking, takings, wanted, wanting, wants
relationship	12	931	0.14	kinship, relationship, relationships
goals	5	1278	0.14	destination, destinations, destined, end, ended, ending, ends, finish, finished, finishing, goal, goals
study	5	6628	0.13	analyse, analyses, analysing, analyze, analyzed, analyzes, analyzing, canvas, consid, consider, considered, considering, considers, contemplate, contemplation, contemplative, discipline, disciplined, disciplines, disciplining, examination, examinations, examine, examined, examiners,

				examines, examining, field, fielding, fields, fields', meditate, meditated, meditation, meditations, meditative, report, reported, reporters, reporting, reports, sketched, studied, studies, studies', study, studying, subject, subjected, subjection, subjective, subjectively, subjectivities, subjectivity, subjects, subjects', survey, surveyed, surveying, surveys
professional	12	1100	0.13	master, master's level, mastered, masterful, mastering, masters, pro, professional, professionalism, professionalization, professionalize, professionalized, professionalizing, professionally, professionals, professionals', professionals'
psychology	10	896	0.13	psychological, psychologically, psychology
specific	8	1593	0.13	particular, particularly, particulars, spec, specific, specifically, specification, specifications, specificities, specificity, specifics, specs, stipulates, stipulations
higher	6	867	0.13	higher
variables	9	1124	0.13	uneven, unevenness, vari, variability, variable, variables, variably, variance, variances, varied, varies, vary, varying
theory	6	2170	0.13	hypothesis, possibilities, possibility, possible, possibly, theories, theories', theory

strategy	8	878	0.13	scheme, schemes, strategi, strategies, strategy, strategy/business
practice	8	7270	0.12	appli, applied, applies, apply, applying, commit, commitment, commitments, commits, committed, committing, drill, drilling, drills, execute, executed, executing, execution, executive, executives, executives', executives', executives' decision, exercise, exercised, exercises, exercising, feasibility, feasible, much, operate, operated, operates, operating, operation, operational, operationally, operations, operative, operators, opers, pattern, patterns, practical, practicality, practically, practice, practiced, practices, practicing, pragmatic, pragmatically, pragmatics, pragmatism, praxis, rehearsal, rehearsals, rehearse, rehearsed, rehearsing, used, useful, usefully, usefulness, uses, using, viable, virtual, virtually, workable
different	9	3004	0.12	conflict, conflicte, conflicted, conflicting, conflicts, departure, departures, deviate, deviation, deviations, differ, differed, difference, differences, different, different', differently, differing, differs, disagree, disagreeables, disagreed, disagreeing, dispute, disputed, dissent, dissenters, dissenting, dissimilar, dissimilarities, dissimilarity, diverge,

				diverged, divergence, divergences, divergent, diverges, diverging, otherwise, remainder, unlike, unlikely
design	6	7147	0.12	advise, advised, adviser, advisers, advises, advising, aim, aimed, aiming, aims, appoint, appointed, appointing, appointment, appointments, architect, architects, assign, assigned, assigning, assignment, assignments, assigns, blueprint, concept, conception, conceptions, concepts, contrived, decorate, decoration, decorations, delegate, delegated, delegation, delegator, deliberate, deliberately, deliberation, deliberations, denominated, denominator, design, designate, designated, designation, designations, designed, designer, designers, designers', designing, designs, destination, destinations, destined, doom, doomed, fate, fates, figuratively, figure, figured, figures, figuring, identification, identifications, indicate, indicated, indicates, indicating, indication, indicative, indicator, indicators, indices, innovate, innovating, innovation, innovations, innovative, innovatively, innovativeness, innovator, innovators, intend, intended, intending, intends, intent, intention,

				intentional, intentionality, intentionally, intentions, intently, intents, intrigued, intriguing, invent, invented, inventing, invention, inventions, inventive, inventiveness, name, named, namely, names, naming, pattern, patterns, plan, planned, planning, plans, point, pointed, pointedly, pointing, points, project, projected, projecting, projection, projections, projects, purpose, purposeful, purposefully, purposely, purposes, purposive, scheme, schemes, show, showed, showing, shows, specifiable, specified, specifies, specify, specifying
instructor	10	795	0.12	instructor, instructor's perception, instructors, instructors', instructors', teacher, teacherly', teachers, teachers'

making	6	7854	0.11 'take, attain, attainable, attained, attaining, attainment, attainments, brand, branded, brandes, branding, brands, build, building, buildings, builds, cause, caused, causes, causing, clear, cleared, clearing, clearly, constitute, constituted, constitutes, constituting, constitution, constitutions, construct, constructed, constructing, construction, constructions, constructive, constructively, constructs, cook, cooke, cooked, creat, create, created, creates, creating, devise, devised, devises, devising, draw, drawing, drawings, draws, earn, earned, earning, earnings, earns, establish, established, establishes, establishing, establishment, establishments, fashion, fashionable, fashioned, fashions, fix, fix', fixed, fixes, fixing, form, forme, formed, formed', forming, forms, gain, gained, gaining, gains, gets, getting, give, gives, giving, haves, hit, hits, hitting, hold, holding, holds, induc, induce, induced, inducement, inducements, induces, inducing, makes, making, making', name, named, namely, names, naming, nominal, nominate, nominated, nominating, nomination, nominations, pissed, pissing, prepar, preparation, preparations, prepare, prepared, prepares, preparing, pretend, pretender,
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				pretending, pretends, produce, produced, producer, producers, produces, producing, qualification, qualifications, reach, reached, reaches, reaching, readiness, ready, realise, realizable, realization, realizations, realize, realized, realizes, realizing, score, scored, scores, scoring, seduced, shuffled, stimulate, stimulated, stimulates, stimulating, stimulation, stools, take, takes, taking, takings, throw, throwing, throws
international	13	2225	0.11	external, externalities, externalize, externally, externals, home, homes, incorporate, incorporated, incorporates, incorporating, incorporation, inner, intern, internal, internalization, internalize, internalized, internalizing, internally, international, internationalism, internationality, internationally, interns, interns', intimate, intimately, intragroup, inward, inwardly, nation, national, nationalism, nationalities, nationality, nationally, nations, nations', nations', outside, outsider, outsiders
rather	6	1168	0.11	instead, prefer, preferable, preferably, preference,

				preferences, preferred, preferring, prefers, quit, quite, quitting, rather, sooner
university	10	4460	0.11	catholic, cosmopolitan, cosmos, creation, exist, existed, existence, existing, exists, general, generalism, generalities, generality, generalization, generalizations, generalize, generalized, generalizing, generally, populate, populated, population, populations, universal, universality, universally, universals, universe, universiti, universities, universities', university, world, world', world'sbusiness, worldly, worlds, worldwide
job	3	2215	0.11	job, jobbing, jobs, problem, problems, speculate, speculations, speculative, subcontract, task, tasked, tasks
knowledge	9	3080	0.11	cognition, cognitions, cognitive, cognitively, initial, initially, initiate, initiated, initiates, initiating, initiation, initiative, initiatives, initiator, intimate, intimately, know, knowing, knowledge, knowledge', knowledgeable, knows, versed, versely
course	6	6334	0.11	class, class', classes, classes', course, courses, courses', feed, feeding, feeds, flow, flowed, flowing, flows, form, forme, formed, formed', forming, forms, grade, graded, grades, grading, line, lines, natural, naturalization, naturalized, naturally, naturalness,

				nature, path, paths, row, rowe, rows, run, running, runs, track, tracked, tracking, tracks, trend, trends
critical	8	2187	0.10	critic, critical, criticality, critically, criticism, criticisms, criticize, criticized, criticizes, criticizing, critics, critique, critiqued, critiques, critiquing, crucial, decision, decisions, decisive, decisively, decisiveness, knock, knocks, vital, vitality
help	4	3666	0.10	aid, aided, aiding, aids, assist, assistance, assistant, assistants, assisted, assisting, assists, availability, available, facilitate, facilitated, facilitates, facilitating, facilitation, facilitative, facilitator, facilitators, help, help', helped, helper, helpers, helpful, helpfulness, helping, helps, portion, portions, serve, served, serves, service, services, serving, support, supported, supporters, supporting, supportive, supports
graduate	8	1400	0.10	alum, alumnae, alums, calibrate, calibrated, calibrating, calibration, calibrations, commence, commenced, commencement, commencing, grad, grad'seye, grads, graduat, graduate, graduated, graduates, graduates', graduates', graduating, graduation, postgraduate, postgraduation

development	11	5317	0.10	acquire, acquired, acquires, acquiring, arise, arises, arising, break, breaking, breaks, develop, developed, developed', developers, developing, development, developments, develops, evolution, evolutions, evolve, evolved, evolves, evolving, explicate, explicated, explicating, explication, exploit, exploitable, exploitation, exploited, exploiters, exploiting, formulate, formulated, formulating, formulation, gets, getting, grow, growing, grows, growth, maturation, mature, matured, maturing, maturity, modern, modernism, modernity, modernization, modernize, origin, original, originality, originally, originate, originated, originating, origins, produce, produced, producer, producers, produces, producing, rise, rises, rising, underdeveloped, underdevelopment, uprising
self	4	1343	0.10	ego, egos, self
relevant	8	667	0.10	relevance, relevancy, relevant
resources	9	824	0.10	imaginal, imagination, imaginations, imaginative, imaginatively, imaginativeness, imagine, imagined, imagining, resource, resourced, resourceful, resourcefully, resourcefulness, resources, resourcing

place	5	3279	0.10	home, homes, identifiable, identified, identifies, identify, identifying, local, locale, locales, locally, locate, located, locating, location, locational, locations, place, placed, places, placing, post, posted, posting, postings, posts, properties, property, put, puts, putting, seat, seating, seats, send, sending, sends, sets, setting, settings, shoes, site, sited, sites, situate, situated, situating, situation, situational, situationally, situations, space, spaced, spaces, spot, spots, station, stations
interaction	11	651	0.10	interact, interacted, interacting, interaction, interactional, interactions, interactive, interactively, interactivity, interacts, synergistic
although	8	645	0.10	although
managerial	10	630	0.09	managerial, managerialism, managerially
competencies	12	1548	0.09	apt, aptly, capabilities, capability, capability', capability'', capable, compete, competed, competence, competences, competencies, competency, competent, competently, competing, contend, contended, contenders, contending, contends, vie, vied

take	4	7090	0.09 'take, accept, acceptability, acceptable, acceptance, acceptances, accepted, accepting, accepts, acquire, acquired, acquires, acquiring, admit, admits, admitted, admittedly, admitting, adopt, adopted, adopting, adoption, adopts, assume, assumed, assumes, assuming, bring, bringing, brings, carried, carries, carry, carrying, charter, chartered, charters, choose, chooses, choosing, claim, claimed, claiming, claims, conduct, conducted, conducting, conducts, consid, consider, considered, considering, considers, consume, consumed, consumer, consumers, consumers', consumers', consuming, contain, contain', contained, container, containing, containment, contains, contract, contracting, contraction, contractions, contracts, convey, conveyed, conveying, conveys, dealing, dealings, deals, direct, directed, directing, direction, directional, directionality, directionally, directions, directive, directives, directly, directs, drive, drives, driving, engage, engaged, engagement, engagements, engages, engaging, exact, exactly, fill, filled, filling, film, filmed, filming, films, gets, getting, guid, guide, guide', guided, guides, guiding, hires, hire, hired, hires, hiring, hold, holding, holds, ingestion, lead,
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				leading, leads, lease, leasing, occupied, occupy, occupying, pack, packed, pick, picked, picking, read, reade, reading, readings, reads, removal, removals, remove, removed, removes, removing, rent, rents, select, selected, selecting, selection, selections, selective, selectively, selectiveness, selectivity, selects, shoot, shooting, shootings, strike, strikes, striking, strikingly, submit, submitted, submitting, subscribe, subscribing, take, takes, taking, takings, win, winning, wins, withdraw, withdrawal, withdrawing
less	4	627	0.09	less
based	5	4119	0.09	bag, base, based, bases, basing, basis, contempt, cornerstone, cornerstones, establish, established, establishes, establishing, establishment, establishments, floor, foot, footing, found, foundation, foundational, foundations, foundations', founded, founding, fundamental, fundamentalism, fundamentally, fundamentals, ground, grounded, grounding, grounds, groundwork, home, homes, humble, humbled, humbling, immoral, immorality, infrastructure, meaning, meanings, meanness, means, radical, radically,

				radicals, root, rooted, roots, stand, standing, standings, stands, stem, stemmed, stemming, stems, theme, themes
methods	7	621	0.09	method, methods
likely	6	3082	0.09	alike, care, cared, careful, carefully, cares, caring, comparability, comparable, comparably, comparative, comparatively, compare, compared, compares, comparing, correspond, corresponded, correspondence, corresponding, correspondingly, corresponds, like, liked, likeli, likely, likes, liking, potential, potentialities, potentiality, potentially, potentials, probabilities, probability, probable, probably, semblance, similar, similarities, similarity, similarly, wish, wished, wishes, wishing
classroom	9	609	0.09	classroom, classroom', classrooms
value	5	5398	0.09	appraisal, appraisals, appraise, appraised, appraising, appreci, appreciably, appreciate, appreciated, appreciates, appreciating, appreciation, appreciations, appreciative, assess, assessed, assesses, assessing, assessment, assessments, esteem, esteemed, evaluate, evaluated, evaluates, evaluating, evaluation, evaluations, evaluative, evaluator, evaluators,

				<p>measur, measurable, measure, measured, measurement, measurements, measures, measuring, precious, prise, prizes, prising, prize, prized, prizes, prizing, rate, rated, ratee, ratees, rates, rating, ratings, respect, respectability, respected, respectful, respectfully, respecting, respective, respectively, respects, treasure, treasurer, valuated, valuation, valuations, value, valued, values, valuing</p>
1997	4	601	0.09	1997
innovation	10	4167	0.09	<p>advance, advanced, advancement, advancements, advances, advancing, creation, found, foundation, foundational, foundations, foundations', founded, founding, groundbreaking, initial, initially, initiate, initiated, initiates, initiating, initiation, initiative, initiatives, initiator, innovate, innovating, innovation, innovations, innovative, innovatively, innovativeness, innovator, innovators, institut, institute, instituted, institutes, instituting, institution, institutional, institutionalism, institutionalisms, institutionally, institutions, institutions', introduce, introduced, introduces, introducing, introduction, introductions, invent, invented, inventing, invention, inventions, inventive, inventiveness, modern, modernism, modernity, modernization,</p>

				modernize, origin, original, originality, originally, originate, originated, originating, origins, pioneer, pioneered, pioneering, pioneers
related	7	4558	0.09	associ, associate, associated, associates, associating, association, associations, comparability, comparable, comparably, comparative, comparatively, compare, compared, compares, comparing, concern, concerned, concerning, concerns, congress, connect, connected, connecting, connection, connections, connective, connectivity, connects, dealing, dealings, deals, interrelate, interrelated, interrelation, interrelations, link, linked, linking, links, pertain, pertained, pertaining, pertains, proportion, proportional, proportionally, proportioned, proportions, recount, recounted, recounts, refer, reference, references, referent, referents, referred, referring, refers, relate, related, relates, relating, relation, relational, relationality, relationally, relations, relative, relatively, relativity, tell, telling, tells, touch, touched, touches, touching

process	7	4047	0.09	action, actionable, 'actionable, actions, advance, advanced, advancement, advancements, advances, advancing, appendages, emanate, emanates, emanating, litigation, march, marches, marching, operate, operated, operates, operating, operation, operational, operationally, operations, operative, operators, opers, outgrowth, procedural, procedure, procedures, process, processed, processes, processing, progress, progressed, progresses, progressing, progression, progressions, progressive, progressively, refine, refined, refinement, refinements, refining, rise, rises, rising, serve, served, serves, serving, sue, sues, summon, summons, treat, treated, treating, treats
professor	9	583	0.09	prof, professor, professorate, professors, professors', professors'
including	9	1206	0.09	admit, admits, admitted, admittedly, admitting, include, included, includes, including
model	5	3114	0.09	example, examples, exemplar, exemplars, exemplary, framework, frameworks, model, modeled, modeling, modelled, modelling, models, mold, molded, molds, pattern, patterns, pose, posed, posefully, poses, posing, posture, postures, posturing, sculpture, simulate, simulated, simulates, simulation, simulations, sit, sits, sitting

group	5	1828	0.09	group, group's, grouped, grouping, groupings, groups, groups', groups', radical, radically, radicals, sort, sorted, sorting, sorts
performance	11	4649	0.09	act, acted, actes, acting, actly, acts, execute, executed, executing, execution, executive, executives, executives', executives', executives'decision, function, functional, functionality, functionally, functioned, functioning, functions, operate, operated, operates, operating, operation, operational, operationally, operations, operative, operators, opers, perform, performance, performances, performative, performativity, performed, performer, performers, performing, performs, play, play', played, playful, playfully, playfulness, playing, plays
class	5	2587	0.08	assorted, categories, category, class, class', classes, classes', classified, classify, classifying, division, divisions, divisive, familial, families, family, separate, separated, separately, separates, separating, separation, separations, separator, sort, sorted, sorting, sorts, stratum, year, yearly, years, years', years'
new	3	2348	0.08	fresh, freshness, modern, modernism, modernity, modernization, modernize, new, newly, newness, novel, novel'sdefensibilityasawor

				k, novels, novels', raw, young
point	5	4115	0.08	aim, aimed, aiming, aims, channel, channeled, channeling, channels, detail, detailed, detailing, details, direct, directed, directing, direction, directional, directionality, directionally, directions, directive, directives, directly, directs, dot, dots, guid, guide, guide', guided, guides, guiding, head, headed, heading, headings, heads, indicate, indicated, indicates, indicating, indication, indicative, indicator, indicators, indices, item, items, maneuver, maneuvering, orient, oriental, orientalism, orientate, orientated, orientation, orientational, orientations, oriented, orienting, peak, peaks, period, periodic, periodical, periodically, periodicals, periods, place, placed, places, placing, point, pointed, pointedly, pointing, points, sharpen, sharpened, sharpening, signal, signaled, signaling, signals, spot, spots, steer, steered, steering, steers, stop, stopped, stopping, stops, target, targeted, targeting, targets, tip, tipped, tipping, tips
1998	4	564	0.08	1998

organizations	13	5516	0.08 administrating, administration, administrations, administrative, administratively, administrator, administrators, administrators', arrange, arranged, arrangement, arrangements, arranging, beings, brass, constituencies, constituency, constituent, constituents, constitute, constituted, constitutes, constituting, constitution, constitutions, coordinate, coordinated, coordinating, coordination, coordinator, coordinators, devise, devised, devises, devising, direct, directed, directing, direction, directional, directionality, directionally, directions, directive, directives, directly, directs, engine, engineer, engineered, engineering, engineers, engines, establish, established, establishes, establishing, establishment, establishments, form, format, formation, formations, formative, formatively, formats, formatting, forme, formed, formed', forming, forms, govern, governance, governed, governing, government, governments, machine, machines, orchestrate, orchestrated, orchestrating, orchestration, organ, organic, organically, organisation, organisational, organisations, organism,
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				organisms, organization, organizations, organizations', organize, organized, organizers, organizes, organizing, organs, prepar, preparation, preparations, prepare, prepared, prepares, preparing, system, systemic, systemically, systems, systems', union, unions
among	5	563	0.08	among
issues	6	5060	0.08	'take, cut, cuts, cutting, emerge, emerged, emergence, emergencies, emergent, emerges, emerging, exit, exits, issue, issued, issues, matter, mattered, mattering, matters, number, numbered, numbers, offspring, outlet, outlets, payoff, payoffs, proceed, proceeded, proceeding, proceedings, proceeds, public, publically, publication, publications, publicity, publicized, publicizing, publicly, publics, publish, publishable, published, publisher, publishers, publishes, publishing, release, released, releases, releasing, return, returned, returning, returns, subject, subjected, subjection, subjective, subjectively, subjectivities, subjectivity,

				subjects, subjects', supplied, supplies, supply, take, takes, taking, takings, topic, topical, topicality, topically, topics, yield, yielded, yielding, yields
women	5	561	0.08	women
faculty	7	1730	0.08	faculties, faculties', faculty, module, modules, staff, staffs
content	7	2477	0.08	argu, argue, argued, argues, arguing, argument, arguments, capac, capacities, capacity, competition, competitions, competitive, competitively, competitiveness, content, contention, contentions, contents, contest, contestants, contestation, contestations, contested, contests, controversial, controversies, controversy, dispute, disputed, message, messages, messaging, rivalry, subject, subjected, subjection, subjective, subjectively, subjectivities, subjectivity, subjects, subjects', substance
however	7	1452	0.08	however, nevertheless, nonetheless, notwithstanding, still, yet
emotional	9	923	0.08	affect, affected, affecting, affections, affective, affectivity, affects, arousal, arouse, aroused, arousing, emotion, emotional, emotionalism, emotionality, emotionally, emotions, excite, excited, excitement, excites, exciting

across	6	537	0.08	across
participants	12	3262	0.08	activate, activates, activating, activation, active, actively, activism, activities, activity, engage, engaged, engagement, engagements, engages, engaging, enter, entered, entering, enters, involve, involved, involvement, involves, involving, participant, participants, participants', participants', participate, participated, participates, participating, participation, participations, participative, player, players
strategic	9	532	0.08	strategic, strategically, strategics, strategizing
financial	9	524	0.08	financial, financialization, financialized, financially, financier, fiscal
toward	6	522	0.08	toward, towards
data	4	1922	0.08	data, inform, informal, informality, informally, informant, informants, informants', information, informational, informative, informed, informing, informs
required	8	3105	0.08	ask, asked, asking, asks, command, commanded, commandment, commands, compulsory, demand, demanded, demanding, demands, essential, essentialism, essentially, essentials, expect, expectancies, expectancy, expectant, expectation, expectations, expected, expecting, expects, mandatory, necessary, necessities, necessity, prerequisite, prerequisites, requir, require, required, requirement, requirements,

				requires, requiring, requisite
level	5	4388	0.08	charge, charged, charges, charging, degree, degrees, demolished, dismantle, equal, equaled, equality, equally, equals, even, evening, evenly, flat, floor, grade, graded, grades, grading, layer, layers, level, leveled, levels, plane, point, pointed, pointedly, pointing, points, stage, staged, stages, staging, storey, stories, story, stratum, tie, tied, tier, tiers, ties, tying
factors	7	1233	0.08	agent, agentic, agents, agents', broker, brokers, component, components, constituencies, constituency, constituent, constituents, element, elemental, elements, factor, factors, genes, ingredient, ingredients
rankings	8	3699	0.08	absolute, absolutely, cried, cry, crying, fertile, fertility, fertilization, glaring, glaringly, grade, graded, grades, grading, gross, membership, memberships, order, ordered, ordering, orderly, orders, place, placed, places, placing, range, ranged, ranges, ranging, rank, ranked, ranking, rankings, rankings', ranks, rate, rated, ratee, ratees, rates, rating, ratings, rich, riches, richly, richness, sheer, stratified, stratifying, superior,

				superiority, superiors, superiors'
feedback	8	511	0.08	feedback
analysis	8	1021	0.08	analysis, psychoanalysis
recent	6	551	0.08	late, lated, latter, recency, recent, recently
significant	11	1586	0.08	meaning, meanings, meanness, means, pregnant, significance, significant, significantly, substantial, substantially, substantiate, substantiated, substantiating, substantiation
support	7	3764	0.07	accompanied, accompany, accompanying, admirable, admirably, admiration, admire, admired, admiring, affirm, affirmation, affirmational, affirmative, affirmed, affirming, affirms, back, backed, backing, backs, backup, bear, bearing, bears, bears', brook, brookes, brookings, brooks, champion, championed, championing, champions, confirm, confirmation, confirmative, confirmed, confirming, confirms, corroborate, corroborated, corroborates, corroborating, corroborative, defend, defended, defenders, defending, defends, digest, digested, digesting, document, documentation, documented, documenting, documents, encourage, encouraged, encouragement, encourages, encouraging,

				encouragingly, endorse, endorsed, endorsement, endorses, endorsing, endure, endured, enduring, friend, friendly, friends, friends', fund, funded, funding, funds, hold, holding, holds, keep, keeping, keeps, live, lived, livelihood, livelihoods, lively, lives, living, protagonist, protagonists, reinforce, reinforced, reinforcement, reinforces, reinforcing, sponsor, sponsored, sponsoring, sponsors, stand, standing, standings, stands, subscribe, subscribing, substantial, substantially, substantiate, substantiated, substantiating, substantiation, suffer, suffered, sufferers, suffering, suffers, support, supported, supporters, supporting, supportive, supports, sustain, sustainability, sustainable, sustained, sustaining, sustains, sustenance, tolerable, tolerance, tolerances, tolerant, tolerate, tolerated, tolerating, toleration, underpin, underpinned, underpinning, underpinnings, underpins
whether	7	506	0.07	whether
responsibility	14	1411	0.07	answer, answered, answering, answers, answers', duties, dutifully, duty, obligate, obligated, obligation, obligations, obliged, obliges, province, provinces, reaction, reactions, reactive, reactivity, reception, receptive, receptiveness, receptivity, replied, reply,

				response, responses, responsibilities, responsibility, responsible, responsibly, responsive, responsively, responsiveness
people	6	1019	0.07	mass, masse, masses, multitude, people, 'people, peoples, peoples', peoples'
personal	8	1648	0.07	characterization, characterizations, characterize, characterized, characterizes, characterizing, enact, enacted, enacting, enactive, enactment, enactments, impersonal, person, personable, personal, personalities, personality, personalization, personalize, personalized, personally, persons, persons', portray, portrayal, portrayals, portrayed, portraying, portrays, pose, posed, posefully, poses, posing
provide	7	2550	0.07	allow, allowable, allowance, allowances, allowed, allowing, allows, cater, catering, furnish, furnished, furnisher, leave, leaves, leaving, offer, offered, offering, offerings, offers, plied, plies, plying, provid, provide, provided, providence, provider, providers, provides, providing, render, rendered, rendering, renderings, renders, supplied, supplier, suppliers, supplies, supply
teaching	8	2453	0.07	command, commanded, commandment, commands, instruct, instructed, instructing, instruction, instructional,

				instructionally, instructions, instructive, pedagogies, pedagogy, precept, teach, teaches, teaching, teachings
entrepreneurship	16	494	0.07	entrepreneurship
approach	8	2130	0.07	access, accessed, accessibility, accessible, accessibly, accessing, advance, advanced, advancement, advancements, advances, advancing, approach, approached, approaches, approaching, attack, attacked, attacking, attacks, come, comes, coming, comings, forthcoming, near, neared, nearly, upcoming
structure	9	2007	0.07	construct, constructed, constructing, construction, constructions, constructive, constructively, constructs, integral, integrate, integrated, integrates, integrating, integration, integrative, integratively, integrator, integrity, structural, structuralism, structurally, structure, structure', structured, structures, structuring
focus	5	2313	0.07	center, centered, centering, centers, centre, centres, concentrate, concentrated, concentrates, concentrating, concentration, concentrations, direct, directed, directing, direction, directional, directionality, directionally, directions, directive, directives, directly, directs, focal, focus, focused, focuses, focusing, sharpen, sharpened, sharpening,

				stress, stressed, stresses, stressful, stressing
characteristics	15	607	0.07	characteristic, characteristically, characteristics, feature, featured, features, featuring
addition	8	2707	0.07	access, accessed, accessibility, accessible, accessibly, accessing, addition, additional, additionally, additions, additive, extra, extras, gain, gained, gaining, gains, improv, improve, improved, improvement, improvement', improvements, improves, improving, increase, increased, increases, increasing, increasingly, linear, plus, summation, summative, summatively
executive	9	2941	0.07	accomplish, accomplishable, accomplished, accomplishes, accomplishing, accomplishment, accomplishments, action, actionable, 'actionable, actions, administrating, administration, administrations, administrative, administratively, administrator, administrators, administrators', execute, executed, executing, execution, executive, executives, executives', executives', executives' decision, fulfill, fulfilled, fulfilling,

				fulfillment, fulfilment, implement, implementable, implementation, implementations, implemented, implementing, run, running, runs
ethics	6	1544	0.07	ethic, ethical, ethically, ethics, honor, honorable, honored, honoring, honors, honour, moral, morale, morales, morality, morally, morals
gmat	4	465	0.07	gmat
often	5	1386	0.07	frequencies, frequency, frequent, frequently, much, oft, often, oftentimes
without	7	459	0.07	without
review	6	1987	0.07	comment, commentator, commentators, commented, commenting, comments, critique, critiqued, critiques, critiquing, inspect, inspecting, inspection, inspections, reader, readers, readers', reappraisal, reassess, reassessed, reassessing, reassessment, recap, reexamination, reexamine, reexamined, reexamining, referee, refereed, referees, refresher, refreshing, refreshments, retrospect, retrospective, retrospectively, retrospectives, revaluation, revalue, review, reviewable, reviewed, reviewer, reviewers, reviewing, reviews, revue, survey, surveyed, surveying, surveys

suggests	8	2356	0.07	advise, advised, adviser, advisers, advises, advising, evoke, evoked, evokes, evoking, hint, hinted, hints, implicate, implicated, implicating, implication, implications, indicate, indicated, indicates, indicating, indication, indicative, indicator, indicators, indices, intimate, intimately, mesmerized, proffer, proffered, proffering, proffers, prompt, prompted, prompting, prompts, proposal, proposals, propose, proposed, proposes, proposing, proposition, propositional, propositionally, propositions, signification, significations, suggest, suggested, suggesting, suggestion, suggestions, suggestive, suggests, trace, traced, traces, tracing
cultural	8	1593	0.07	'cultural, civil, civility, civilization, civilized, cultivate, cultivated, cultivates, cultivating, cultivation, cultural, culturally, culture, cultures, ethnic, ethnicities, ethnicity, finish, finished, finishing, polit, polite, politely, political, politically, politics, refine, refined, refinement, refinements, refining
discussion	10	1595	0.07	discourse, discourses, discuss, discussable, discussed, discusses, discussing, discussion, discussions, treatment, treatments, word, worded, wording, words
another	7	444	0.07	another, others'

employees	9	436	0.06	employee, employee's perception, employees, employees'
literature	10	430	0.06	literature, literatures
context	7	1402	0.06	circumstance, circumstances, context, contexts, sets, setting, settings
world	5	2368	0.06	domain, domains, earth, global, 'global, global', globalism, globality, globalization, globalize, globalized, globalizing, globally, globe, planetary, populace, public, publically, publication, publications, publicity, publicized, publicizing, publicly, publics, realities, reality, secular, temporal, temporality, temporally, world, world', world's business, worldly, worlds, worldwide
decision	8	1860	0.06	conclusion, conclusions, conclusive, conclusively, decision, decisions, decisive, decisively, decisiveness, determinant, determinants, determinate, determination, determinations, determine, determined, determines, determining, determinism, final, finalize, finalized, finalizing, finally, resolute, resolution
others	6	1468	0.06	distinct, distinction, distinctions, distinctive, distinctively, distinctiveness, distinctly, early, early', former, formerly, otherness, others, others', others', separate, separated, separately, separates, separating, separation, separations, separator
members	7	895	0.06	appendages, extreme, extremely, extremes,

				member, members, members', members'
eds	3	414	0.06	edly, eds
harvard	7	411	0.06	harvard
must	4	409	0.06	must
interest	8	2315	0.06	concern, concerned, concerning, concerns, interest, interested, interestedly, interesting, interestingly, interests, involve, involved, involvement, involves, involving, occupied, occupy, occupying, pastimes, pursuit, pursuits, sake, stake, stakes, worried, worries, worry, worrying
stakeholders	12	407	0.06	stakeholder, stakeholders, stakeholders'
united	6	1793	0.06	amalgams, chunk, combination, combinations, combine, combined, combines, combining, connect, connected, connecting, connection, connections, connective, connectivity, connects, join, joined, joins, joining, joins, link, linked, linking, links, merge, merger, mergers, mergers', merging, together, unification, unified, unifies, unifying, union, unions, unit, united, unites, units, whole, wholeness

order	5	2552	0.06	arrange, arranged, arrangement, arrangements, arranging, cohere, coherence, coherent, coherently, consecrated, consist, consisted, consistence, consistency, consistent, consistently, consisting, consists, dictate, dictated, dictates, dictating, dictator, dictators, govern, governance, governed, governing, government, governments, logic, logical, logically, logics, neat, neatly, ordain, order, ordered, ordering, orderly, orders, ordinal, prescribe, prescribed, prescribes, prescribing, put, puts, putting, regular, regularity, regularly, regulate, regulated, regulates, regulating, regulation, regulations, regulative, regulators, saying, system, systematic, systematically, systematized, systemic, systemically, systems, systems', tell, telling, tells
challenges	10	1397	0.06	ambitious, ambitiously, challenge, challenged, challengers, challenges, challenging, competition, competitions, competitive, competitively, competitiveness, competitor, competitors, contend, contended, contenders, contending, contends, dispute, disputed, intrigued, intriguing, rival, rivals
role	4	3815	0.06	character, characters, characters', function, functional, functionality, functionally, functioned, functioning, functions, office, officer, officers,

				offices, parted, parting, partly, parts, persona, purpose, purposeful, purposefully, purposely, purposes, purposive, role, roles, roling, used, useful, usefully, usefulness, uses, using
career	6	1103	0.06	call, called, calling, callings, calls, career, careerism, careers, vocate, vocation, vocational, vocationally
phd	3	401	0.06	phd
first	5	2360	0.06	1st, begin, beginning, beginnings, begins, commence, commenced, commencement, commencing, first, firstly, foremost, inaugural, inaugurated, inauguration, initial, initially, initiate, initiated, initiates, initiating, initiation, initiative, initiatives, initiator, low, lowe, lowed, lows, maidens, offset, outset, start, started, starting, starts
possible	8	1186	0.06	maybe, open, opened, opening, openly, openness, opens, perhaps, possibilities, possibility, possible, possibly
human	5	1785	0.06	art, art'ssake, artful, arts, homo, human, humane, humanely, humanism, humanist, humanistic, humanities, humanity, humanize, humanized, humanizes, humanizing, humankind, humanly, humans, man, man', manhood, mankind, manning, world, world', world'sbusiness, worldly, worlds
within	6	806	0.06	inside, insider, insiders, within

findings	8	3319	0.06	ascertain, ascertained, ascertaining, breakthrough, breakthroughs, chance, chances, detect, detected, detecting, detection, determinant, determinants, determinate, determination, determinations, determine, determined, determines, determining, determinism, discover, discovered, discoveries, discovering, discovers, discovery, encounter, encountered, encountering, encounters, feel, feeling, feelings, feels, finding, findings, finds, gets, getting, happen, happened, happening, happenings, happens, incur, incurred, notice, noticeable, noticeably, noticed, notices, noticing, observability, observable, observation, observational, observations, observe, observed, observer, observers, observers', observes, observing, obtain, obtainable, obtained, obtaining, receivable, receive, received, receiver, receivers, receives, receiving, recover, recovered, recovering, recovers, regain, regained, regaining, retrieved, rule, ruled, rules, ruling, rulings, seeing, sees, uncover, uncovered, uncovering, uncovers, witness, witnessed, witnesses, witnessing, wits
mintzberg	9	390	0.06	mintzberg, mintzbergs
principles	10	509	0.06	precept, principle, principled, principles,

				rationale, rationales, rule, ruled, rules, ruling, rulings
thinking	8	3819	0.06	'think, believ, believe, believed, believers, believes, believing, cerebral, conceivable, conceive, conceived, conceives, conceiving, consid, consider, considered, considering, considers, guess, imaginal, imagination, imaginations, imaginative, imaginatively, imaginativeness, imagine, imagined, imagining, intellect, intelligence, intelligences, intelligent, intend, intended, intending, intends, meaning, meanings, meanness, means, opined, reason, reasonable, reasonably, reasoned, reasoning, reasons, recall, recalled, recalling, recollection, recollections, remember, remembered, retrieved, suppose, supposed, supposedly, think, thinking, thinks, thought, thought', thoughtful, thoughtfully, thoughtfulness, thoughts
potential	9	1492	0.06	capabilities, capability, capability', capability'', capable, possibilities, possibility, possible, possibly, potency, potential, potentialities, potentiality, potentially, potentials
marketing	9	1048	0.06	commercial, commercialisation, commercialization, commercialize, commercialized, commercializing, commercially, market, marketable, marketed, marketers, marketing,

				marketization, marketplace, markets, mart, merchants, sell, sell', seller, sellers, selling, sells, vendors
experiential	12	377	0.06	existential, existentially, experiential, experientially
understanding	13	3606	0.06	agreement, agreements, apprehension, clear, cleared, clearing, clearly, comprehensibility, comprehension, comprehensive, comprehensively, comprehensiveness, discern, discerned, discernible, discerning, discernment, empathic, empathize, empathizing, infer, inference, inferences, inferred, intellect, intelligence, intelligences, intelligent, interpret, interpretation, interpretations, interpretative, interpreted, interpreters, interpreting, interpretive, interprets, perceive, perceived, perceiver, perceives, perceiving, read, reade, reading, readings, reads, realise, realizable, realization, realizations, realize, realized, realizes, realizing, reason, reasonable, reasonably, reasoned, reasoning, reasons, savvy, seeing, sees, sympathies, sympathy, translat, translatable, translate, translated, translates, translating, translation, translational, translations, translator, translators, understand, understandable, understandably, understanding,

				understandings, understands
line	4	3225	0.05	air, aired, airing, airs, argument, arguments, blood, cable, channel, channeled, channeling, channels, contrast, contrasted, contrasting, contrasts, crease, creased, delin, delineate, delineated, delineates, delineating, delineation, demarcation, descent, describe, described, describes, describing, draw, drawing, drawings, draws, face, faced, faces, facing, line, liner, lines, note, noted, notes, noting, origin, original, originality, originally, originate, originated, originating, origins, pedigree, pipeline, stock, stocks, strain, trace, traced, traces, tracing, tune, tuned, tunes, tuning
real	4	1969	0.05	actual, actuality, actualization, actualizing, actually, exist, existed, existence, existing, exists, genuine, genuinely, genuineness, liter, literal, literally, literate, material, materialize, materially, materials, real, realism, realities, reality, really,

				realness, substantial, substantially, substantiate, substantiated, substantiating, substantiation, tangibility, tangible, tangibles, veridical
fact	4	369	0.05	fact, facts
college	7	365	0.05	college, colleges, colleges'
technology	10	1326	0.05	engine, engineer, engineered, engineering, engineers, engines, technical, technically, technological, technologically, technologies, technologization, technology
time	4	2568	0.05	apropos, clip, clips, clock, multiple, multiples, multiplication, multiplicative, multiplicity, season, seasoned, seasoning, seasons, sentence, sentences, time, timed, timely, times, times', timing
empirical	9	367	0.05	conglomerate, conglomeration, empire, empires, empires', empirical, empirically
capital	7	897	0.05	cap, capital, capital', capitalising, capitalism, capitalization, capitalizations, capitalize, capitalized, capitalizing, capped, caps, great, greatly, greatness, washington

present	7	3537	0.05	acquaintance, acquaintances, acquainted, award, awarded, awarding, awards, bestow, bestowed, bestowing, conferral, deliver, delivered, delivering, delivers, demo, demonstrably, demonstrate, demonstrated, demonstrates, demonstrating, demonstration, demonstrations, demos, display, displayed, displaying, displays, donor, donors, exhibit, exhibited, exhibiting, exhibits, gift, gifted, gifts, gifts', give, giver, givers, gives, giving, intro, introduce, introduced, introduces, introducing, introduction, introductions, now', nowadays, portray, portrayal, portrayals, portrayed, portraying, portrays, pose, posed, posefully, poses, posing, present, presentation, presentational, presentations, presented, presenters, presenting, presently, presents, represent, representative, representatively, representativeness, representatives, represented, representing, represents, short, shortly, show, showed, showing, shows, soon, sponsor, sponsored, sponsoring, sponsors, stage, staged, stages, staging, submit, submitted, submitting
mbas	4	360	0.05	mbas, mbas'
made	4	356	0.05	made
curricula	9	352	0.05	curricula

used	4	3371	0.05	<p>appli, applied, applies, apply, applying, consumption, employ, employability, employable, employed, employer, employers, employers', employers', employing, employment, employs, enjoy, enjoyable, enjoyed, enjoying, enjoyment, enjoys, exercise, exercised, exercises, exercising, expend, expended, expending, exploit, exploitable, exploitation, exploited, exploiters, exploiting, habit, habits, habitual, habituate, manipulate, manipulated, manipulating, manipulation, manipulations, manipulative, manipulatively, usage, used, useful, usefully, usefulness, uses, using, utilising, utilitarian, utilitarianism, utilities, utility, utilization, utilize, utilized, utilizes, utilizing, victim, victimization, victimize, victimized, victimizer, victims</p>
researchers	11	1224	0.05	<p>enquiry, exploration, explorations, explorative, explore, explored, explorer, explorers, explores, exploring, inquiry, investigate, investigated, investigates, investigating, investigation, investigations, investigative, investigator, investigators, researchable, researched, researchers, researchers', researching, search, searched, searches, searching</p>

interpersonal	13	347	0.05	interpersonal, interpersonally
networks	8	838	0.05	meshes, nets, network, networked, networking, networks, web, webs
setting	7	3139	0.05	adjust, adjustable, adjusted, adjusting, adjustment, adjustments, adjusts, arrange, arranged, arrangement, arrangements, arranging, background, backgrounds, band, circle, circles, correct, corrected, correcting, correction, corrections, corrective, correctly, correctness, corrects, cure, cures, definable, define, defined, defines, defining, determinant, determinants, determinate, determination, determinations, determine, determined, determines, determining, determinism, dictate, dictated, dictates, dictating, dictator, dictators, dress, dressed, dressing, fit, fitness, fits, fitted, fitting, fix, fix', fixed, fixes, fixing, laid, limit, limitation, limitations, limited, limiters, limiting, limits, lot, lots, mark, marked, markedly, marking, marks, mount, mounted, mounting, plant, planted, plants, prepar, preparation, preparations, prepare, prepared, prepares, preparing, prime, primes, priming, readiness, ready, rigid, rigidities, rigidity, rigs, scene, scenes, scope, scoped, seth, sets, setting, settings, sic, solidify, specifiable, specified,

				specifies, specify, specifying
view	4	3615	0.05	aspect, aspects, catch, catching, consid, consider, considered, considering, considers, horizon, horizons, opinion, opinions, persuasion, persuasive, persuasively, persuasiveness, prospect, prospective, prospectively, prospects, purview, regard, regarded, regarding, regards, scene, scenes, screen, screened, screening, screens, seeing, sees, sentiment, sentimental, sentiments, show, showed, showing, shows, sight, sighted, sights, survey, surveyed, surveying, surveys, thought, thought', thoughtful, thoughtfully, thoughtfulness, thoughts, view, viewed, viewing, views, vistas, wake, wake', watch, watched, watchful, watching
admission	9	552	0.05	access, accessed, accessibility, accessible, accessibly, accessing, admission, admissions, admittance, admittances

collaborative	13	746	0.05	collaborate, collaborated, collaborates, collaborating, collaboration, collaborations, collaborative, collaboratively, collaborators, confederate, confederates, cooper, cooperate, cooperating, cooperation, cooperative, cooperatively, cooperatives, partner, partnered, partnering, partners, partners'
building	8	2646	0.05	anatomy, build, building, buildings, builds, construct, constructed, constructing, construction, constructions, constructive, constructively, constructs, establish, established, establishes, establishing, establishment, establishments, figuratively, figure, figured, figures, figuring, form, forme, formed, formed', forming, forms, frame, framed, frames, framing, framings, habitus, progress, progressed, progresses, progressing, progression, progressions, progressive, progressively, shape, shaped, shapely, shapes, shaping
beyond	6	338	0.05	beyond
corporate	9	1642	0.05	bodies, bodily, body, bodying, collect, collected, collecting, collection, collections, collective, collectively, collectives, collectivity, collects, corp, corporal, corporate, corporates, corporation, corporations, corporations', corporations', corps, embodied, embodiment, embody, embodying, incorporate, incorporated,

				incorporates, incorporating, incorporation, material, materialize, materially, materials, physical, physically, physics, potted
example	7	2474	0.05	cases, casing, example, examples, exercise, exercised, exercises, exercising, illustrate, illustrated, illustrates, illustrating, illustration, illustrations, illustrative, instance, instances, lesson, lessons, lessons', represent, representative, representatively, representativeness, representatives, represented, representing, represents
greater	7	336	0.05	greater
report	6	2536	0.05	account, accountability, accountable, accountancy, accountant, accountants, accounted, accounting, accounts, composite, composites, composition, compositional, compositions, cover, coverage, covered, covering, covers, describe, described, describes, describing, paper, papers, report, reported, reporters, reporting, reports, stories, story, theme, themes
peer	4	850	0.05	'peer, equal, equaled, equality, equally, equals, match, matched, matches, matching, peer, peere, peers, peers', peers'
american	8	331	0.05	american, americanization, americanizations, americanized, americanizing, americans
correlations	12	328	0.05	correlate, correlated, correlates, correlating,

				correlation, correlational, correlations
undergraduate	13	327	0.05	undergrad, undergrads, undergraduate, undergraduates, undergraduates'
action	6	1569	0.05	action, actionable, 'actionable, actions, activate, activates, activating, activation, active, actively, activism, activities, activity
policy	6	335	0.05	insurance, insure, insuring, policies, policy
change	6	2652	0.05	alter, alterable, alteration, alterations, altered, altering, alterity, alters, chang, change, changeability, changeable, changed, changes, changing, commute, convert, converted, converting, converts, deepen, deepening, deepens, exchange, exchangeable, exchanged, exchanges, exchanging, interchange, interchangeability, interchangeable, interchangeably, modification, modifications, modified, modify, modifying, shift, shifted, shifting, shifts, switch, switched, switching, transfer, transferability, transferable, transferred, transferring, transfers, vari, varied, varies, varieties, variety, vary, varying
practitioners	13	322	0.05	practitioner, practitioners, practitioners', practitioners'
complex	7	376	0.05	complex, complexes, complexities, complexity, composite, composites, composition,

				compositional, compositions
theoretical	11	320	0.05	theoret, theoretic, theoretical, theoretically
community	9	1573	0.05	communal, communally, communes, communicate, communicated, communicates, communicating, communication, communication', communications, communications', communicative, communicativeness, communicators, communism, communities, community, convey, conveyed, conveying, conveys, nation, national, nationalism, nationalities, nationality, nationally, nations, nations', nations', pass, passe, passed, passes, passing, transmit, transmitted, transmitting
cases	5	2100	0.05	cases, casing, cause, caused, causes, causing, character, characters, characters', event, events, face, faced, faces, facing, font, shell, showcase, showcasing, slip, slipped, slipping, slips, subject, subjected, subjection, subjective, subjectively, subjectivities, subjectivity, subjects, subjects', suit, suite, suited, suites, suits, types, typing
training	8	3861	0.05	'take, aim, aimed, aiming, aims, check, checked, checking, checks, coach, coached, coaches, coaching, coaching', condition, conditional, conditioned, conditioning, conditions, direct, directed, directing, direction, directional, directionality,

				directionally, directions, directive, directives, directly, directs, discipline, disciplined, disciplines, disciplining, geared, gears, groomed, grooms, prepar, preparation, preparations, prepare, prepared, prepares, preparing, rail, string, strings, take, takes, taking, takings, trail, trails, train, trained, training, trainings, trains
growth	6	1624	0.05	emerge, emerged, emergence, emergencies, emergent, emerges, emerging, growth, increase, increased, increases, increasing, increasingly, incremental, incrementalism, increments, outgrowth
control	7	3120	0.05	account, accountability, accountable, accountancy, accountant, accountants, accounted, accounting, accounts, ascend, ascendancy, ascending, ascertain, ascertained, ascertaining, assurance, assure, assured, assures, assuring, check, checked, checking, checks, command, commanded, commandment, commands, contain, contain', contained, container, containing, containment, contains, control, controllability, controllable, controlled, controllers, controlling, controls, curb, dominance, dominant, dominate, dominated, dominates, dominating, domination, ensure, ensured, ensures, ensuring, govern, governance, governed, governing, government,

				governments, hold, holding, holds, insurance, insure, insuring, manipulate, manipulated, manipulating, manipulation, manipulations, manipulative, manipulatively, master, master's level, mastered, masterful, mastering, masters, mastery, moder, moderate, moderated, moderately, moderates, moderating, moderation, moderator, moderators, operate, operated, operates, operating, operation, operational, operationally, operations, operative, operators, opers, restrain, restraint, restraints, seeing, sees, verify, verified, verify, verifying
measures	8	2409	0.05	amount, amounted, amounts, bar, bars, beat, beating, bill, billed, billing, calculate, calculated, calculating, calculation, calculations, calculative, calculativeness, calculator, calculators, care, cared, careful, carefully, cares, caring, criterion, deliberate, deliberately, deliberation, deliberations, measur, measurable, measure, measured, measurement, measurements, measures, measuring, metric, metrics, quantifiable, quantified, quantifies, quantify, quantifying, quantities, quantity, standard, standardization, standardize, standardized, standardizes, standardizing, standards, step, stepped, stepping,

				steps, touchstone, touchstones
traditional	11	841	0.05	custom, customer, customers, customers', customers', customization, customize, customized, customs, tradition, traditional, traditionally, traditions
open	4	2913	0.04	afford, affordability, affordable, afforded, affording, affords, candid, candidate, candidates, candidates', capabilities, capability, capability', capability'', capable, clear, cleared, clearing, clearly, expose, exposed, exposes, exposing, gap, gaps, give, gives, giving, initial, initially, initiate, initiated, initiates, initiating, initiation, initiative, initiatives, initiator, loose, loosely, open, opened, opening, openly, openness, opens, outdoor, outdoors, overt, overtly, reception, receptive, receptiveness, receptivity, scuttle, scuttled, spread, spreading, subject, subjected, subjection, subjective, subjectively, subjectivities, subjectivity, subjects, subjects', surface, surfaced, surfaces, surfacing, undecided, unfold, unfolded, unfolding, unfolds, unresolved
taught	6	303	0.04	taught

problems	8	929	0.04	problem, problems, trouble, troubled, troubling
able	4	600	0.04	able, ables, capabilities, capability, capability', capability'', capable
prior	5	302	0.04	prior
better	6	1758	0.04	advance, advanced, advancement, advancements, advances, advancing, ameliorate, ameliorated, amend, amended, amendments, amends, best, better, better', break, breaking, breaks, improv, improve, improved, improvement, improvement'', improvements, improves, improving, wager
gender	6	641	0.04	gender, gendered, gendering, genders, sex, sexes, sexual, sexuality, sexualization, sexualize, sexualized, sexualizes
since	5	294	0.04	since
statistics	10	294	0.04	statistic, statistical, statistically, statistics
particular	10	1822	0.04	detail, detailed, detailing, details, especially, except, excepting, exception, exceptional, exceptionally, exceptions, item, items, particular, particularly, particulars, peculiar, special, specialisation, specialism, specialisms, specialization, specializations, specialize, specialized, specializes, specializing, specially, specifiable, specified, specifies, specify, specifying
company	7	1100	0.04	accompanied, accompany, accompanying, companies, companies', companion, company, company'sassembly, fellowship, fellowships,

				parties, parties', party, societies, society, troupe
questions	9	1718	0.04	doubt, doubtful, doubts, dubious, enquiring, enquiry, head, headed, heading, headings, heads, inquire, inquired, inquirers, inquiring, inquiry, interrogate, interrogation, interrogative, interview, interviewed, interviewer, interviewers, interviewing, interviews, motion, motions, queried, queries, query, querying, question, questionable, questioned, questioner, questioners, questioning, questions, refutability, refutation, refutations, refute, refuted, refutes, sceptical, sceptics, skeptic, skeptical, skepticism, skeptics, speculate, speculations, speculative, wonder, wondered, wonderful, wondering
overall	7	289	0.04	overall
male	4	367	0.04	male, males, man, man', manning, masculine, masculinities, masculinity, masculinization, masculinized
little	6	847	0.04	little, petty, short, shortly, slight, slightly, small, trivial, trivialization, trivialize
figure	6	1182	0.04	calculate, calculated, calculating, calculation, calculations, calculative, calculativeness, calculator, calculators, computational, compute, computed, computer, computers, computes, computing, digit, digital, digitize, digitized, digitizing, enter, entered, entering, enters, estimate, estimated,

				estimates, estimating, estimation, estimations, estimator, estimators, fig, figuratively, figure, figured, figures, figuring, forecast, forecaster, forecasting, forecasts, imag, image, images, imaging, name, named, namely, names, naming, trope, tropes
reputation	10	1481	0.04	esteem, esteemed, report, reported, reporters, reporting, reports, reputable, reputation, reputational, reputations, repute, reputed, respect, respectability, respected, respectful, respectfully, respecting, respective, respectively, respects
major	5	578	0.04	bulk, major, majored, majoring, majorities, majority, majors
1990	4	284	0.04	1990
aacsb	5	284	0.04	aacsb, aacsb's2003
number	6	2581	0.04	act, acted, actes, acting, actly, acts, amount, amounted, amounts, bits, come, comes, coming, comings, count, counted, counting, counts, enumerate, enumerated, figuratively, figure, figured, figures, figuring, list, listed, listing, lists, number, numbered, numbers, numer, numerical, numerically, numerous, routine, routinely, routines, total, totaled, totality, totally, totals, turn, turned, turning, turns
conceptual	10	357	0.04	conceivable, conceive, conceived, conceives, conceiving, conceptual, conceptualization, conceptualizations, conceptualize,

				conceptualized, conceptualizes, conceptualizing, conceptually, formulate, formulated, formulating, formulation, gestation
pfeffer	7	281	0.04	pfeffer, pfeffers
state	5	2072	0.04	commonwealth, countries, country, country'smajority, court, courting, courts, declaration, declarative, declare, declared, express, expressed, expresses, expressing, expression, expressions, expressive, expressively, expressiveness, formal, formality, formalization, formalized, formalizing, formally, impose, imposed, imposes, imposing, land, landed, lands, nation, national, nationalism, nationalities, nationality, nationally, nations, nations', nations', noble, province, provinces, saying, state, stated, states, states', states', stating, tell, telling, tells
future	6	983	0.04	future, futures, futurism, hereafter, next, succeed, succeeded, succeeding
success	7	1289	0.04	achievable, achieve, achieved, achievement, achievements, achievers, achieves, achieving, consecutive, prosper, prosperity, prosperous, sequence, sequenced, sequences, sequencing, sequential, sequentially, succeed, succeeded, succeeding, success, successes, successful, successfully, succession, successive, winner, winners

engage	6	2141	0.04	absorb, absorbed, absorbing, appoint, appointed, appointing, appointment, appointments, book, books, date, dated, dates, dating, employ, employability, employable, employed, employer, employers, employers', employers', employing, employment, employs, engage, engaged, engagement, engagements, engages, engaging, engrossed, enlist, enlisted, enlisting, hire, hired, hires, hiring, interlocking, lock, locke, locked, locking, locks, meshes, occupied, occupy, occupying, operate, operated, operates, operating, operation, operational, operationally, operations, operative, operators, ops, plight, pursue, pursued, pursues, pursuing, wage, waged, wages
sample	6	731	0.04	sample, sampled, samples, sampling, taste, tastes, tried, tries, try, trying
elective	8	273	0.04	chosen, elect, elected, election, elections, elective, electives, elite, elites
articles	8	577	0.04	article, articles, bound, bounded, bounding, bounds, indentured
quality	7	1741	0.04	caliber, calibrate, calibrated, calibrating, calibration, calibrations, character, characters, characters', choice, choices, prime, primes, priming, prize, prized, prizes, prizing, qualities, quality, select, selected, selecting, selection, selections, selective,

				selectively, selectiveness, selectivity, selects, tone
thus	4	1123	0.04	hence, soed, therefore, thus
analytical	10	270	0.04	analytic, analytical, analytically, analytics
associated	10	1473	0.04	affiliated, affiliation, affiliations, affiliative, associ, associate, associated, associates, associating, association, associations, assorted, companion, connect, connected, connecting, connection, connections, connective, connectivity, connects, familiar, familiar', familiarity, familiarization, familiarize, familiarizing, fellow, fellows, tie, tied, ties, tying
give	4	2860	0.04	afford, affordability, affordable, afforded, affording, affords, big, break, breaking, breaks, collapse, collapsed, collapses, contribute, contributed, contributes, contributing, contribution, contributions, devote, devoted, devotes, devoting, devotion, establish, established, establishes, establishing, establishment, establishments, feed, feeding, feeds, founder, founders, freehand, generate, generated, generates, generating, generation, generational, generationally, generations, generations', generative, generativity, generator, generators, gift, gifted, gifts, gifts', give, gives, giving, grant,

				granted, granting, grants, hand, handed, handful, handing, hands, 'hands, impart, imparting, imparts, leave, leaves, leaving, liberal, liberalization, liberals, liberated, liberating, liberation, pass, passe, passed, passes, passing, pay, paying, pays, reach, reached, reaches, reaching, render, rendered, rendering, renderings, renders, return, returned, returning, returns, sacrifice, spring, springs, throw, throwing, throws, yield, yielded, yielding, yields
influence	9	1443	0.04	determinant, determinants, determinate, determination, determinations, determine, determined, determines, determining, determinism, influenc, influence, influenced, influencers, influences, influencing, mold, molded, molds, regulate, regulated, regulates, regulating, regulation, regulations, regulative, regulators, shape, shaped, shapely, shapes, shaping, tempt, tempted, tempting, tempts
managers	3	449	0.04	web, webs, managers
commitment	10	2112	0.04	attach, attached, attachment, attachments, charge, charged, charges, charging, commit, commitment, commitments, commits, committed, committing, confided, confidence, confident, consecrated, consigned, dedicate, dedicated, dedicating, dedication, devote, devoted, devotes, devoting,

				devotion, entrusted, give, gives, giving, institutionalised, institutionalization, institutionalize, institutionalized, institutionalizing, invest, invested, investing, investment, investments, invests, loyalties, loyalty, perpetrators, place, placed, places, placing, pull, pulled, pulling, pulls, put, puts, putting, send, sending, sends, trust, trusted, trusting, trusts
described	9	1472	0.04	depict, depicted, depicting, depiction, depicts, describe, described, describes, describing, discover, discovered, discovering, discovers, distinguish, distinguishable, distinguished, distinguisher, distinguishes, distinguishing, draw, drawing, drawings, draws, identifiable, identified, identifies, identify, identifying, keyed, keyes, keys, name, named, namely, names, naming
table	5	837	0.04	board, boards, defer, deference, remit, table, tables, tabulate
good	4	2700	0.04	beneficial, commodities, commodity, dear, dear^, depend, dependability, depended, dependence, dependencies, dependency, dependent, depending, depends, estimate, estimated, estimates, estimating, estimation, estimations, estimator, estimators, full, fullness, good, goode, goodness, goods, healthy, honest,

				honestly, honor, honorable, honored, honoring, honors, near, neared, nearly, respect, respectability, respected, respectful, respectfully, respecting, respective, respectively, respects, right, rightfully, rightly, rightness, rights, ripe, safe, safely, salutary, secure, secured, securely, securing, securities, security, serious, seriously, seriousness, sizable, sizeable, sound, sounded, sounding, soundly, sounds, thorough, thoroughly, thoroughness, tidy, welled, wellness, wells
following	9	2166	0.04	accompanied, accompany, accompanying, adopt, adopted, adopting, adoption, adopts, beings, chase, chasing, come, comes, coming, comings, complied, comply, complying, espousal, espouse, espoused, espousing, follow, followed, follower, followers, followers', following, follows, next, observability, observable, observation, observational, observations, observe, observed, observer, observers, observers', observes, observing, pursue, pursued, pursues, pursuing, pursuit, pursuits, succeed, succeeded, succeeding, trace, traced, traces, tracing, watch, watched, watchful, watching

lead	4	2985	0.04	ahead, chair, chaired, chairs, conduce, conducive, conduct, conducted, conducting, conducts, contribute, contributed, contributes, contributing, contribution, contributions, direct, directed, directing, direction, directional, directionality, directionally, directions, directive, directives, directly, directs, extend, extended, extending, extends, going, goings, head, headed, heading, headings, heads, hint, hinted, hints, lead, leading, leads, moder, moderate, moderated, moderately, moderates, moderating, moderation, moderator, moderators, pass, passe, passed, passes, passing, precede, preceded, precedence, precedent, precedents, precedes, preceding, preeminence, preeminent, prima, principal, principally, principals, run, running, runs, star, stars, steer, steered, steering, steers, stellar, tip, tipped, tipping, tips, track, tracked, tracking, tracks, trail, trails, wind, winding, winds
june	4	262	0.04	june
email	5	259	0.04	email, emailed
found	5	1951	0.04	constitute, constituted, constitutes, constituting, constitution, constitutions, establish, established, establishes, establishing, establishment, establishments, found, founded, founding, institut, institute, instituted,

				institutes, instituting, institution, institutional, institutionalism, institutionalisms, institutionally, institutions, institutions', launch, launched, launching, plant, planted, plants
least	5	258	0.04	least
impact	6	1101	0.04	affect, affected, affecting, affections, affective, affectivity, affects, impact, impacted, impactful, impacting, impacts, impinge, shock, shocked, shocks, touch, touched, touches, touching
shared	6	1424	0.04	communion, contribute, contributed, contributes, contributing, contribution, contributions, dealing, dealings, deals, divide, divided, divides, dividing, parcel, partake, parted, parting, partly, parts, percentage, percentages, portion, portions, share, shared, shares, sharing
accounting	10	1304	0.04	account, accountability, accountable, accountancy, accountant, accountants, accounted, accounting, accounts, answer, answered, answering, answers, answers', bill, billed, billing, calculate, calculated, calculating, calculation, calculations, calculative, calculativeness, calculator, calculators, chronicle, chronicled, chronicler, chronicling, explanation, explanations, histories, history, stories, story
deep	4	677	0.04	astute, astutely, bass, deep, deeply, depth, depths, inscrutability, inscrutable, late, lated, mysteries, mysterious, mystery,

				profound, profoundly, rich, riches, richly, richness, trenched
show	4	2542	0.04	appear, appearance, appeared, appearing, appears, demonstrably, demonstrate, demonstrated, demonstrates, demonstrating, demonstration, demonstrations, depict, depicted, depicting, depiction, depicts, display, displayed, displaying, displays, establish, established, establishes, establishing, establishment, establishments, exhibit, exhibited, exhibiting, exhibits, express, expressed, expresses, expressing, expression, expressions, expressive, expressively, expressiveness, picture, picture', pictured, pictures, prove, proved, proves, proving, read, reade, reading, readings, reads, record, recorded, recording, recordings, records, register, registered, registers, render, rendered, rendering, renderings, renders, show, showed, showing, shows, usher
london	6	255	0.04	london
european	8	254	0.04	european, europeans
given	5	1223	0.04	apt, aptly, disposable, disposal, disposed, disposing, given, grant, granted, granting, grants, mind, mind', minded, mindful, mindfulness, minding, minds, precondition,

				preconditions, presumption, presumptively, tend, tended, tending, tends
ways	4	2373	0.04	agencies, agency, direct, directed, directing, direction, directional, directionality, directionally, directions, directive, directives, directly, directs, fashion, fashionable, fashioned, fashions, manner, manners, meaning, meanings, meanness, means, mode, modes, path, paths, room, rooms, style, styles, ways
dean	4	251	0.04	dean, deans, deans', deans', doyen
finance	7	358	0.04	finance, financed, finances, financing, fund, funded, funding, funds
colleagues	10	290	0.04	colleague, colleagues, colleagues', colleagues', fellow, fellows
according	9	1013	0.04	accord, accordance, accorded, according, accordingly, accords, agree, agreeable, agreeableness, agreed, agreeing, agreement, agreements, agrees, allotted, concordance, conform, conforming, conformity, consequence, consequences, consequences', consequent, consequently, consonant, grant, granted, granting, grants, harmonize, harmonizes, pact
rubin	5	245	0.04	rubin

several	7	2377	0.04	asper, austerity, bad, badly, breach, breaches, break, breaking, breaks, danger, dangerous, dangers, differentiable, differential, differentially, differentials, differentiate, differentiated, differentiates, differentiating, differentiation, differentiator, dissociating, distinguish, distinguishable, distinguished, distinguisher, distinguishes, distinguishing, grave, graves, grim, hard, harding, hardly, hardship, harsh, harshly, independence, independent, independently, lop, respect, respectability, respected, respectful, respectfully, respecting, respective, respectively, respects, rift, rigor, rigorous, rigorously, separate, separated, separately, separates, separating, separation, separations, separator, serious, seriously, seriousness, sever, several, severe, severely, severity, stark, starks, stern, tell, telling, tells, terrible, terribly, various, variously, wicked, wicks
compared	8	704	0.04	comparability, comparable, comparably, comparative, comparatively, compare, compared, compares, comparing, comparison, comparisons, equate, equated, equates, equating, equation, equations, equivalence, equivalency,

				equivalent, equivalents, likened
dierdorff	9	241	0.04	dierdorff, dierdorff's conclusions, dierdorff's findings
become	6	1758	0.04	become, becomes, becoming, becoming', come, comes, coming, comings, decorate, decoration, decorations, gets, getting, going, goings, seem, seemed, seeming, seemingly, seems, suit, suite, suited, suites, suits, turn, turned, turning, turns
task	4	1209	0.04	labor, labored, laborer, laborers, project, projected, projecting, projection, projections, projects, task, tasked, tasks, tax, taxes, taxing, undertake, undertaking, undertakings
evidence	8	2507	0.04	apparent, apparently, attest, attested, attesting, attests, certifiable, certified, certifies, certify, demonstrably, demonstrate, demonstrated, demonstrates, demonstrating, demonstration, demonstrations, discern, discerned, discernible, discerning, discernment, evidence, evident, evidently, ground, grounded, grounding, grounds, manifest, manifestation, manifestations, manifested, manifesting, manifestly, manifests, observability, observable, observation, observational, observations, observe, observed, observer,

				observers, observers', observes, observing, obvious, obviously, obviousness, patent, patented, patently, patents, plain, plainly, plains, prove, proved, proves, proving, show, showed, showing, shows, tell, telling, tells, testified, testify, unmistakably
argue	5	1665	0.04	argu, argue, argued, argues, arguing, contend, contended, contenders, contending, contends, debatable, debate, debated, debates, debating, indicate, indicated, indicates, indicating, indication, indicative, indicator, indicators, indices, reason, reasonable, reasonably, reasoned, reasoning, reasons
field	5	1155	0.04	area, areas, arena, arenas, battleground, champaign, domain, domains, field, fielding, fields, fields', plain, plainly, plains, sphere, spheres, theater, theatre
attributes	10	1009	0.03	ascribe, ascribed, ascribes, ascribing, ascriptions, assign, assigned, assigning, assignment, assignments, assigns, attributable, attribute, attributed, attributes, attributing, attribution, attributional, attributions, dimension, dimensions, imputation, impute, imputed, properties, property
entrepreneurial	15	235	0.03	entrepreneurial, entrepreneurially
arbaugh	7	233	0.03	arbaugh

activities	10	1197	0.03	activate, activates, activating, activation, active, actively, activism, activities, activity, actuated, alive, aliveness, dynamic, dynamically, dynamics, dynamism, energized, energizes, energizing, excite, excited, excitement, excites, exciting, fight, fighting, spark, sparked, sparking, sparks, trigger, triggered, triggering, triggers, trip, trips
extent	6	231	0.03	extent, extents
face	4	2168	0.03	aspect, aspects, bold, bolded, boldly, brass, cheeks, confront, confrontation, confrontational, confronted, confronting, confronts, express, expressed, expresses, expressing, expression, expressions, expressive, expressively, expressiveness, face, faced, faces, facing, front, fronts, looked, looking, looks, nerve, present, presentation, presentational, presentations, presented, presenters, presenting, presently, presents, side, sided, sides
disciplines	11	728	0.03	correct, corrected, correcting, correction, corrections, corrective, correctly, correctness, corrects, disciplinary, discipline, disciplined, disciplines, disciplining
paradigm	8	369	0.03	imag, image, images, imaging, paradigm, paradigm', paradigms, prototyp, prototype, prototypes, prototypic, prototypical,

				prototypicality, prototyping
motivation	10	968	0.03	actuated, incent, incented, incentive, incentives, incite, incites, induc, induce, induced, inducement, inducements, induces, inducing, motif, motivate, motivated, motivates, motivating, motivation, motivational, motivations, motivator, motivators, motive, motives, motor, motors, move, moved, moves, moving, prompt, prompted, prompting, prompts, propel, propelled
current	7	1368	0.03	currencies, currency, current, currently, flow, flowed, flowing, flows, present, presentation, presentational, presentations, presented, presenters, presenting, presently, presents, stream, streams
identity	8	450	0.03	identical, identically, identities, identity, indistinguishable
size	4	226	0.03	size, sized, sizes
total	5	2141	0.03	absolute, absolutely, add, adds, aggregable, aggregate, aggregated, aggregates, aggregating, aggregation, alles, altogether, amount, amounted, amounts, complet, complete, completed, completely, completeness, completes, completing, completion, entire, entirely, entirety, integral, integrate, integrated, integrates, integrating, integration, integrative, integratively, integrator, integrity, sum, summation, summative,

				summatively, summed, sums, tallied, tallies, tally, tallying, total, totaled, totality, totally, totals, whole, wholeness, wholly
orientation	11	795	0.03	east, orient, oriental, orientalism, orientate, orientated, orientation, orientational, orientations, oriented, orienting, predilection, predilections, prefer, preferable, preferably, preference, preferences, preferred, preferring, prefers, tailor, tailored, tailoring
high	4	993	0.03	eminently, extreme, extremely, extremes, height, heights, high, highly, highs, lofty, luxuries, luxuriously, luxury, rich, riches, richly, richness
information	11	1958	0.03	betrayal, betrayed, colloquial, colloquially, conversation, conversational, conversationally, conversations, converse, conversely, conversing, conversion, cozy, ease, enlightened, enlightening, enlightenment, entropy, illuminate, illuminated, illuminating, illuminatingly, info, inform, informal, informality, informally, informant, informants, informants', information, informational, informative, informed, informing, informs, instruct, instructed, instructing, instruction, instructional,

				instructionally, instructions, instructive, intimate, intimately, loose, loosely, rat, source, sources, witness, witnessed, witnesses, witnessing, wits
ideas	5	1590	0.03	approximate, approximated, approximately, approximation, approximations, estimate, estimated, estimates, estimating, estimation, estimations, estimator, estimators, idea, ideas, mind, mind', minded, mindful, mindfulness, minding, minds, theme, themes, thought, thought', thoughtful, thoughtfully, thoughtfulness, thoughts
techniques	10	271	0.03	proficiency, proficient, technique, techniques
economic	8	895	0.03	conservancy, conservation, conservative, conservatively, conservatives, conserved, econom, economic, economical, economically, economics, economics', husband, save, saved, saving, savings, spare, spared, sparingly, stint, stints
attention	9	1628	0.03	aid, aided, aiding, aids, attend, attendance, attendant, attended, attending, attends, attention, attentional, attentive, care, cared, careful, carefully, cares, caring, heed, heeded, heedful, regard, regarded, regarding, regards, tend, tended, tending, tends, thought, thought',

				thoughtful, thoughtfully, thoughtful, thoughtfulness, thoughts
years	5	1551	0.03	age, aged, ageing, ages, aging, annual, annually, days, year, yearbook, yearly, years, years', years'
2014	4	216	0.03	2014
either	6	216	0.03	either
enhance	7	643	0.03	augment, augmented, augmenting, cosmetic, enhance, enhanced, enhancement, enhancements, enhancer, enhances, enhancing, heighten, heightened, heightens, raise, raised, raises, raising
september	9	217	0.03	sept, september
address	7	2382	0.03	address, addressed, addresses, addressing, call, called, calling, callings, calls, cover, covered, covering, covers, dealing, dealings, deals, destination, destinations, destined, direct, directed, directing, direction, directional, directionality, directionally, directions, directive, directives, directly, directs, handle, handled, handles, handling, plowed, refer, reference, references, referent, referents, referred, referring, refers, speak, speaking, speaks, speech, speeches, treat, treated, treating, treats
week	4	214	0.03	week, weeklies, weekly, weeks
cambridge	9	213	0.03	cambridge
concepts	8	1235	0.03	concept, conception, conceptions, concepts, construct, constructed, constructing, construction,

				constructions, constructive, constructively, constructs, creation, ideation, notion, notions
sense	5	1133	0.03	detect, detected, detecting, detection, feel, feeling, feelings, feels, perception, perceptions, perceptive, perceptiveness, sensation, sensational, sensations, sense, sensed, senses, sensing, signifi, signified, signifier, signifiers, signifies, signify, signifying, smells
diversity	9	1237	0.03	deflect, deflected, deviate, deviation, deviations, diver, diverse, diversion, diversions, diversity, recreate, recreating, recreation, recreational, varieties, variety, various, variously
feel	4	1130	0.03	belief, beliefs, feel, feeling, feelings, feels, finger, flavor, impress, impressed, impression, impressions, impressive, looked, looking, looks, notion, notions, opinion, opinions, smells, spirit, spirited, spirits, tone, touch, touched, touches, touching
average	7	1359	0.03	average, averaged, averages, averaging, fair, fairly, fairness, intermediate, intermediating, meaning, meanings, meanness, means, median, mediocre, mediocrity, medium, mediums, middle, middles, modalities, norm, normed, norming, norms, ordinary

authors	7	1599	0.03	agencies, agency, author, authored, authoring, authoritative, authoritatively, authorities, authority, authorize, authorized, authors, authors', authors', bureau, empower, empowered, empowering, empowerment, empowers, generate, generated, generates, generating, generation, generational, generationally, generations, generations', generative, generativity, generator, generators, govern, governance, governed, governing, government, governments, mandate, mandated, mandates, mandating, office, officer, officers, offices, regime, regimes, sanction, sanctioned, sanctioning, sanctions, source, sources, writer, writers
increase	8	1119	0.03	increase, increased, increases, increasing, increasingly, incremental, incrementalism, increments, progress, progressed, progresses, progressing, progression, progressions, progressive, progressively
similar	7	1233	0.03	exchange, exchangeable, exchanged, exchanges, exchanging, interchange, interchangeability, interchangeable, interchangeably, likewise, similar, similarities, similarity, similarly, standard, standardization, standardize, standardized, standardizes, standardizing, standards

form	4	1692	0.03	cast, caste, casting, casts, configuration, configurational, configurations, configure, configured, conform, conforming, conformity, contours, descriptor, descriptors, form, forme, formed, formed', forming, forms, imprints, kind, kindness, kindnesses, kinds, pattern, patterns, phase, phased, phases, shape, shaped, shapely, shapes, shaping, signifi, signified, signifier, signifiers, signifies, signify, signifying, sort, sorted, sorting, sorts, spring, springs, strain, var, variant, variants, varieties, variety
assessment	10	1267	0.03	appraisal, appraisals, appraise, appraised, appraising, assess, assessed, assesses, assessing, assessment, assessments, judgement, judgment, judgment', judgmental, judgments, tax, taxes, taxing
kolb	4	208	0.03	kolb
come	4	1334	0.03	advent, amount, amounted, amounts, arrival, arrivals, arrive, arrived, arrives, arriving, come, comes, coming, comings, cummings, derivates, derivation, derivatives, derive, derived, derives, deriving, descendants, descending, fair, fairly, fairness, fall, falling, falls, fare, gets, getting, hail, occur, occuring, occurred, occurring, occurs, seed, seeded, seeds, sight, sighted, sights
001	3	207	0.03	001

service	7	997	0.03	overhaul, overhauling, overhauls, serve, served, serves, service, services, serving, usability, usable
much	4	686	0.03	lot, lots, much
continue	8	1697	0.03	ceaseless, chronic, conjunction, conjunctive, connect, connected, connecting, connection, connections, connective, connectivity, connects, continual, continually, continuation, continue, continued, continues, continuing, continuities, continuity, continuous, continuously, cover, covered, covering, covers, duration, durations, endless, extend, extended, extending, extends, keep, keeping, keeps, lengthy, persist, persisted, persistence, persistent, persistently, persisting, persists, preservation, preserve, preserved, preserving, proceed, proceeded, proceeding, proceedings, proceeds, prolong, prolongation, prolonged, remain, remained, remaining, remains, retain, retained, retaining, sibility, stay, stayed, staying, stays, strident, uninterrupted, uphold, upholding
recruiters	10	963	0.03	enlist, enlisted, enlisting, enrol, enroll, enrolled, enrolling, enrollment, enrollments, enrolls, enter, entered, entering, enters, inscribed, levi, levy, raise, raised, raises, raising, recruit, recruited, recruiter, recruiters, recruiters', recruiters', recruiting, recruitment, recruits
criteria	8	204	0.03	criteria

large	5	1648	0.03	big, boasts, breadth, comprehensibility, comprehension, comprehensive, comprehensively, comprehensiveness, expect, expectancies, expectancy, expectant, expectation, expectations, expected, expecting, expects, extension, extensions, extensive, extensively, extensiveness, great, greatly, greatness, heavy, large, largely, mostly, pretense, pretensions, pretentious, pretentious', prominence, prominent, prominently, turgid, vaunted
reason	6	1569	0.03	cause, caused, causes, causing, conclude, concluded, concludes, concluding, fair, fairly, fairness, ground, grounded, grounding, grounds, middle, middles, moder, moderate, moderated, moderately, moderates, moderating, moderation, moderator, moderators, modest, modestly, passable, pretty, ration, rational, rationalities, rationality, rationalization, rationalizations, rationalize, rationalized, rationalizes, rationalizing, rationally, reason, reasonable, reasonably, reasoned, reasoning, reasons, sensibilities, sensibility, sensible, somewhat, sound, sounded, sounding, soundly, sounds, tenable
environment	11	658	0.03	border, borders, environ, environment, environments, ring, rings, surround, surrounded,

				surrounding, surroundings, surrounds
brown	5	199	0.03	brown, browne, browning
consistent	10	917	0.03	bodies, body, bodying, comprise, comprised, comprises, comprising, consist, consisted, consistence, consistency, consistent, consistently, consisting, consists, dwell, dwelling, dwells, lie, lied, lies, lying, reproduce, reproduced, reproduces, reproducibility, reproducing, systematic, systematically, systematized, uniform, uniformly
taken	5	391	0.03	interpret, interpretation, interpretations, interpretative, interpreted, interpreters, interpreting, interpretive, interprets, taken
seen	4	198	0.03	seen
choice	6	1375	0.03	alternate, alternated, alternative, alternatively, alternatives, choice, choices, fine, finely, option, optional, options, pick, picked, picking, select, selected, selecting, selection, selections, selective, selectively, selectiveness, selectivity, selects
san	3	197	0.03	san, sans
satisfaction	12	394	0.03	gratification, satisfaction
versus	6	197	0.03	versus
life	4	814	0.03	alive, aliveness, animal, animals, animated, animating, biographies, biography, life, life', life'smystery, lifespan, lifespans, lifetime, lifetimes, live, lived, liveliness, lively, lives, living, spirit, spirited, spirits

perceived	9	1299	0.03	beholder, comprehend, comprehending, observability, observable, observation, observational, observations, observe, observed, observer, observers, observers', observes, observing, perceive, perceived, perceiver, perceives, perceiving, sense, sensed, senses, sensing
2015	4	196	0.03	2015
bourdieu	8	196	0.03	bourdieu
efforts	7	1288	0.03	attempt, attempted, attempting, attempts, campaign, campaigns, cause, caused, causes, causing, crusade, drive, drives, driving, effort, effortful, efforts, endeavor, endeavored, endeavors, exert, exerted, exerting, exertion, exerts, exploit, exploitable, exploitation, exploited, exploiters, exploiting, feat, feats, movement, movements, sweat, tried, tries, try, trying
application	11	527	0.03	applicability, applicable, applicant, applicants, applicants', application, applications, appliers, coat, coate, coats, cover, covered, covering, covers, diligence, diligent, diligently, pertinent
female	6	219	0.03	female, femaleness, females, feminine, femininities, femininity
public	6	1202	0.03	advertise, advertised, advertisements, advertising, adverts, air, aired, airing, airs, bare, barely, package, packaged, packages, packaging, promote, promoted, promoters, promotes, promoting, promotion,

				promotional, promotions, public, publically, publication, publications, publicity, publicized, publicizing, publicly, publics, publish, publishable, published, publisher, publishers, publishes, publishing
core	4	885	0.03	center, centered, centering, centers, centre, centres, core, essence, gist, heart, heart'saffec, hearted, hearts, inward, inwardly, kernel, substance, sum, summed, sums
test	4	1951	0.03	essay, essays, exam, examination, examinations, examine, examined, examiners, examines, examining, exams, prove, proved, proves, proving, run, running, runs, screen, screened, screening, screens, test, tested, testing, tests, trial, trials, tried, tries, try, trying
teamwork	8	192	0.03	teamwork
received	8	1637	0.03	encounter, encountered, encountering, encounters, gets, getting, haves, invit, invitation, invitations, invite, invited, invites, inviting, meet, meeting, meetings, meets, receivable, receive, received, receiver, receivers, receives, receiving, recipient, recipients, standard, standardization, standardize, standardized, standardizes, standardizing, standards, welcome, welcomed, welcomes
indeed	6	191	0.03	indeed, soed

areas	5	853	0.03	area, areas, countries, country, country's majority, expansion, expansions, expansive, expansively, region, regional, regionalized, regions
express	7	1277	0.03	carried, carries, carry, carrying, construct, constructed, constructing, construction, constructions, constructive, constructively, constructs, convey, conveyed, conveying, conveys, explicit, explicitly, explicitness, express, expressed, expresses, expressing, expression, expressions, expressive, expressively, expressiveness, extract, extracted, extracting, extraction, extractive, extracts, formula, formulae, formulaic, formulas, formulate, formulated, formulating, formulation, saying, utter, utterance, utterances, utterly, verbal, verbalize, verbalized, verbally
expertise	9	298	0.03	expert, expertise, experts, experts'
play	4	2450	0.03	act, acted, actes, acting, actly, acts, bet, bidding, drama, dramas, encounter, encountered, encountering, encounters, fun, gamble, gambles, gambling, game, gamed, games, gaming, loose, loosely, maneuver, maneuvering, meet, meeting, meetings, meets, play, play', played, playful, playfully, playfulness, playing, plays, recreate, recreating, recreation, recreational, represent, representative, representatively,

				representativeness, representatives, represented, representing, represents, roleplay, roleplaying, roleplays, run, running, runs, sport, sports, toy, toys, turn, turned, turning, turns, wager
primary	7	897	0.03	chief, chiefs, element, elemental, elementary, elements, main, maine, mainly, master, master'slevel, mastered, masterful, mastering, masters, primary, principal, principally, principals
entrepreneurs	13	294	0.03	enterprise, enterprises, enterprising, entrepreneur, entrepreneurs, entrepreneurs', entrepreneurs'
finally	7	1307	0.03	close, closed, closely, closeness, closes, closing, coda, conclude, concluded, concludes, concluding, conclusion, conclusions, conclusive, conclusively, eventual, eventually, final, finalised, finalize, finalized, finalizing, finally, finish, finished, finishing, last, lasted, lasting, lasts, nets, settle, settled, settling, terminal, terminally, terminate, terminated, termination, ultimate, ultimately
five	4	187	0.03	fin, five

note	4	1641	0.03 annotated, annotation, bill, billed, billing, celebrate, celebrated, celebrating, celebration, celebrations, distinct, distinction, distinctions, distinctive, distinctively, distinctiveness, distinctly, eminently, fame, famous, famously, mark, marked, markedly, marking, marks, mention, mentioned, mentioning, mentions, notable, notably, notation, note, noted, notes, notice, noticeable, noticeably, noticed, notices, noticing, noting, observability, observable, observation, observational, observations, observe, observed, observer, observers, observers', observes, observing, preeminence, preeminent, remark, remarkable, remarkably, remarked, remarks, tone
direct	6	1858	0.03 aim, aimed, aiming, aims, calculate, calculated, calculating, calculation, calculations, calculative, calculativeness, calculator, calculators, candid, candidate, candidates, candidates', charge, charged, charges, charging, commission, commissioned, counsel, counseling, counselling, direct, directed, directing, direction, directional, directionality, directionally, directions, directive, directives, directly, directs, flat, forthright, frank, franke, frankly, guid, guidance, guide, guide', guided, guides, guiding,

				immediate, immediately, instant, instantly, instruct, instructed, instructing, instruction, instructional, instructionally, instructions, instructive, now', send, sending, sends, steer, steered, steering, steers, straight, verbatim
coursework	10	186	0.03	coursework
businessweek	12	185	0.03	businessweek
smith	5	185	0.03	smith
subject	7	1704	0.03	conquering, conquest, depend, dependability, depended, dependence, dependencies, dependency, dependent, depending, depends, immanent, nation, national, nationalism, nationalities, nationality, nationally, nations, nations', nations', subject, subjected, subjection, subjective, subjectively, subjectivities, subjectivity, subjects, subjects', subjugation, submit, submitted, submitting, theme, themes, topic, topical, topicality, topically, topics
status	6	823	0.03	condition, conditional, conditioned, conditioning, conditions, status
december	8	189	0.03	dec, december
trust	5	1047	0.03	bank, banking, banks, combination, combinations, combine, combined, combines, combining, desirability, desirable, desire, desired, desires, desiring, faith, hope, hoped, hopeful, hopefully, hopefulness, hopes, hoping, reli, reliance, relied, relies, rely,

				relying, sure, sured, surely, trust, trusted, trusting, trusts
cross	5	802	0.03	bilked, cover, covered, covering, covers, cross, crossed, crossing, crossover, crossroads, ford, frustrated, frustrating, frustration, frustrations, hybrid, hybridity, hybridization, hybrids, intersect, intersection, irritable, irritably, mark, marked, markedly, marking, marks, span, spanned, spanning, spans, spoils, sweeping, thwart, thwarted, track, tracked, tracking, tracks, traverse
rynes	5	183	0.03	rynes, rynes'
narrative	9	445	0.03	narrates, narrative, narratives, narrator, recount, recounted, recounts, stories, story, storytellers, storytellers', storytelling, tale, tales, tell, teller, telling, tells
interviews	10	668	0.03	audience, audiences, consult, consultancies, consultancy, consultant, consultants, consultants', consultation, consultative, consulted, consulting, consults, interview, interviewed, interviewer, interviewers, interviewing, interviews
press	5	1127	0.03	bidding, campaign, campaigns, compact, compressed, conjure, conjured, conjures, conjuring, constrict, contract, contracting, contraction, contractions, contracts, crusade, crush, exhort, exhorting, fight, fighting, imper,

				imperative, imperatives, insist, insisted, insistence, insisting, insists, iron, ironed, ironically, irons, jam, press, pressed, presses, pressing, pressure, pressured, pressures, pressurized, push, pushed, pushes, pushing, squeeze, squeezed, urge, urged, urgent, urgently, urges, urging, weigh, weighed, weighing
full	4	1359	0.03	broad, broadly, comprehensibility, comprehension, comprehensive, comprehensively, comprehensiveness, entire, entirely, full, fullness, fully, replete, rich, riches, richly, richness, total, totaled, totality, totally, totals, voluminous, waxing, wide, widely
amle	4	181	0.03	amle
dba	3	181	0.03	dba
fundamental	11	856	0.03	ass, basic, basically, basics, behind, bottom, can'tbe, can'treally, canned, cans, essential, essentialism, essentially, essentials, fundamental, fundamentalism, fundamentally, fundamentals, nated, profound, profoundly, seat, seating, seats, stern, tail, tailed, underlies, underly, underlying
second	6	920	0.03	2nd, back, backed, backing, backs, bits, endorse, endorsed, endorsement, endorses, endorsing, instant, instantly, irregular, minute, minutes, moment, moments, s'jegers, sec, second, secondly, secondment, seconds

past	4	235	0.03	past, paste, pasting, pasts, precede, preceded, precedence, precedent, precedents, precedes, preceding, retire, retired, retirement, retiring, spread, spreading
central	7	700	0.03	cardinal, central, centrale, centrality, centralization, centralized, centrally, concentrate, concentrated, concentrates, concentrating, concentration, concentrations, exchange, exchangeable, exchanged, exchanges, exchanging, fundamental, fundamentalism, fundamentally, fundamentals, keyed, keyes, keys, primal
enable	6	179	0.03	enable, enabled, enabler, enablers, enables, enabling
common	6	799	0.03	common, commonalities, commonality, commonly, commonplace, commons, everyday, green, greene, greening, gross, mutual, mutuality, mutually, normal, normale, normality, normalize, normalized, normalizing, normally, ordinarily, park, parking, parks, unremarked, unwashed, usual, usually
ratings	7	1512	0.03	evaluate, evaluated, evaluates, evaluating, evaluation, evaluations, evaluative, evaluator, evaluators, pace, paced, paces, pacing, rate, rated, ratee, rates, rates, rating, ratings, valuated, valuation, valuations

collective	10	818	0.03	accumulate, accumulated, accumulates, accumulating, accumulation, accumulative, aggregable, aggregate, aggregated, aggregates, aggregating, aggregation, amassed, amassing, appeal, appealed, appealing, appeals, assemble, assembled, assemblers, assembling, assembly, cod, collect, collected, collecting, collection, collections, collective, collectively, collectives, collectivity, collects, compendium, compilation, compile, compiled, compiling, compose, composed, composers, composing, conjoint, conjointly, equanimity, garner, garnered, garnering, gather, gathered, gatherers, gathering, gatherings, hoard, hoarded, joint, jointly, poise, poised, solicit, soliciting
regarding	9	2286	0.03	affect, affected, affecting, affections, affective, affectivity, affects, consid, consider, considered, considering, considers, defer, deference, esteem, esteemed, gaze, involve, involved, involvement, involves, involving, regard, regarded, regarding, regards, respect, respectability, respected, respectful, respectfully, respecting, respective, respectively, respects, wish, wished, wishes, wishing
oxford	6	178	0.03	oxford

integration	11	1587	0.03	consolidate, consolidated, consolidating, consolidation, consolidations, constitute, constituted, constitutes, constituting, constitution, constitutions, entire, entirely, inbuilt, incorporate, incorporated, incorporates, incorporating, incorporation, inherent, inherently, inheres, intact, integral, integrate, integrated, integrates, integrating, integration, integrative, integratively, integrator, integrity, merge, merging, mix, mixed, mixing, unified, unifies, unifying, unity, whole, wholeness
systems	7	768	0.03	scheme, schemes, system, systematic, systematically, systematized, systemic, systemically, systems, systems'
opportunities	13	741	0.03	chance, chances, expediency, expedient, opportunism, opportunities, opportunity, pat, timeliness
right	5	970	0.03	compensate, compensated, compensating, compensation, correct, corrected, correcting, correction, corrections, corrective, correctly, correctness, corrects, justifiable, justifiably, justified, justifies, justify, justifying, law, laws, proper, properly, rectify, redress, redressing, right, rightfully, rightly, rightness, rights, true, truly

mind	4	1064	0.03	advert, aware, awareness, beware, brain, brains, head, headed, heading, headings, heads, heed, heeded, heedful, intellect, judgement, judgment, judgment', judgmental, judgments, listen, listened, listener, listening, mind, mind', minded, mindful, mindfulness, minding, minds, nous, psyche, thinker, thinkers
remains	7	591	0.03	clay, corpses, left, odd, odds, persist, persisted, persistence, persistent, persistently, persisting, persists, remain, remained, remaining, remains, rest, rested, rests, stay, stayed, staying, stays
francisco	9	175	0.03	francisco
sustainability	14	1136	0.03	gets, getting, have, keep, keeping, keeps, maintain, maintained, maintaining, maintains, maintenance, nourish, nourishing, nourishing', nourishment, nurture, nurtured, nurtures, nurturing, prolong, prolongation, prolonged, suffer, suffered, sufferers, suffering, suffers, sustain, sustainability, sustainable, sustained, sustaining, sustains, sustenance, uphold, upholding
charisma	8	174	0.03	charisma
supervisor	10	174	0.03	supervisor, supervisors, supervisors', supervisors'
fong	4	173	0.03	fong
scale	5	734	0.03	grade, graded, grades, grading, plate, scale, scaled, scales, scaling, shell
adult	5	247	0.03	adult, adults, adults', big, grown
description	11	172	0.03	description, descriptions, descriptive, descriptives

done	4	172	0.03	beneficiaries, beneficiary, done
van	3	172	0.03	van
difficult	9	519	0.03	difficult, difficulties, difficultly, difficulty, hard, harding, hardly, unmanageably
department	10	1387	0.03	asleep, departed, departing, department, departments, departs, deviate, deviation, deviations, diverge, diverged, divergence, divergences, divergent, diverges, diverging, foregone, going, goings, gone, leave, leaver, leaves, leaving, parted, parting, partly, parts, quit, quite, quitting, sidetrack, start, started, starting, starts, vari, varied, varies, vary, varying
media	5	171	0.03	media
online	6	171	0.03	online
call	4	1310	0.03	anticipate, anticipated, anticipates, anticipating, anticipation, bidding, call, called, calling, callings, calls, claim, claimed, claiming, claims, cried, cry, crying, name, named, namely, names, naming, phone, phones, predict, predictability, predictable, predictably, predicted, predicting, prediction, predictions, predictive, predictiveness, predicts, promise, promised, promises, promising, ring, rings, screamed, screaming, shout, shouting, song, songs, telephone, visit, visited, visiting, visits, vociferous, yelled, yelling

explain	7	516	0.02	excuse, excused, explain, explainable, explained, explaining, explains, explicate, explicated, explicating, explication, interpret, interpretation, interpretations, interpretative, interpreted, interpreters, interpreting, interpretive, interprets
ghoshal	7	168	0.02	ghoshal
end	3	1546	0.02	cease, ceased, ceases, close, closed, closely, closeness, closes, closing, complet, complete, completed, completely, completeness, completes, completing, completion, conclude, concluded, concludes, concluding, conclusion, conclusions, conclusive, conclusively, death, deaths, destruction, destructive, end, ended, ending, ends, finish, finished, finishing, last, lasted, lasting, lasts, over', overly, remainder, remnant, stop, stopped, stopping, stops, terminal, terminally, terminate, terminated, termination
scholars	8	558	0.02	assimilate, assimilated, assimilates, assimilating, assimilation, assimilative, assimilators, learner, learners, learners', scholar, scholarly, scholars, scholars'
perceptions	11	1209	0.02	appreci, appreciably, appreciate, appreciated, appreciates, appreciating, appreciation, appreciations, appreciative, detect, detected, detecting, detection, discern, discerned, discernible, discerning, discernment, insight, insightful, insights, notice, noticeable,

				noticeably, noticed, notices, noticing, observability, observable, observation, observational, observations, observe, observed, observer, observers, observers', observes, observing, perception, perceptions, perceptive, perceptiveness, taste, tastes
added	5	184	0.02	added, adding, ads, advertise, advertised, advertisements, advertising, advertises
appropriate	11	1390	0.02	allow, allowable, allowance, allowances, allowed, allowing, allows, appropriability, appropriate, appropriated, appropriately, appropriateness, appropriating, appropriation, befits, capture, captured, captures, capturing, conquering, fit, fitness, fits, fitted, fitting, reservation, reservations, reserve, reserved, reserves, right, rightfully, rightly, rightness, rights, seize, seized, seizes, seizing, suitability, suitable
south	5	167	0.02	s'jegers, south
explore	7	406	0.02	adventure, adventures, exploration, explorations, explorative, exploratory, explore, explored, explorer, explorers, explores, exploring
references	10	1467	0.02	acknowledge, acknowledged, acknowledges, acknowledging, acknowledgment, advertises, citation, citations, cite, cited, cites, citing, consult, consultancies, consultancy, consultant, consultants, consultants', consultation,

				consultative, consulted, consulting, consults, credit, credited, credits, denote, denoted, denotes, denoting, extension, extensions, extensive, extensively, extensiveness, mention, mentioned, mentioning, mentions, name, named, namely, names, naming, quotation, quotations, refer, reference, references, referent, referents, referred, referring, refers
something	9	164	0.02	something, somethings
dominant	8	1361	0.02	ascend, ascendancy, ascending, author, authored, authoring, authorities, authority, authorize, authorized, authors, authors', authors', autocratic, command, commanded, commandment, commands, dominance, dominant, dominate, dominated, dominates, dominating, domination, eclipsing, later, lateral, laterally, master, master's level, mastered, masterful, mastering, masters, mastery, overlook, overlooked, overlooking, overlooks, overshadow, overshadowed, potency, predominance, predominant, predominantly, predominate, predominated, predominately, prevail, prevailed, prevailing, prevalence, prevalent, prevalently, reign, rife, rule, ruled, rules, ruling, rulings, supremacy
global	6	631	0.02	global, 'global, global', globalisation, globalised,

				globalising, globalism, globality, globalization, globalize, globalized, globalizing, globally
intergenerational	17	163	0.02	intergenerational
small	5	652	0.02	belittles, diminish, diminished, diminishes, diminishing, diminishment, humble, humbled, humbling, low, lowe, lowed, lows, minor, minorities, minority, minors, modest, modestly, small
clear	5	1402	0.02	author, authored, authoring, authorities, authority, authorize, authorized, authors, authors', authors', brighten, clarification, clarifications, clarity, clean, cleaned, cleaning, clear, cleared, clearing, clearly, crystallizes, crystallizing, distinct, distinction, distinctions, distinctive, distinctively, distinctiveness, distinctly, elucidate, elucidated, elucidates, elucidating, elucidations, enlightened, enlightening, enlightenment, illuminate, illuminated, illuminating, illuminatingly, light, lightly, nets, pass, passe, passed, passes, passing, readability, sacked, solve, solve', solved, solving
com	3	162	0.02	com
previous	8	617	0.02	antecedent, antecedents, former, formerly, late, lated, old, olds, premature, prematurely, previous, previously
methodology	11	161	0.02	methodological, methodologies, methodology

getting	7	1742		0.02 acquire, acquired, acquires, acquiring, aim, aimed, aiming, aims, amazed, amazement, amazing, amazingly, arrested, beat, beating, bewildering, bring, bringing, brings, capture, captured, captures, capturing, catch, catching, convey, conveyed, conveying, conveys, draw, drawing, drawings, draws, drive, drives, driving, engender, engendered, engendering, engenderings, engenders, father, fathers, fix, fix', fixed, fixes, fixing, generate, generated, generates, generating, generation, generational, generationally, generations, generations', generative, generativity, generator, generators, gets, getting, have, lets, letting, mother, mothers, perplexing, pose, posed, posefully, poses, posing, puzzle, puzzled, puzzles, puzzling, sired, stick, sticking, sticks, vexed, vexing
law	3	397		0.02 law, laws, legal, legally, legitimate, legitimated, legitimately, legitimates, legitimating, legitimation, legitimization, legitimize, legitimized, legitimizes, legitimizing, police, polices

initial	7	1411	0.02	beginner, broached, broaches, enlightened, enlightening, enlightenment, enterprise, enterprises, enterprising, format, formation, formations, formative, formatively, formats, formatting, induction, inductive, inductively, initial, initially, initiate, initiated, initiates, initiating, initiation, initiative, initiatives, initiator, installations, installed, installing, instigate, instigating, novice, novices, origin, original, originality, originally, originate, originated, originating, origins, pioneer, pioneered, pioneering, pioneers, start, started, starting, starts, trigger, triggered, triggering, triggers
general	7	1158	0.02	abstract, abstracted, abstracting, abstraction, abstractions, abstracts, broad, broadly, extrapolate, extrapolated, extrapolates, extrapolating, extrapolation, general, generalised, generalism, generalities, generality, generalization, generalizations, generalize, generalized, generalizing, generally, induction, inductive, inductively, infer, inference, inferences, inferred, loose, loosely, mostly, popular, popularity, popularized, popularly
quantitative	12	160	0.02	quantitative, quantitatively
shown	5	160	0.02	shown

benefits	8	786	0.02	benefit, benefited, benefiting, benefits, benefitted, gain, gained, gaining, gains, profit, profitability, profitable, profitably, profiting, profits, welfare
survey	6	1153	0.02	appraisal, appraisals, appraise, appraised, appraising, follow, followed, follower, followers, followers', following, follows, resume, resumes, sketched, surveillance, survey, surveyed, surveying, surveys
months	6	159	0.02	month, monthly, months
developmental	13	158	0.02	developmental, developmentalism, developmentally
distance	8	578	0.02	aloof, distance, distance', distanced, distances, distancing, length, lengths, space, spaced, spaces
published	9	608	0.02	print, printing, promulgate, promulgated, promulgation, publish, publishable, published, publisher, publishers, publishes, publishing, write, writes, writing, writings
curricular	10	157	0.02	curricular
every	5	157	0.02	every
scientific	10	157	0.02	scientific, scientifically, scientificity
emi	3	157	0.02	emi, emy
institutional	13	1364	0.02	bring, bringing, brings, establish, established, establishes, establishing, establishment, establishments, institut, institute, instituted, institutes, instituting, institution, institutional, institutionalism, institutionalisms,

				institutionally, institutions, institutions'
already	7	156	0.02	already
o'toole	7	156	0.02	o'brien, o'connell, o'conner, o'connor, o'gorman, o'grady, o'learly, o'leary, o'mahen, o'malley, o'neil, o'regan, o'reilly, o'rourke, o'shea, o'sullivan, o'toole, oed
product	7	1303	0.02	fat, fertile, fertility, fertilization, fruit, fruitful, fruitfully, fruits, generate, generated, generates, generating, generation, generational, generationally, generations, generations', generative, generativity, generator, generators, intersect, intersection, output, outputs, product, product', production, productive, productively, productivity, products, profit, profitability, profitable, profitably, profiting, profits, rich, riches, richly, richness, ware, waring, yield, yielded, yielding, yields
reflective	10	2227	0.02	contemplate, contemplation, contemplative, express, expressed, expresses, expressing, expression, expressions, expressive, expressively, expressiveness, manifest, manifestation, manifestations, manifested, manifesting, manifestly, manifests, meditate, meditated, meditation, meditations, meditative, mulled, muse, mused, musing, observability,

				observable, observation, observational, observations, observe, observed, observer, observers, observers', observes, observing, ponder, pondered, pondering, reflect, 'reflect, reflected, reflecting, reflection, reflections, reflective, reflectively, reflectiveness, reflects, reflexion, reverberations, shine, speculate, speculations, speculative, thought, thought', thoughtful, thoughtfully, thoughtfulness, thoughts
offer	5	1267	0.02	bidding, crack, cracks, extend, extended, extending, extends, going, goings, offer, offered, offering, offerings, offers, pass, passe, passed, passes, passing, proffer, proffered, proffering, proffers, proposal, proposals, propose, proposed, proposes, proposing, volunteer, volunteered, volunteering, volunteers, volunteers'
project	7	1596	0.02	cast, caste, casting, casts, contrived, envision, envisioned, envisioning, envisions, external, externalities, externalize, externally, externals, fancy, figuratively, figure, figured, figures, figuring, imag, image, images, imaging, picture, picture', pictured, pictures, project, projected, projecting, projection, projections, projects, proposal, proposals, propose, proposed, proposes, proposing, relieve, relieved, seeing, sees,

				stick, sticking, sticks, throw, throwing, throws, visual, visualization, visualizations, visualize, visualized, visualizing, visually, visuals
environmental	13	154	0.02	environmental, environmentalism, environmentally
mentoring	9	154	0.02	mentor, mentored, mentoring, mentors
strong	6	1268	0.02	firm, firmly, firms, firms', firms', hard, harding, hardly, inviolate, potent, secure, secured, securely, securing, securities, security, solid, strong, strongly, substantial, substantially, substantiate, substantiated, substantiating, substantiation, warm, warming
interdisciplinary	17	153	0.02	interdisciplinary
transformation	14	659	0.02	convert, converted, converting, converts, shift, shifted, shifting, shifts, transform, transformation, transformational, transformations, transformative, transformed, transforming, transforms, translat, translatable, translate, translated, translates, translating, translation, translational, translations, translator, translators

limited	7	1285	0.02	bound, boundaries, boundary, bounded, bounding, bounds, circumscribed, circumscribing, confine, confined, confines, constrain, constrained, constraining, constrains, constrict, demarcation, express, expressed, expresses, expressing, expression, expressions, expressive, expressively, expressiveness, limit, limitation, limitations, limited, limiters, limiting, limits, modification, modifications, modified, modify, modifying, qualified, qualifiers, qualifies, qualify, qualifying, restrain, restrict, restricted, restricting, restriction, restrictions, restrictive, restricts, special, specialism, specialisms, specialization, specializations, specialize, specialized, specializes, specializing, specially
boston	6	152	0.02	boston
even	4	1338	0.02	equal, equaled, equality, equally, equals, eve, even, evening, evenly, invariably, invariant, regular, regularity, regularly, still, yet
conflict	8	1084	0.02	battle, battled, battles, conflict, conflicte, conflicted, conflicting, conflicts, contradictory, engage, engaged, engagement, engagements, engages, engaging, fight, fighting, infringement, struggle, struggled, struggles, struggling
chinese	7	151	0.02	chinese

text	4	183	0.02	^text^, text, textbook, textbooks, texts
africa	6	150	0.02	africa, africa', africa'ssimultaneous, africa'stop
furthermore	11	300	0.02	furthermore, moreover
vol	3	150	0.02	vol, vols
men	3	561	0.02	hand, handed, handful, handing, hands, 'hands, men, men'shelpwill, men'snetworksat, workforce, workforces
language	8	499	0.02	language, languages, speech, speeches, terminology, word, worded, wording, words
complete	8	937	0.02	accomplish, accomplishable, accomplished, accomplishes, accomplishing, accomplishment, accomplishments, close, closed, closely, closeness, closes, closing, complement, complementary, complemented, complementing, complements, complet, complete, completed, completely, completeness, completes, completing, completion, culminates, culminating, culmination, finish, finished, finishing, gross, perfect, perfecting, perfection, perfectly, pure, purely, realise, realizable, realization, realizations, realize, realized, realizes, realizing, stark, starks, thoroughgoing, unadulterated, utter, utterance, utterances, utterly

represent	9	1145	0.02	beings, comprise, comprised, comprises, comprising, constitute, constituted, constitutes, constituting, constitution, constitutions, correspond, corresponded, correspondence, corresponding, correspondingly, corresponds, defend, defended, defenders, defending, defends, delin, delineate, delineated, delineates, delineating, delineation, exemplified, exemplifies, exemplify, interpret, interpretation, interpretations, interpretative, interpreted, interpreters, interpreting, interpretive, interprets, map, mapped, mapping, maps, represent, representative, representatively, representativeness, representatives, represented, representing, represents, spokesperson, symbol, symbolic, symbolically, symbolism, symbols, voice, voiced, voices, voicing
emphasis	8	374	0.02	accent, emphasis, stress, stressed, stresses, stressful, stressing
legitimacy	10	352	0.02	authentic, authentically, authenticity, genuine, genuinely, genuineness, legitimacy
regression	10	430	0.02	fixation, lapse, lapses, regress, regressed, regressing, regression, regressions, regressive, retrogression, return, returned, returning, returns, reversal, reverse, reversed, reversible,

				reversing, reversion, revert, reverted
scores	6	1581	0.02	account, accountability, accountable, accountancy, accountant, accountants, accounted, accounting, accounts, dozen, dozens, grade, graded, grades, grading, grievances, heap, hit, hits, hitting, load, loaded, loading, loadings, loads, lot, lots, mark, marked, markedly, marking, marks, pile, piled, rafting, score, scored, scores, scoring, stack, stacked, stacks, tallied, tallies, tally, tallying, ton
definition	10	611	0.02	authoritative, authoritatively, classic, classical, classics, decide, decided, decidedly, decides, deciding, definite, definitely, definition, definitional, definitions, definitive, definitively, determinant, determinants, determinate, determination, determinations, determine, determined, determines, determining, determinism, emphatic, unequivocal, unequivocally, unquestionably
applied	7	1440	0.02	appli, applied, applies, apply, applying, enforce, enforceability, enforced, enforcement, enforcing, give, gives, giving, hold, holding, holds, implement, implementable, implementation, implementations, implemented, implementing

martin	6	145	0.02	martin, martin's vision, martins
semester	8	145	0.02	semester, semesters
functional	10	1362	0.02	affair, affaires, affairs, affairs', function, functional, functionality, functionally, functioned, functioning, functions, map, mapped, mapping, maps, occasion, occasions, official, officially, officials, operate, operated, operates, operating, operation, operational, operationally, operations, operative, operators, opers, procedural, procedure, procedures, routine, routinely, routines, serve, served, serves, serving, usability, usable
adopted	7	826	0.02	accept, acceptability, acceptable, acceptance, acceptances, accepted, accepting, accepts, adopt, adopted, adopting, adoption, adopts, assume, assumed, assumes, assuming, borrow, borrowed, borrower, borrowing, dramatic, dramatically, dramatizing, embrace, embraced, embraces, embracing, espousal, espouse, espoused, espousing
council	7	143	0.02	council, councils
thomas	6	143	0.02	thomas, thomas'
dialogue	8	443	0.02	dialog, dialogic, dialogical, dialogue, dialogued, dialogues, dialoguing, negotiable, negotiate, negotiated, negotiating, negotiation, negotiations, negotiator, negotiators, talk, talked, talking, talks

judge	5	823	0.02	adjudicating, approximate, approximated, approximately, approximation, approximations, estimate, estimated, estimates, estimating, estimation, estimations, estimator, estimators, gauge, gauged, guess, judge, judged, judgement, judges, judging, judgment, judgment', judgmental, judgments, justice, label, labeled, labeling, labelling, labels, pronounce, pronounced, pronouncements, tried, tries, try, trying
coded	5	283	0.02	code, coded, codes, coding, inscribed
meta	4	141	0.02	meta
nature	6	1075	0.02	born, borne, cancel, cancelation, canceled, cancellation, cancelling, cultivate, cultivated, cultivates, cultivating, cultivation, domestic, domestically, domestication, establish, established, establishes, establishing, establishment, establishments, ingenuity, innate, innocence, innocent, instinct, instinctive, instincts, lifelike, natural, naturalization, naturalized, naturally, naturalness, nature, raw, realism, tame, taming
creative	8	452	0.02	creative, creatively, creativity, origin, original, originality, originally, originate, originated, originating, origins
english	7	347	0.02	english, side, sided, sides

objective	9	825	0.02	accusation, accusations, accuse, accused, accusing, aim, aimed, aiming, aims, dissent, dissenters, dissenting, documentary, nonsubject, object, objected, objection, objections, objective, objectively, objectives, objectivity, objects, protest, protestation, protesters, protesting, protests, target, targeted, targeting, targets
later	5	406	0.02	afterward, handedness, late, lated, later, lateral, laterally, subsequent, subsequently
fit	3	1429	0.02	accommodate, accommodating, accommodation, accommodations, accommodative, adjust, adjustable, adjusted, adjusting, adjustment, adjustments, adjusts, agree, agreed, agreeing, agrees, appoint, appointed, appointing, appointment, appointments, burst, check, checked, checking, checks, correspond, corresponded, correspondence, corresponding, correspondingly, corresponds, equip, equipment, equipped, equipping, equips, fit, fitness, fits, fitted, fitting, going, goings, interrupt, interrupted, interrupting, interruption, interruptions, interrupts, match, matched, matches, matching, meet, meeting, meetings, meets, scene, scenes, suit, suite, suited, suites, suits, tallied, tallies, tally, tallying

section	7	874	0.02	departed, departing, department, departments, departs, division, divisions, divisive, incisive, local, locale, locales, locally, parted, parting, partition, partitioned, partitioning, partly, parts, provincial, section, sectional, sections, segment, segmentation, segmented, segments
sociology	9	138	0.02	sociological, sociology
intellectual	12	410	0.02	cerebral, intellect, intellectual, intellectually, intellectuals, ration, rational, rationalities, rationality, rationalization, rationalizations, rationalize, rationalized, rationalizes, rationalizing, rationally
terms	5	839	0.02	condition, conditional, conditioned, conditioning, conditions, damage, damaged, damages, damaging, foot, footing, price, priced, prices, pricing, termed, terms
things	6	602	0.02	affair, affaires, affairs, affairs', matter, mattered, mattering, matters, thing, thing', things
download	8	137	0.02	download, downloaded, downloading, downloads
respondents	11	681	0.02	answer, answered, answering, answers, answers', react, reacting, replied, reply, respond, responded, respondent, respondents, respondents', respondents', responding, responds
half	4	136	0.02	half
industry	8	567	0.02	diligence, diligent, diligently, energetically, industrial, industrialisation, industrialization, industrialized, industries, industries', industry, manufacture,

				manufactured, manufacturer, manufacturers, manufactures, manufacturing, tireless
babson	6	135	0.02	babson
cohort	6	135	0.02	cohort, cohorts
johnson	7	135	0.02	johnson
percentage	10	206	0.02	percent, percentage, percentages
facilitate	10	302	0.02	alleviate, alleviates, alleviating, alleviation, ease, facilitate, facilitated, facilitates, facilitating, facilitation, facilitative, facilitator, facilitators
contemporary	12	480	0.02	contemporary, generate, generated, generates, generating, generation, generational, generationally, generations, generations', generative, generativity, generator, generators
ceo	3	134	0.02	ceo, ceos
europe	6	134	0.02	eec, eecs, europe
existing	8	1034	0.02	actual, actuality, actualization, actualizing, actually, beings, exist, existed, existence, existing, exists, live, lived, lively, lives, living, survivability, survival, survive, survived, survives, surviving
prestige	8	175	0.02	prestige, prestiged, prestigious
session	7	151	0.02	session, sessional, sessions, sessions', sit, sits, sitting
age	3	646	0.02	age, aged, ageing, ages, aging, cure, cures, elder, elderly, elders, elders', maturation, mature, matured, maturing, maturity, older, senior, seniority, seniors
due	3	659	0.02	ascribe, ascribed, ascribes, ascribing, due, imputation, impute, imputed, refer,

				reference, references, referent, referents, referred, referring, refers
learners	8	352	0.02	apprentice, apprentices, apprentices', learner, learners, learners', prentice, prentices
center	6	654	0.02	center, centered, centering, centers, centre, centres, eye, eyes, halfway, heart, heart'saffec, hearted, hearts, middle, middles, midpoint, midway
know	4	1156	0.02	acknowledge, acknowledged, acknowledges, acknowledging, acknowledgment, bed, bonk, cognizable, cognizant, intent, intention, intentional, intentionality, intentionally, intentions, intently, intents, jazz, know, knowing, knows, love, loved, lovely, loves, loving, recognize, recognized, recognizes, recognizing, screw, screwed, screws, wise, wisely, witness, witnessed, witnesses, witnessing, wits
administration	14	771	0.02	administered, administering, administers, administrating, administration, administrations, administrative, administratively, administrator, administrators, administrators', disposable, disposal, disposed, disposing, govern, governance, governed, governing, government, governments, presided, presidency, president, presidents
gpa	3	131	0.02	gpa

starkey	7	131	0.02	starkey, starr
multiple	8	827	0.02	generate, generated, generates, generating, generation, generational, generationally, generations, generations', generative, generativity, generator, generators, multiple, multiples, multiplication, multiplicative, multiplicity, numer, numerical, numerically, numerous, propagating
grey	4	132	0.02	dull, gray, grey, grizzlies
seems	5	847	0.02	apparent, apparently, appear, appearance, appeared, appearing, appears, looked, looking, looks, ostensibly, seem, seemed, seeming, seemingly, seems
encourage	9	904	0.02	advance, advanced, advancement, advancements, advances, advancing, boost, boosting, encourage, encouraged, encouragement, encourages, encouraging, encouragingly, furthering, furthers, promote, promoted, promoters, promotes, promoting, promotion, promotional, promotions
broader	7	128	0.02	broader
listserv	8	128	0.02	listserv, listservs
posted	6	569	0.02	bill, billed, billing, brand, branded, brandes, branding, brands, card, cards, carried, carries, carry, carrying, mail, mailed, mails, notice, noticeable, noticeably, noticed, notices, noticing, post, posted, posting, postings, posts, send, sending, sends, stake, stakes, station, stations

society	7	727	0.02	club, clubs, gilding, lodge, lodged, lodging, order, ordered, ordering, orderly, orders, societies, society
rater'stest	11	127	0.02	rater, rater'stest, raters, raters'
gain	4	1224	0.02	acquire, acquired, acquires, acquiring, advance, advanced, advancement, advancements, advances, advancing, amplification, derivates, derivation, derivatives, derive, derived, derives, deriving, gain, gained, gaining, gains, gather, gathered, gatherers, gathering, gatherings, lucrative, paid, pay, paying, pays, profit, profitability, profitable, profitably, profiting, profits, win, winning, wins
known	5	126	0.02	known
going	5	1040	0.02	adam, adamant, adams, belong, belonged, belonging, belongings, belongs, blend, blended, blending, blends, break, breaking, breaks, choked, departure, departures, die, died, dies, dying, ecstasy, exit, exits, fail, failed, failing, failings, fails, going, goings, leave, leaves, leaving, loss, losses, pass, passe, passed, passes, passing, perish, proceed, proceeded, proceeding, proceedings, proceeds, release, released, releases, releasing, run, running, runs, sound, sounded, sounding, soundly, sounds
org	3	125	0.02	org
accreditation	13	608	0.02	accredit, accreditation, accreditations, accredited, accrediting, commission, commissioned, credit, credited, credits, license,

				licensed, licenses, licensing, recognize, recognized, recognizes, recognizing
reading	7	1138	0.02	indicate, indicated, indicates, indicating, indication, indicative, indicator, indicators, indices, interpret, interpretation, interpretations, interpretative, interpreted, interpreters, interpreting, interpretive, interprets, read, reade, reading, readings, reads, saying, scan, scanning, version, versions
flexibility	11	225	0.02	compromise, compromised, compromises, compromising, conciliatory, elasticity, flexibility, flexible, tractability
ips	3	124	0.02	ips
jossey	6	124	0.02	jossey
contribute	10	863	0.02	add, adds, bestow, bestowed, bestowing, bring, bringing, brings, conduce, conducive, contribute, contributed, contributes, contributing, contribution, contributions, contributory, donate, donations, impart, imparting, imparts, lend, lending, lends
available	9	520	0.02	access, accessed, accessibility, accessible, accessibly, accessing, availability, available, handy, uncommitted, usability, usable

hold	4	1085	0.02	accommodate, accommodating, accommodation, accommodations, accommodative, admit, admits, admitted, admittedly, admitting, appreci, appreciably, appreciate, appreciated, appreciates, appreciating, appreciation, appreciations, appreciative, arrested, bear, bearing, bears, bears', bind, binding, carried, carries, carry, carrying, confine, confined, confines, contain, contain', contained, container, containing, containment, contains, declaration, declarative, declare, declared, deem, deemed, deems, defend, defended, defenders, defending, defends, defy, delay, delayed, layering, delays, entertain, entertained, entertaining, entertainment, grasp, grasping, grasps, grip, grips, guard, guarding, halt, halted, handle, handled, handles, handling, harbor, harbored, harboring, have, hold, holding, holds, keep, keeping, keeps, nurse, nurses, nursing, obligate, obligated, obligation, obligations, obliged, obliges, restrain, retain, retained, retaining, retention, wait, waite, waited, waiting, waits
always	6	301	0.02	always, constant, constantly, ever, forever, invariably, invariant, perpetual, perpetually, perpetuate, perpetuated,

				perpetuates, perpetuating, perpetuation, perpetuator
implications	12	999	0.02	concern, concerned, concerning, concerns, deduction, deductive, entail, entailed, entailing, entails, implicate, implicated, implicating, implication, implications
formal	6	813	0.02	ball, convention, conventional, conventionality, conventionally, conventions, formal, formalistic, formalists, formality, formalization, formalized, formalizing, formally, official, officially, officials, valid, validate, validated, validating, validation, validities, validity
hbs	3	121	0.02	hbs, hbs'
moral	5	444	0.02	lesson, lessons, lessons', moral, morale, morales, morality, morally, morals, virtuous
tenure	6	121	0.02	incumbent, incumbents, tenure, tenured
written	7	250	0.02	script, scripts, written
items	5	506	0.02	enumerate, enumerated, item, items, list, listed, listing, lists, token, tokenism
best	4	359	0.02	best, trump, trumps
predictors	10	260	0.02	forecast, forecaster, forecasting, forecasts, predictor, predictors
talk	4	504	0.02	blabs, lecture, lecturer, lecturers, lecturers', lectures, lecturing, mouth, peach, sing, sing', singing, speak, speaking, speaks, spill, talk, talked, talking, talks, tattle, utter, utterance, utterances, utterly, verbal, verbalize, verbalized, verbally

1980	4	119	0.02	1980
believe	7	614	0.02	believe, believe, believed, believers, believes, believing, credibility, credible, credibly, plausibility, plausible, plausibly, probabilities, probability, probable, probably, trust, trusted, trusting, trusts, worship
coefficient	11	118	0.02	coefficient, coefficients
led	3	118	0.02	led
per	3	118	0.02	per
attempt	7	807	0.02	attack, attacked, attacking, attacks, attempt, attempted, attempting, attempts, essay, essays, seek, seeking, seeks, tried, tries, try, trying, undertake, undertaking, undertakings
khurana	7	117	0.02	khurana
younger	7	117	0.02	younger
expectations	12	1023	0.02	anticipate, anticipated, anticipates, anticipating, anticipation, await, awaiting, awaits, bear, bearing, bears, bears', carried, carries, carry, carrying, expect, expectancies, expectancy, expectant, expectation, expectations, expected, expecting, expects, gestation, looked, looking, looks, outlook, outlooks, prospect, prospective, prospectively, prospects, wait, waite, waited, waiting, waits
capabilities	12	480	0.02	capabilities, capability, capability', capability'', capable, capac, capacities, capacity
1977	4	116	0.02	1977
crisis	6	116	0.02	crisis
stanford	8	116	0.02	stanford

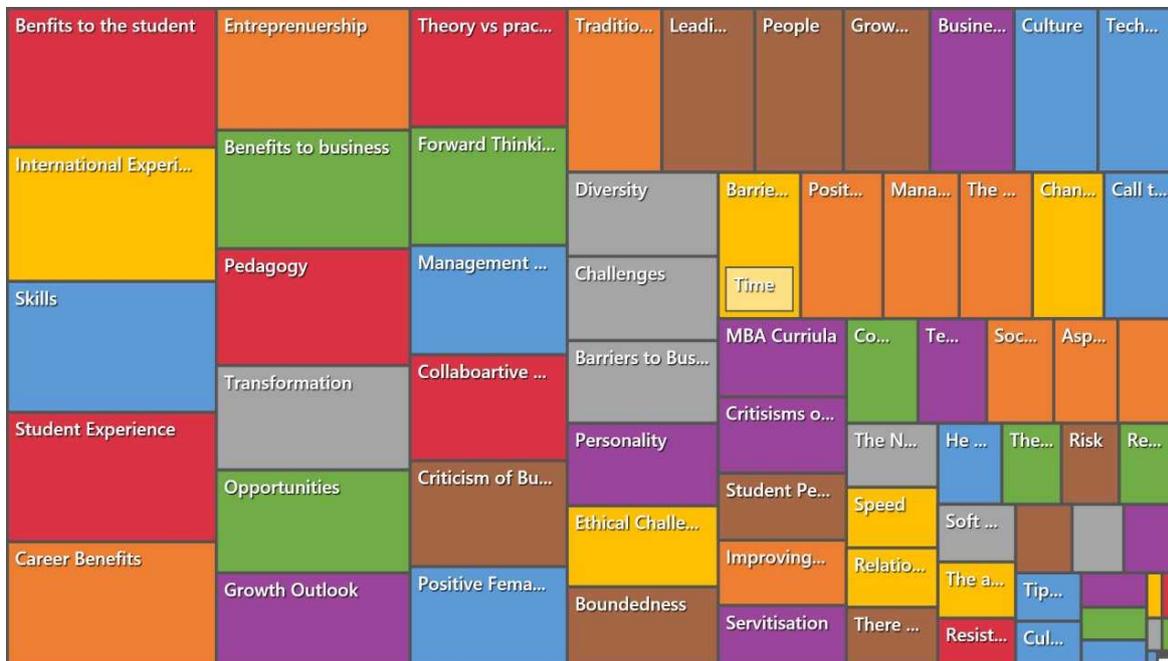
top	3	1715	0.02	ace, acm, clear, cleared, clearing, clearly, cover, covered, covering, covers, crack, cracks, crown, crowne, elevate, elevated, elevates, elevation, exceed, exceeded, exceeding, exceedingly, exceeds, height, heights, lead, leading, leads, marvelous, pass, passe, passed, passes, passing, peak, peaks, summit, summits, super, superlative, terrific, tip, tipped, tipping, tips, top, topped, tops, transcend, transcended, transcendence, transcendent, transcending, transcends, upside, wonder, wondered, wonderful, wondering
doctoral	8	508	0.02	doc, docs, doctor, doctoral, doctorally, doctorate, doctorates, doctors, fix, fix', fixed, fixes, fixing, mending, physician, physicians, repair, repaired, restoration, restore, restoring, sophisticated, sophistication
children	8	115	0.02	children
handbook	8	115	0.02	handbook, handbooks
search	6	606	0.02	hunt, hunting, looked, looking, looks, probe, probes, probing, search, searched, searches, searching, seek, seeking, seeks, trenchant
longer	6	114	0.02	longer

2.3 Nodes coded visualisation:

Global:



UK:



3. External MSB Reports (Origin of stratified random sampling for CSR analysis).

Investec Mid-Market 100



Company name	Key directors	Headquarters	What they do	Latest turnover	4 Year CAGR (%)	Latest EBITDA
1 Hamiltons Galleries	Tim Jefferies	London	Art gallery	£31,374,939	131	£1,489,950
2 T & E Ferris	Thomas Ferris and Edward Ferris	Surrey	Jewellers	£28,315,305	109	£4,588,918
3 Fio's Cash And Carry	Arthur Zoga and Firat Mayil	London	Alcohol and drinks wholesaler	£21,101,780	106	£1,369,478
4 Conway Bailey Transport	Mark Bailey	Cornwall	Freight transport by road	£13,993,900	81	£1,415,307
5 JB Global	Jason Barnister	Wiltshire	Furniture retailer	£145,543,201	80	£8,112,028
6 Oliver Twinsafe Valves	Michael Oliver	Cheshire	Precision valves manufacturer	£25,553,054	71	£7,489,614
7 Leadenhall Capital Partners LLP	John Wells and Luca Albertini	London	Investment manager	£11,551,732	67	£9,402,810
8 Childrensalon	Michele Harman Smith	Kent	Children's clothing retailer	£13,185,773	64	£1,970,764
9 Sterne Agee UK LLP	Simon Mullaly	London	Financial trader	£15,244,364	60	£13,522,799
10 D.K. Engineering	David Cottingham and Katherine Cottingham	Buckinghamshire	Vintage car repairs and sales	£66,424,117	59	£1,315,593
11 Cars 2	Alan Otley	West Yorkshire	Car dealer	£36,287,197	58	£1,091,643
12 Index Venture Management LLP	Saul Klein	London	Venture capital firm	£11,731,316	58	£5,906,098
13 Ennismore Fund Management	William Oldfield	London	Security broking and fund management	£10,893,599	55	£4,416,848
14 Animal Friends Insurance Services	Elaine Fairfax and Christopher Fairfax	Wiltshire	Pet and equine insurance	£11,694,952	53	£2,645,654
15 Certeco	Graham Smith and Richard Moseman	London	Technology consultants	£14,386,736	52	£1,488,715
16 Sadie Coles HQ	Sadie Taler	London	Art gallery	£8,834,239	51	£5,544,031
17 Id Medical Group	Michael Saccor	Buckinghamshire	Medical locum recruitment	£62,505,406	50	£2,825,712
18 BI Electrical Services (NI)	Ian Humphreys	County Antrim	Electrical engineering	£16,442,000	46	£3,969,648
19 Wear Inns	John Weir	Cleveland	Inns and pubs	£11,750,035	46	£1,788,388
20 P. Hughes Construction	Philip Hughes	Nottinghamshire	Construction and civil engineering	£18,624,763	46	£1,823,648
21 Benson Park	David Park and Alastair Benson	North Humberside	Meat and poultry producer	£24,594,659	43	£2,797,223
22 Victoria Plum	Jason Walker	North Humberside	Online bathroom retailer	£26,236,371	43	£5,990,456
23 Lambert Metals International	Howard Masters	Middlesex	Minor metals trader	£54,741,383	42	£4,685,829
24 Armstrong Packaging	David Armstrong and David Mark	Angus	Packaging and cardboard manufacturer	£10,926,719	42	£2,487,993
25 Smart Solutions (Recruitment)	Nathan Bowles	Gwent	Cross-sector recruiter	£41,999,527	42	£1,388,640
26 Interact Medical	Marty Bettles and Steve Young	Buckinghamshire	Medical locum recruitment	£39,391,361	42	£1,797,646
27 Qualitycourse	Jon Taylor and Paul Beasley	West Yorkshire	Temporary recruiter	£70,823,630	41	£1,748,456
28 Softcat	Martin Hellwell and Colin Brown	Buckinghamshire	IT and software	£395,755,868	40	£28,615,219
29 Muffitts Industries	Mark Muffitt	Suffolk	Rubber granule manufacturer	£11,084,716	39	£2,900,816
30 M.B. Crocker	Mary Crocker	Dorset	Poultry farmer	£16,833,290	38	£3,373,889
31 FSR Trading	Farooq Raja and Richard Hunter	London	IT consultants	£16,072,656	38	£3,623,154
32 Focusrite Audio Engineering	Phil Dudderidge	Buckinghamshire	High-tech audio equipment manufacturer	£36,078,236	38	£5,387,163
33 Oaklands Farm Eggs	Gareth Griffiths	Shropshire	Egg farmer	£63,232,623	37	£10,681,404
34 Oliver Valves	Michael Oliver	Aberdeenshire	Precision valves manufacturer	£31,590,433	37	£6,428,088
35 Poundworld Retail	Chris Edwards	West Yorkshire	Single-price retailer	£345,259,000	37	£11,272,000
36 Hoh Oilfield Services	Darren Allport	Buckinghamshire	Oil and gas service provider	£58,081,139	37	£4,869,684
37 Harvard Engineering	John McDonnell	West Yorkshire	Electronics manufacturer in power supplies	£36,707,053	37	£7,110,061
38 Simpson Oils	Hugh Simpson	Wick, Calthness	Fuel deliveries	£54,765,939	37	£1,036,551
39 Pilgrim Foodservice	Peter Bateman	Lincolnshire	Wholesale food retailer	£20,527,721	36	£1,139,308
40 J.E. Porter	Graham Porter	Lincolnshire	Animal feed producer	£52,983,889	35	£2,406,066
41 Ocean Automotive	David Kelly	Dorset	Aud car dealers	£80,527,296	34	£1,700,845
42 Cosatto	Andrew Kluge	Lancashire	Manufacturer of children's nursery products	£19,825,000	33	£1,414,000
43 Total Computer Networks	Aidan Groom and Paul Jones	Northamptonshire	IT and software consultants	£30,653,103	33	£1,124,999
44 Troy Foods	David Kempley	West Yorkshire	Salad and dressings producer	£51,982,816	33	£1,066,170
45 Greencroft Bottling Company	Anthony Cleary	Co. Durham	Wine bottler	£22,259,293	32	£2,602,469
46 Financial Market Engineering	Julian Baker-Ward and Charles Miller	London	Financial trader	£10,420,231	32	£1,658,959

47	Dairy Partners	Will Bennett, Clive Bennett and Robert Peel	Gloucestershire	Cheese maker	£25,485,179	32	£1,340,952
48	Please Hold (UK)	Grant Reed	Manchester	Audio branding agency	£11,136,974	32	£1,777,289
49	Motis Ireland	David McComb	County Down	Shipping	£48,550,555	31	£1,678,348
50	Independent Transition Management	Grant Stanley and Dan Hockley	London	Pensions data software	£10,706,170	31	£2,096,935
51	Tithegrove	Stephen Rayson and Paul Walton	Wiltshire	Civil engineering contractor	£42,769,098	31	£1,629,392
52	Davidson Brothers (Stotts)	William Davidson	Lanarkshire	Animal feed producer	£35,715,442	31	£1,026,706
53	Lynn's Country Foods	Denise Lynn	County Down	Artisan meat producer	£20,205,214	31	£1,974,979
54	Redrock Consulting	Dean Harte	Bristol, Avon	Cross-sector recruiter	£24,645,162	31	£1,353,044
55	Watch Shop	Kahore Naib	Berkshire	Online watch retailer	£17,468,275	31	£1,335,501
56	Quanta Consultancy Services	Stephen Trigg	Hertfordshire	Cross-sector recruiter	£29,547,827	31	£1,418,141
57	Ukfast.Net	Lawrenos Jones	Manchester	IT consultant and data centre provider	£19,869,984	30	£7,930,635
58	Comline Auto Parts	Dnyesh Kamdar	Bedfordshire	Car-parts manufacturer	£21,919,953	30	£1,011,010
59	J & A Beare	Simon Morris and Steven Smith	London	Violin auctioneers and restorers	£82,950,294	30	£1,918,450
60	Oxford Policy Management	Simon Hunt	Oxford	Social and economic policy consultants	£27,238,227	29	£1,561,753
61	Intelliflo	Nick Eatock and Akeel Ahmed	Surrey	CRM software provider	£12,682,540	29	£4,255,098
62	Caterers Choice	Charles Pinder	Cumbria	Canned food wholesaler	£48,954,157	29	£1,727,598
63	John Pointon & Sons	Carl Pointon	Staffordshire	Waste disposal and rendering of animals	£50,037,031	29	£2,861,106
64	Charles Tyrwhitt LLP	Nick Wheeler	SE1 2QG	Shirtmaker and clothing retailer	£120,857,000	29	£16,081,000
65	Sweep Kususakoski	Patrick Watts	Kent	Recycling of used electrical goods	£11,213,777	29	£1,369,085
66	M.V. Kelly	Paul Wheelan	West Midlands	Civil engineering and building	£94,339,653	28	£1,316,900
67	Nigel Fredericks	Nigel Totman	London	Fine meat butcher	£29,573,457	28	£1,445,557
68	Excalon	Des Donnelly and Kevin O'Donnell	Lancashire	Electrical utility service provider	£27,613,286	28	£1,608,695
69	Space Solutions (Scotland)	Steve Judge	Aberdeenshire	Workplace design	£33,960,373	28	£2,176,446
70	The Bath Priory	Andrew Brownaword	Avon	Luxury country house hotels	£14,347,994	28	£1,165,452
71	Pure Collection	Nick Falkingham	North Yorkshire	Cashmere clothing retailer	£30,759,015	28	£1,032,421
72	Thomas Bell & Sons	Andrew Major	North Lincs	Fertiliser importer	£95,378,948	28	£1,007,060
73	Cornish Farm Dairy	Bill Clarke and Rachel Clarke	Cornwall	Dairy farm	£25,856,526	27	£1,939,689
74	Shopfittings Direct	Paul Brooks and David Brooks	Essex	Retail environment specialists	£21,714,228	27	£1,012,984
75	Mitchell & Webber	Robert Weedon	Cornwall	Oil delivery and boiler servicing	£50,922,627	27	£1,130,092
76	Millennium Cash & Carry	Rishi Mashru	Essex	Food and drink wholesaler	£90,113,033	26	£1,579,668
77	Tillicostry Quarries	Wallace Menzies	Fife	Hard-rock quarries	£43,834,052	26	£6,094,490
78	Exponential-E	Lee Wade	London	IT and network services provider	£49,643,345	26	£6,726,041
79	Chesterfield Poultry	Mohammed Ahmed and Nadeem Iqbal	Chesterfield	Halal chicken producer	£58,280,268	26	£2,296,745
80	Harbour & Jones	Nathan Jones and Patrick Harbour	London	Contract caterer	£30,777,946	26	£1,245,181
81	Henbury	Katie Stewart	West Lothian	Corporate clothing manufacturer	£12,686,634	26	£1,481,672
82	A & L Restaurants	Amir Alisi	London	McDonald's franchisee	£14,606,309	25	£1,084,094
83	First Call Contract Services	David Markelov	London	Temporary recruiter	£27,714,920	25	£1,223,155
84	TES (NI)	Brian Taylor	County Tyrone	Environmental engineers	£12,019,103	25	£1,257,592
85	Baldwins Crane Hire	Wayne Baldwin	Slough	Crane hire	£16,687,165	25	£5,057,331
86	Kingdom Security	Terry Barton	Lancashire	Security services provider	£27,686,835	25	£2,217,548
87	Hudson Contract Services	David Jackson	North Humbersid	Construction contract and payroll	£502,096,645	25	£3,515,193
88	Moresand	Paramjit Singh Kang and John Kalis	London	Travel agency	£112,731,035	25	£1,032,636
89	Pump Supplies	Andrew John	West Glamorgan	Submersible pump supplier	£18,949,028	24	£2,230,473
90	Silverstar Foods	Toby Raphael	Kent	Food wholesaler	£23,973,794	24	£1,077,841
91	CDE Global	Tony Convery and Brendan McGurgan	Cookstown	Industrial washing manufacturer	£23,107,094	24	£1,726,540
92	Pinnacle Foods	Graham Reed and Chris Wilson	Alton	Meat and poultry producer	£17,169,265	24	£1,034,348
93	Cadline	Dabi Peppin	Middlesex	CAD design and data management	£20,926,227	24	£1,328,360
94	Oldfield Partners LLP	Jamie Carter and Richard Oldfield	London	Investment manager	£29,556,961	24	£18,682,407
95	Glyn Hopkin	Fraser Cohen	London	Car dealers	£294,536,000	24	£6,559,000
96	Olympus Distribution	Kath Rice	Tipton	Automotive components distributor	£13,055,799	24	£2,865,999
97	Hi! Training	John Hyde and Jill Whittaker	West Sussex	Training and apprenticeship provider	£24,068,000	24	£1,827,000
98	Staples (Vegetables)	Vernon Read	Lincolnshire	Vegetable farmer	£74,999,437	23	£2,289,171
99	Dains Furniture	Chris Scott	Merseyside	Office furniture manufacturer and retailer	£24,455,129	23	£2,193,850
100	M.T.S. Cleansing Services	Anthony Crust	Kent	Liquid waste management	£51,818,712	23	£9,820,993

Note: All companies are limited companies unless specified otherwise (for example, through the designation 'LLP')