



Diagnosing the Distance: An Exploration into Remote and Mobile Employee Viewpoints on Corporate Commitment and Wellbeing using Q Methodology

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Abstract

The aim of this research was to gain a critical understanding of the subjective viewpoints of remote and mobile employees (RMEs) on corporate commitment and wellbeing, and to create a conceptual framework to inform the future strategic plans for a medium sized enterprise in the United Kingdom (UK).

The literature search revealed a stratum of complex, multi-faceted discourse and social constructions around the subject of remote workers in terms of their definition, identification, and impact on modern working practices. A gap in the research literature identified that Q methodology had not been used before to elicit the views of RMEs. Furthermore, no published papers relating to RMEs and their viewpoints on the theoretical topics of role identity, remote working and job satisfaction were found. This significant finding led to Q methodology being pursued as it minimised the potential for researcher bias and maximised the opportunity for RMEs to give their personal account. The total RME sample was $N = 50$ and was split into two distinct categories, $N = 42$ Area Engineers (AEs) and $N = 8$ Regional Engineering Managers (REMs).

The results revealed four distinct factors (shared viewpoints) within the Area Engineers' category, Factor 1: 'Supported and Proud'; Factor 2: 'Remote and Distant'; Factor 3: 'Controlled and Concerned'; Factor 4: 'Work and Life Balance', and two distinct factors within the Regional Engineering Managers' category, Factor 1: 'Engaged and Focused'; Factor 2: 'Challenged Leaders'. These six factors were interpreted and the emergent social viewpoints discussed further in relation to existing literature and the two research questions. This discussion and analysis led to the construction of an RME conceptual framework. The findings, analysis and RME conceptual framework within the study represents new insight to move existing knowledge and professional practice forward. Thus, the aims and objectives of the study have been met by providing an original contribution to the domain of RMEs. Limitations were acknowledged and recommendations for further research suggested.

Keywords: *remote and mobile employees (RMEs), engagement, corporate commitment, wellbeing, role identity, remote working, job satisfaction.*

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It is good to have an end to journey toward; but it is the journey that matters, in the end.

(Ursula K. LeGuin, 1969 - The Left Hand of Darkness)

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Chapter 1: Introduction

1.1 Research problem

Flexible working patterns and increasing technological advances have led to employees moving away from the daily commute to their corporate head offices. Modern working practices are now allowing an increasing number of employees to use their own homes as work places. However, amongst the perceived positive benefits of these arrangements lies a plethora of potentially unconsidered consequences for leaders of these contemporary organisations. Corporate commitment and wellbeing are rapidly becoming key considerations for all organisations, regardless of size, as employee engagement relies heavily upon these factors (Shreeve *et al.*, 2015). The overarching aim of this research is to explore the methods available for an organisation to improve strategically the corporate commitment and wellbeing levels of its remote and mobile employees (RMEs) who are employed within the operations department.

1.2 Research context

The research will be conducted using a medium sized enterprise. The Organisation is a leading third party certification body whose main purpose is to conduct compliance audits within the electrical contracting industry for over 36,000 registered clients each year. These technical audits are undertaken by over 75 RMEs (remote and mobile employees) who are located throughout the United Kingdom (UK). These RMEs are highly qualified and experienced electrical engineers that are home based and spend most of their working week travelling around their pre-determined regional area assessing the compliance of their clients. They have a dedicated home office period every second week, or more, if there are cancellations or void visits.

1.3 Research rationale

The Organisation has been awarded '2 Stars' (Excellent) status overall in the Sunday Times Best Companies Awards 2016. However, the RMEs (remote and mobile employees) within the operations department were ranked amongst the lowest scoring employees (in the Sunday Times Best Companies' survey) within

the Organisation. The aspiration of the Chief Executive Officer is for the Organisation to achieve a 3 Star status (Extraordinary) in the next three years. This will require significant improvements within the operations department who mainly consist of RMEs (remote and mobile employees). Two categories of RMEs exist within the operations department: Regional Engineering Managers (REMs) and Area Engineers (AEs). All the AEs are directly line managed by an REM.

The Head of Field Performance is responsible for managing the REMs (Regional Engineering Managers). Two significant areas highlighted by the Sunday Times Best Companies' survey for improvement were related to corporate commitment and wellbeing. Therefore the researcher, who is a senior manager in the Organisation himself and responsible for schemes and operations within the Organisation, has requested that an appropriate study is commissioned that focusses specifically on corporate commitment and wellbeing for RMEs. The request has been fully endorsed by the Chief Executive Officer and Directors, and is viewed as a key business objective.

The overall aim of this research is to hopefully make an original contribution to the domains of theoretical, methodological and professional practice knowledge.

1.4 Aims, objectives and research questions

Aims

- i. To gain a critical understanding of the subjective viewpoints of RMEs on corporate commitment and wellbeing to inform future strategic plans.*
- ii. To create a conceptual framework for improving the corporate commitment and wellbeing among RMEs.*

Objectives

- i. To discover the internal and external factors that contribute to the positive and negative levels of corporate commitment and wellbeing among RMEs.*
- ii. To identify what dimensions of the role could be redesigned to be more appropriate for RMEs in the future.*

Research questions

The research questions that will be developed throughout the research will consist of the following fundamental parts:

- i. What are the key factors that contribute to the positive and negative levels of corporate commitment and wellbeing among RMEs?*
- ii. What dimensions of the RME role could be redesigned to help improve corporate commitment and wellbeing?*

Classical views of early writers (Fayol, 1916; Herzberg, 1966; Maslow, 1954; McGregor, 1960; Taylor, 1947) helped to shape and create the theoretical foundations for modern management techniques in use today. However, are these theories still relevant and current for the modern modes of working or do they need to be modified or even replaced to accommodate the needs and expectations of RMEs? The central focus of this research will be to develop a critical understanding of RMEs subjective viewpoints on corporate commitment and wellbeing, a currently neglected area. The factors identified will then be used to develop a conceptual framework to support the new challenges facing contemporary leaders with remote workers.

1.5 Thesis activity structure and writing up plans

This study will start by exploring the existing salient research literature and other sources surrounding RMEs in the literature review chapter. Subsequently, the methodology chapter will give a detailed account of both the methodology being used as the research tool (Q methodology) and the process and procedures used for gathering the participants' data. The findings chapter will describe and

highlight the key research findings and analysis, which will set the scene for the discussion chapter, a critical discussion of the research findings in the light of previous research. Finally, the conclusions chapter will discuss and summarise the new knowledge and insight with the intention of making an original contribution to the domains of theoretical, methodological and professional practice knowledge. The thesis activity structure and writing up plans are graphically depicted in Figures 1.1 and 1.2.

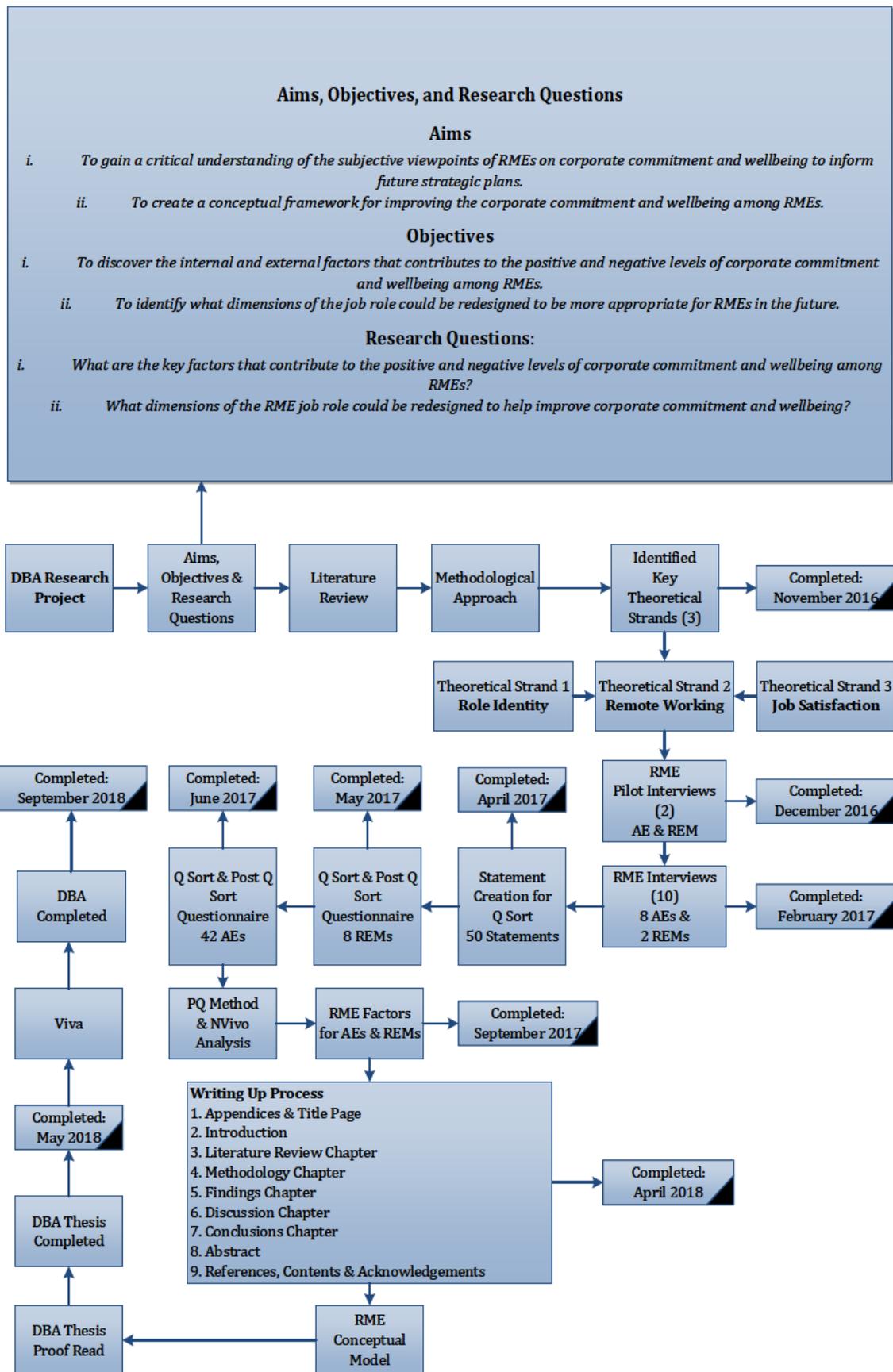


Figure 1.1: Thesis activity structure plan

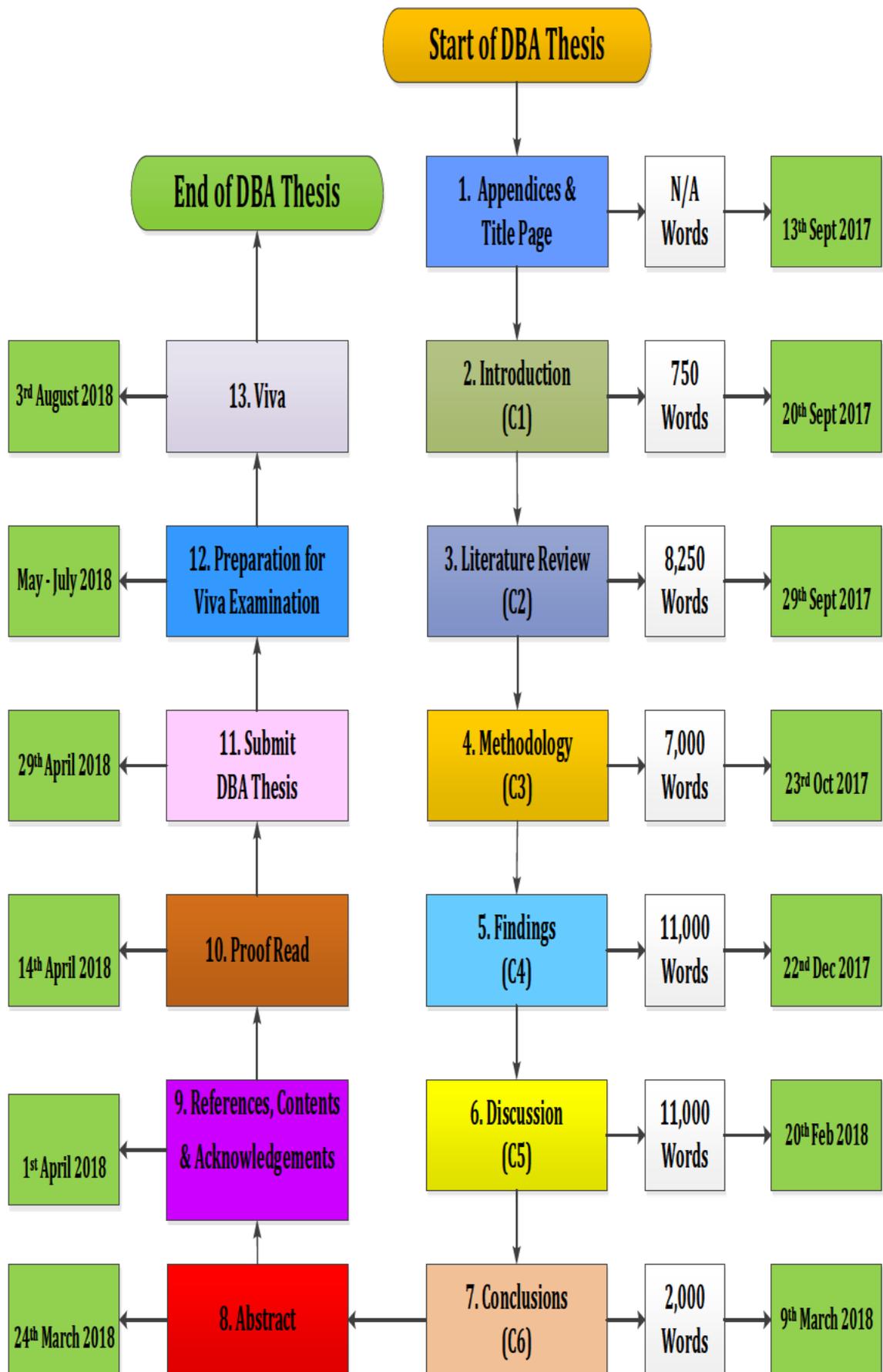


Figure 1.2: Thesis writing up plan

Chapter 2: Literature review

2.1 Introduction

The focus on corporate commitment and wellbeing of employees continues to rise and provides a significant challenge for organisations. Recognising the linkages between the levels of commitment and wellbeing of employees and the overall health of an organisation is vital for leaders (Jacobs, 2008; Kelloway *et al.*, 2012; Shreeve *et al.*, 2015). A substantial increase over the last twenty years in employees working remotely from the head office has led to further complexities for modern leaders to consider and manage (Chartered Institute of Personnel and Development (CIPD), 2016).

Employing remote workers gives an organisation the ability to create a flexible and decentralised work structure that can capture available talent without considering the normal geographic boundaries of a head office. However, remote employees can encounter different daily work experiences (clarity of role, corporate culture, empowerment, feedback, job satisfaction, professional development, and workload) from their head office counterparts (Jacobs, 2008). As a result, different considerations and managerial approaches are needed to achieve high levels of corporate commitment and wellbeing (Casper and Harris, 2008). Existing research and theory has been strongly biased towards head office based employees being the normative benchmark. However, remote employees need to be considered within the equation now to enable a corporate culture of inclusiveness to exist.

Following initial discussions with remote and mobile employees (RMEs) a scoping review of the literature was conducted that focussed upon three abstractions: purpose, security and happiness. Subsequently, this review of the three abstractions within the existing literature led to three key theoretical strands being identified: role identity, remote working and job satisfaction. A comprehensive literature review was then conducted using journal articles and books from the fields of business, education, engineering, public health, management, and nursing that focussed on what seemed to be the most salient overarching literature within the identified research topic areas. This strategy was utilised to maximise the benefits of using the most relevant and influential literature, whilst hopefully

maintaining the integrity and depth of the literature review within the limited word count capacity (40,000 Words) of the Doctorate of Business Administration (DBA) thesis.

Thus, the structure for the literature review will be as follows:

- 2.2 Role Identity (Theoretical Strand 1)
- 2.3 Remote Working (Theoretical Strand 2)
- 2.4 Job Satisfaction (Theoretical Strand 3)
- 2.5 Conclusion and Conceptual Framework

The literature review plan linked to the four types of research theory: background, focal, data and contribution is represented graphically in Figure 2.1.

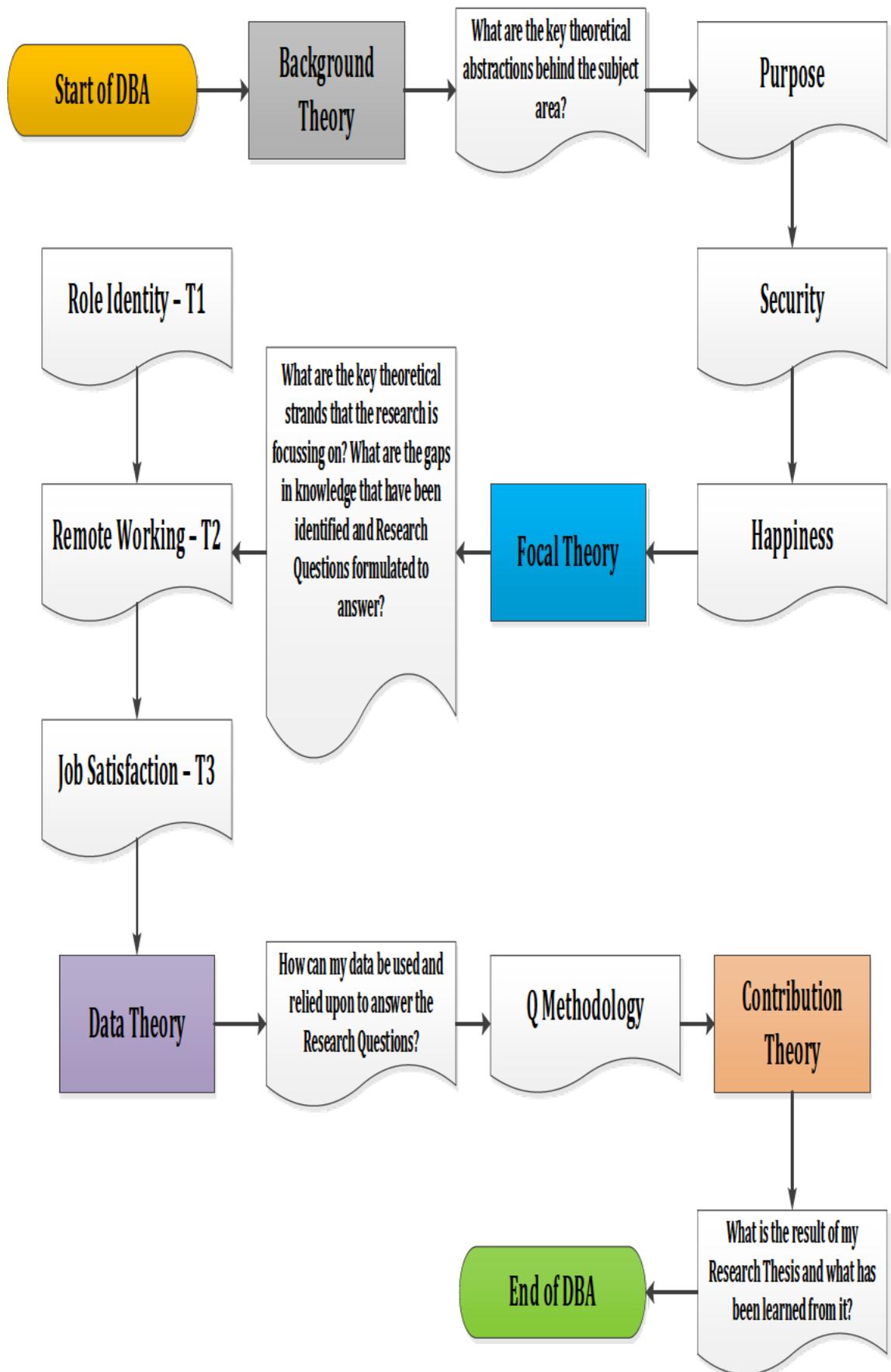


Figure 2.1: Literature review plan linked to the four types of research theory

2.2 Role identity

Role identity can be considered a set of meanings that define 'the self' with particular reference to a given role that is expressed behaviourally to verify and reinforce a given identity (Burke and Stets, 2009). Individuals within a work environment are actively encouraged by management and HR departments to maintain their roles by demonstrating behaviours that are consistent and aligned with the corporate paradigm for a given role (Grube and Piliavin, 2000).

However, the 'self' is complex and multidimensional and can lead to an employee having multiple role identities as needed to maintain social relationships within the work environment (Markus and Wurf, 1987; Stryker, 1987). Identities can be seen as a function of commitment to the associated role and its core set of values (Blenkinsopp and Owens, 2010; Penner, 2002). Having clear role definitions allows employees to engage in behaviours beyond what is required to meet task performance and improves feelings of ownership according to Parker *et al.* (2006: 637):

Individuals with flexible role orientation define their roles broadly and, as such, feel ownership of goals and problems beyond their immediate set of technical tasks, seeing them as my job rather as not my job.

When a role in an organisation is clearly defined and understood, and the corresponding expectations are clear and non-conflicting, an employee's engagement increases and work-based stress is minimised (Arnold *et al.*, 2010). O'Driscoll and Brough (2010) identified in their study that three critical factors are major sources of stress for employees: role ambiguity, role conflict and the degree of responsibility for others. Any of these factors can lead to an employee developing psychological health problems and to a reduction in organisational commitment (Glazer and Beehr, 1995).

Role ambiguity arises from an employee not having a clear understanding about their role's objectives, expectations and responsibilities. This can occur at the outset of an employee's employment through badly defined job descriptions or inadequate selection processes (Beehr, 1995). However, role ambiguity can also occur over a period of time because of strategic drift caused by an organisation's

strategy changing without considering its employees existing roles and leaving them misaligned. Role conflict exists when an employee has irreconcilable job demands that lead to feelings of being torn between doing what they believe is expected of them and what is being asked of them by other employees (Arnold *et al.*, 2010; Hoang and Gimeno, 2010). In general, responsibility within an organisation can be considered to fall into two distinct categories: responsibility for people, and responsibility for inanimate things such as budgets, buildings and equipment. Several studies have found that having responsibility for people is more likely to lead to stress and coronary heart disease than having responsibility for things (Ivancevich and Matteson, 1980; Jiao *et al.*, 2013; Wardwell *et al.*, 1964). As a result, supervisory and management roles and their demands need to be considered holistically.

How an employee identifies and responds to the behavioural scripts and expectations of a particular role, and the interactions they have with other employees directly effects how obligated and motivated they are to perform behaviours that they define as being in role (Morrison, 1994). Jiao *et al.* (2013) remonstrate that compared with other factors such as leadership, management style, organisation and personality, role identity is paramount in securing and maintaining employee organisational commitment. Job autonomy that supports an employee to determine their own approaches and, pace and intensity to accomplish their work tasks allows role identity to become more salient and securely embedded (Hackman and Oldham, 1980; Spector, 1986; Thoits, 2003). Thus, creating purpose and meaning for an employee that is aligned to an organisation's strategic objectives is paramount.

2.2.1 Role centrality and self-verification

From a psychological perspective, role identity is validated from an employee's role performance which enhances their self-concept in a process called self-verification (Stets and Burke, 2000; Stryker and Burke, 2000). Role identities offer an employee the opportunity to be motivated from the enactment of relevant roles that fulfil their critical need for self-verification (Markus and Wurf, 1987; Vignoles *et al.*, 2006). Self-verification is defined as, 'seeing the self in terms of the role as embodied in the identity standard' (Stets and Burke, 2000: 232). Therefore,

the more central a role identity is to an employee, the higher the probability that their behaviour will be consistent with that identity (Grube and Piliavin, 2000; Stryker, 1980). Accordingly, the more important a role identity is to an employee, the more likely that they will have a sense of purpose and meaning in life, and the related mental and physical health benefits that this offers (Thoits, 2003).

Identity centrality is defined as the relative importance of the identity as a function to which an identity is central or peripheral to an individual's self-concept (Rosenberg, 1979; Stryker and Serpe, 1994). As a result, identity centrality requires a measure of self-awareness to assign a value of importance to the activities representing a role identity. Murnieks *et al.* (2014: 1590) stated that, 'centrality demands conscious reflection by the individual.' Callero (1985) developed distinct measures relating to centrality to predict the behaviour of an individual, these included: commitment, relative importance, perceived role evaluations of others and salience. Where employees have more than one central identity and share activities in common (for example, professional engineer and manager) integrated identities are created that are a hybrid of the principal features of each central institution and role identity (Glynn, 2008). Identities are constructed from integrating meanings and behaviours associated with roles undertaken that are important and can facilitate personal emotional, psychological, and physiological wellbeing (Creed *et al.*, 2010; Marks, 1977; Settles, 2004). According to Jain *et al.* (2009), individuals manage multiple identities using a variety of strategies in order to retain the meaningfulness of those considered most central, while minimising conflict between them.

2.2.2 Identity and knowledge transfer

Identities are instilled with personal meaning and are internally constructed and reconstructed by an employee. In contrast, roles are more static in nature and externally constructed, identified by hierarchical structures and job descriptions. Roles are usually predetermined and defined by an HR department to meet certain specific criteria that normally include experience, qualifications, competence, and previous responsibilities. However, an individual may view the role's identity differently. Thus, internal and external views of a role and its subjective identity may vary depending on an organisation's ability to manage and evolve its

employees' roles (Glynn, 2008). Strategic alignment and internal harmony are much-debated subjects within the theoretical and practitioner literature (Creed *et al.*, 2010). Shared meanings formed by patterns of social behaviour can exist within the same organisation at a variety of levels and influence, and are responsible for driving thoughts and actions. However, conflict can manifest itself when employees have divergent truths and knowledge claims that lead to competing understandings for validity. Employees who have the same job title and role, but may have joined the organisation at different points in time, can differ widely in opinion of what their role actually is and what their perceived identity within the role is (Watson, 2008). Motivation and pride assist employees in building strong and stable identities that are constructed through the intrinsic and extrinsic interpretations of what their role identity is and stands for (Jones *et al.*, 2011).

The relationship between an individual's working and personal life is inextricably linked to societal and personal perceptions of their role and its identity. Society identifies employees with what their organisation stands for based on its reputation (Cable and Turban, 2003; Helm, 2013). The creation of an individual identity rather than collective identity is strongly linked to knowledge that is secured and the willingness to transfer it to others (Gao and Riley, 2010). However, organisations can overcome this 'stickiness' of knowledge transfer by encouraging employees to share their individual experiences and knowledge with colleagues to promote an improved group identity and to create a greater affiliation with the group for individuals (Szulanski, 2000).

2.2.3 Organisational socialisation and work adjustment

Organisational socialisation is the process where employees align their behaviours with the requirement and expectation of an organisation (Louis, 1980; Van Maanen, 1976). The more successful an organisation is in its attempts to influence its employees, the more of the organisational values are internalised in employees' self-concept. Louis (1980) maintained that there were two aspects of socialisation for an organisation to consider. The first aspect was linked to role-related learning involving knowledge base, mission and strategy, and the second aspect involved the creation of a learning culture. During the socialisation process, new employees

are expected to learn about an organisation's cultural norms, values and beliefs. Wu *et al.* (2014) maintain that there are two kinds of employee role identities. The first identity is linked to the job and its related expectations, goals and tasks. The second identity is linked to an organisation's beliefs, cultural norms, expectations and values. Employees can have multiple role identities, though; some of these identities are more noticeable than others. The more significant identity is to an employee the more it contributes to their definition of self-concept (Hogg, 2000). Thus, strong role identities have several key functions for individuals. First, they provide overarching schemas that allow individuals to interpret and respond effectively to daily events (Vignoles *et al.*, 2006). Second, they provide employees with a sense of direction and help to guide their behaviours when faced with new or indeterminate situations (Suh, 2002). Third, they support individuals in their life stage transition where their identities are also likely to change (Super, 1980).

Work adjustment theory suggests that employees actively look to achieve harmony and alignment between their personal attributes and those of their work environment (Dawis, 2005; Dawis and Lofquist, 1984). This theory suggests that corporate commitment and job satisfaction are intrinsically linked to the extent that the reinforcers (rewards) of the role or organisation correspond to the values that a person seeks to satisfy through their work. Thus, alignment and organisational fit for an employee within an organisation is a contributory factor for corporate commitment, job satisfaction and wellbeing.

2.2.4 Societal interpretations

Considering role identity theory from a sociological perspective highlights the fact that society consists of heterogeneous continuing patterns of interactions and relationships that are entrenched within organisations (Stryker and Burke, 2000). Thus, role meanings can be considered to be negotiated during interactions with other employees, and role performance is attuned to meet the expectations of other employees within social interactions (Glynn, 2008). Constructing role identity from societal interpretations that rely upon social interactions is a subjectivist approach. Each employee's experiences will be different and therefore the interpretation that is being made based on the experiences or principles of an individual will also differ. The formation of knowledge is based on a belief of truth,

which relies upon a paradigm of what a role is, or should be (Helm, 2013). However, there may be differences between the perceptions of a role for an organisation's employee to that of an external person (Brown, 2006). Societal interpretations can be developed on an individual basis or become homogenous with the formation of a community that has shared views, perceived understandings and empathy (Highhouse *et al.*, 2009). As interpretations of role identities vary, by exercising choice society constructs their own individual interpretations of what a role should be. Thus, roles should have a functional place in society that provides benefits to the macro needs of a country (Jones *et al.*, 2011). However, the identity of a role can also be considered the dynamic part of the equation that needs to be seen as fluid and not fixed (Gotsi *et al.*, 2010; Watson, 2008).

2.2.5 Knowledge and professional competence

Organisations use core and specialist training to create knowledge which serves to create a sense of standardisation that in turn is evaluated at annual appraisals. However, strategic plans seldom fully recognise the impact and disparity that can arise from role identities being changed and a subsequent gap appearing between the organisation and its employees' subjective views of their role and its purpose within an organisation (Byrne *et al.*, 2013; CIPD, 2016). This strategic drift can be subtle and a slow process that may not become apparent to leaders. Thus, tacit knowledge of long serving employees that has been gained from their interactions with individuals, teams and the internal and external dimensions of the organisation can become a key differentiator for an organisation. Hence, organisational relationship provides a link between the socialisation of knowledge, organisational learning and, social expectations and actions. In contrast, if this role identity has not been managed and strategic drift has occurred, then this tacit knowledge can become a serious disadvantage for an organisation that may lead to any new employees having their expectations of the role and its constructed identity becoming distorted. Continuous evaluation and review of the existing knowledge within an organisation becomes a method to prevent tacit knowledge being formed and compounded so that it becomes counterproductive (Watson, 2008). Gaining knowledge has the effect of emphasising the primacy of the individual as owner of the knowledge (Gao and Riley, 2010). This knowledge is

then used to provide a pathway with suitable training and experience to competency and ultimately to create a professional identity (Helm, 2013). For some, it is the interaction between this knowledge and the professional identity it creates that defines an employee (Gao and Riley, 2010). However, an employee who achieves a recognised professional standard may still be unable to fulfil their career aspirations depending on factors that may include career path and choices, length of service and the organisation's strategy. Experience and tacit knowledge creates an unofficial seniority structure, where knowledge has been gained from a previous work experience and then creates an enhanced professional capability (Gao and Riley, 2010; Kolb, 1984). This enhanced capability then creates different identities for the same role, which implies that knowledge can define and improve the levels of self-concept through affiliation or individualism linked to the organisational identification (Dutton *et al.*, 1994). This suggests that role identity is formed through operational experience and effectiveness and is responsible for bringing together professional practice and professional identity (Gao and Riley, 2010; Keenoy *et al.*, 2009; Wenger, 1998).

Considering knowledge to be a central component in the creation of an employee's identity, the different levels and types of knowledge that exist elicits the view that different identities will exist within an organisation (Watson, 2008). According to Gao and Riley (2010) knowledge possession and the willingness to transfer affects individual and organisational identity. Overcoming this 'stickiness' of knowledge transfer with an organisation is paramount to the development of an individual and organisational identity that is more strategically aligned (Eckel and Grossman, 2005; Reitzes *et al.*, 1994). Employees are individuals and will always have different skills, knowledge and experience. Nevertheless, their role identity within an organisation needs to be able to embrace the concept of informational diversity which recognises that no employee could have the entire task related characteristics necessary to achieve the desired organisational goals (Jehn *et al.*, 1999). Thus, knowledge transfer that supports the alignment of team and organisational identities to allow greater productivity is to be actively encouraged by leaders of organisations. In summary, identities are multi-faceted, and have strong links between 'internal self-identities' and 'external social identities' and as such, identity can be viewed simply as a negotiation between the

self and the social (Keenoy *et al.*, 2009). Role identity is shaped through task related exposure, organisational learning and the subsequent effectiveness of the acquired knowledge. This cyclical process leads to employees testing and redefining their explicit knowledge constantly through practical application (Blenkinsopp and Owens, 2010; Penner, 2002; Szulanski, 2000). Information sharing to create team and organisational identities by 'valuing organisational knowledge' is part of a process, which binds professional practice and professional identity (Gao and Riley 2010; Wenger 1998). Nurturing individual and team identity through structured knowledge transfer is viewed as a way forward for an organisation to improve corporate commitment, job satisfaction and wellbeing (Dawis, 2005; Dawis and Lofquist, 1984).

2.3 Remote working

2.3.1 The growth and popularity of remote working

According to the Office for National Statistics (ONS), 4.2 million people in the UK spent at least half of their working time carrying out work at their home in 2014. This figure represents 13.9 percent of those employed in the UK and 'is the highest rate since comparable records began in 1998' (ONS, 2014: 1). The growth and popularity of remote working has been fuelled by the advancement and universal availability of information communication technology (ICT), changing expectations from employees and organisational requirements linked to the location and type of work needed (Wynarczyk, 2005). The virtual workplace has provided an employee with the ability to work from almost anywhere in the World and to reconsider the rational boundaries that define employment in the twenty-first century (Johns and Gratton, 2013). Email starting in the 1980s allowed individual businesses to supply their expertise to larger organisations quickly and virtually. Further advancements in the mid to late 1990s (for example, eBay and PayPal) led to opportunities being further increased for remote workers being able to buy and sell marketable products from their homes or virtual offices. Modern employment practice has now partially moved away from the traditional head office or factory paradigm to a more flexible and decentralised approach that now includes the home environment (Kurland and Bailyn, 1999). Rising numbers of remote workers have also been linked to the changes in UK employment legislation in 2003, which

gave employees the right to request flexible working, and for their employers having a statutory duty to consider such requests appropriately (Grainger and Holt, 2005).

In the past, managers temporarily allowed remote working for office-based employees to undertake individual tasks or short-term assignments (Mokhtarian and Salomon, 1996). However, the current context for remote working is far more formalised and has become an integral part of an organisation's operational structure. As a result, a growing number of organisations have accepted that remote working offers mutual benefits and has become part of the corporate landscape (Lautsch *et al.*, 2009). The BT Group is one of the UK's largest public limited company employers, with 106,400 full-time equivalent (FTE) employees in 63 countries, and 82,800 based in the UK (BT Group, 2017). BT (formerly known as British Telecom) started their first official telework scheme, the 'Inverness experiment' in 1993 and by 2007 they had over 70 percent of their employees working flexibly with nearly 10 percent of these employees being home based (BT, 2007; Hills, 2002). The major driver for BT to implement the telework project was to decrease their expenditure on office accommodation (Hopkinson *et al.*, 2002). However, flexible working arrangements can be an ideal solution for employees who find it difficult to attend an office every day because of home or personal circumstances.

A myriad of motivations and reasons are cited for the uptake of remote working for employers and employees. For employees the reasons can include: parents with child care responsibilities, mature workers caring for ageing parents, to reduce commute travel, couples trying to balance busy work schedules, and to achieve a better work/life balance (Foster, 2012; Johns and Gratton, 2013; Reeves, 2003; Tremblay, 2002). For employers remote working has been viewed in many different ways. First, as a reward given to hardworking and trusted employees in order to create or maintain a performance driven culture (Taskin, 2009; Taskin and Edwards, 2007). Second, as a measure to increase the productivity of certain types of employees (Golden *et al.*, 2008; Tremblay and Genin, 2007). Finally, as a method to significantly reduce the expenditure on office

accommodation for employees (BT Group, 2017; Daniels *et al.*, 2000; Green *et al.*, 2003; Hopkinson *et al.*, 2002).

In contrast, to the positive outcomes previously discussed, negative consequences also occur from remote working and these include: work and family conflict/tension (Baines and Gelder, 2003; Harris, 2003), reduced organisational and management visibility leading to reduced career development and opportunities (McDonald *et al.*, 2008; Tietze and Musson, 2005), increased working hours, personal isolation, stress and wellbeing issues (CIPD, 2016; Crawford *et al.*, 2011; Harris *et al.*, 2003; Tremblay, 2003), and the additional costs involved with operating a home office that includes, lighting, power and other sundry items (Harris, 2003). Notwithstanding the benefits and disadvantages for employees and employers linked to remote working, an ever-increasing number of organisations are now using remote employees. One salient reason highlighted in the research of Doyle (2000) is that knowledge work is no longer being viewed as linear or ideally suited to a conventional 9-5 structure, as working patterns have now become more diverse. Thus, the complexities of understanding and managing remote employees are an ever-increasing challenge for modern organisations (Maruyama and Tietze, 2012).

2.3.2 Type of remote employees

Crawford *et al.* (2011) define remote employees as people that spend the majority of their working time away from their organisation's head office. As the interest increases with this category of employee, so does the precision of the literature and the terminology that surrounds it. A myriad of terms to describe the overarching concept of remote working have been developed. These include telework/telecommuting (Nilles, 1994), flexible work (McCloskey, 2001; McCloskey and Igarria, 1998), and home office work (Hill *et al.*, 2003). All of these colloquial terms describe employees who are absent from the traditional head office for a defined percentage of their working week and as such this type of remote worker is only partly separated from other employees. In contrast, virtual work/employees (Handy, 1995), distance work (Napier and Ferris, 1993), and distributed work (Belanger and Collins, 1998) all describe employees who generally work away from a traditional head office nearly full-time, potentially live

in different geographic regions and experience nearly full-time separation from other employees. Telework/telecommuting employees normally maintain a work desk/station in their head office, whereas virtual work/employees often do not. These fundamental differences change the nature of the social exchanges (Blau, 1964; Homans, 1958) that occur and create different challenges for organisations and managers (Golden and Fromen, 2011).

To maintain consistency with prior research (Belanger and Collins, 1998; Handy, 1995; Napier and Ferris, 1993), remote employees will be considered from the virtual work/employee definition. Remote working has given employees increased flexibility to choose their area of residence without the normal constraints of commutable distance being unduly considered (Maruyama and Tietze, 2012; Tietze *et al.*, 2006). However, concerns from managers regarding productivity being achieved from remote employees has led to new methods being developed that monitor virtual not physical presence to determine active engagement with job related tasks (Lautsch *et al.*, 2009; Napier and Ferris, 1993). The exchange relationship between remote employees and their manager due to greater managerial distance and absence from the head office can have significant adverse consequences (Gajendran and Harrison, 2007; Monge *et al.*, 1985). Thus, managers play a pivotal role in shaping the work experiences and outcomes of remote employees (Gerstner and Day, 1997). Kossek *et al.* (2006) remonstrate that managerial approaches and the scheduling of work may be out of date because most were developed based upon on homogeneous head office schedules, with mostly face-to-face supervision. Allowing remote employees to choose when they start and finish work whilst ensuring aligned core hours to ensure that virtual meetings or customer support are available can increase productivity, corporate commitment and wellbeing (BT Group, 2017; Maruyama and Tietze, 2012).

According to the research (BT Group, 2017; Lautsch *et al.*, 2009; Maruyama and Tietze, 2012; Napier and Ferris, 1993), the concerns regarding the work effort diminishing with distance have been commonly based upon the ability of a manager to measure accurately the effort of the remote employees. Thus, missing from the current research is specific literature for managers to support and manage non-traditional work modes effectively (Golden and Fromen, 2011). The need for managers to create clarity of purpose for remote employees to minimise

ambiguity whilst ensuring an appropriate level of work is available is a challenge (Cooper and Kurland, 2002; Golden *et al.*, 2008). However, creativity and innovation that is strongly associated with knowledge workers is often created through unplanned interactions with others (Raghuram *et al.*, 2001). Remote working can be isolating and lead to insular behaviours that may become a disruptive factor for organisations in their pursuit to promote teamwork and collaboration (Golden *et al.*, 2008).

2.3.3 Corporate commitment and motivation

Corporate commitment and motivation are intrinsically linked and considered key factors for employees and organisations (CIPD, 2016). The strategical alignment of employees to an organisation's vision and mission creates a coherent march towards the future. Thus, cultural environments need to adapt to counteract the reduction in visibility of remote employees and provide new communication networks between remote employees and office-based employees (Taskin and Edwards, 2007; Tietze *et al.*, 2006). Organisational knowledge systems and flows need to incorporate and effectively manage the cultural and social topography to harness the competitive advantage of remote employees. Thus, as these mechanisms and systems mature and become more established the productivity and aspirations of remote employees will increase (Lautsch *et al.*, 2009). Remote working within the managerial ranks is increasing with the advancement of modern technology, and from managers demanding more flexibility within their own roles (Bailey and Kurland, 2002; Golden *et al.*, 2009).

Despite the parity of needs for employees and their line managers, the research has been remiss in focussing upon their experiences and needs. Considering managers who work remotely and, who have responsibility for staff working remotely too, is a currently neglected area of research. Managers working remotely are susceptible to the same feelings of isolation, work-family conflicts, reduced visibility and feedback as their staff (Cooper and Kurland, 2002; Golden *et al.*, 2006; Golden *et al.*, 2008; Hill *et al.*, 1998). This commonality of needs with managers and their staff can lead to a domino effect being created without the needs of remote managers being adequately supported by their organisation. The distance and isolation potentially leads to reduced levels of social exchanges for remote

employees. Monge *et al.* (1985) contended that distance and absence from the office led to a decline in the quality of exchanges between a manager and their subordinates. In contrast, Gajendran and Harrison (2007) maintain that managers are fully responsible for the work experiences of their subordinates and need to change their style of management to maintain the exchange relationship for remote employees. Maintaining a healthy exchange relationship is an imperative for remote employees and their managers as without it significant adverse consequences can ensue (stress, a reduction of wellbeing and job satisfaction) linked to reduced levels of corporate commitment and motivation (Gerstner and Day, 1997; Golden *et al.*, 2008).

2.3.4 Work experiences

Providing a positive working environment for employees is vital in maintaining a healthy and supportive organisational culture. The experience of working remotely can offer employees the opportunity to manage their family responsibilities or achieve an improved work/life balance by reducing commuting time and its associated costs (Foster, 2012; Johns and Gratton, 2013). However, these benefits can soon become forgotten if the experience of working remotely leads to feelings of loneliness and apathy for an employee. Organisations need to ensure that their remote working policy receives appropriate support throughout the organisational supply chain to allow it to be fully embraced and embedded within the organisational culture (Ryan and Kossek, 2008).

The organisation and its management sets the tone for the subsequent outcomes linked to work experiences (clarity of purpose, empowerment, feedback, professional development and workload) and work outcomes (attrition levels, job satisfaction and work climate/culture) experienced by its remote employees by defining the quality and frequency of exchanges enacted (Golden and Fromen, 2011). Email and other forms of electronic communication mediums are less effective than interacting face-to-face with employees (Daft and Lengel, 1986). The constraints of electronic media stifle a purely natural flow of information in real time from a situation and readily provide opportunities for misunderstandings due to a lack of clarity, contextual indicators and nuances (Rice and Gattiker, 2001). Meaningful work that has clear objectives and allows appropriate support for cognitive and emotional needs creates a behavioural state towards organisational

alignment for employees (Shuck and Wollard, 2010). According to Saks (2006), engaged employees exhibit attentiveness and mental absorption in their work that promotes improved levels of wellbeing.

2.3.5 Remote employee wellbeing

The attention placed upon corporate commitment and wellbeing has risen sharply over the past decade. This has been supplemented by the increased recognition of the positive link between employee commitment and wellbeing as well as the long-term health of an organisation (Kelloway *et al.*, 2012; Shreeve *et al.*, 2015). Ryan and Deci (2000: 142) define wellbeing as, 'optimal psychological functioning and experience' that encompasses several aspects of personal health. Strategically, an organisation has a duty of care to all of its employees to mitigate workplace risks, and an intrinsic desire to improve the levels of employee engagement. Wellbeing is a principal part of employee engagement that includes five domains: collective/social, health, personal growth, values/principles, and work (CIPD, 2016). Therefore, subjective wellbeing requires internal and external factors to be acknowledged whilst accepting the significant responsibility an organisation has towards its employees (Byrne *et al.*, 2013). Thus, strategic wellbeing should be at the core of an organisation's *modus operandi*, and not merely a sporadic activity performed by the human resource department (CIPD, 2016). Research by Putnam (2001) concluded that individual measures of wellbeing have two associated components, individual level and state-level variables that link to the relative contributions of family, health, income, and social connectedness. In contrast, Arnold *et al.* (2007), Kelloway *et al.* (2012) and Van Dierendonck *et al.* (2004) advocate that the quality of management behaviours within a workplace predicts health and wellbeing of an employee. Van Dierendonck *et al.* (2004) findings concluded that, less consideration had been given to the wellbeing of managers. Critically, this research omission highlights that a manager's own wellbeing is instrumental in the quality of their management behaviours that directly affect their team's wellbeing (Brunetto *et al.*, 2012; Byrne *et al.*, 2013). Valuing the differences of the remote employees is paramount in enabling a corporate culture of inclusiveness to exist. A strong focus needs to be on valuing and embracing the differences across all types of employees with a key focus on productivity, not location, lifestyles, or family demands (Mor Barak, 2000; Pless and Maak, 2004;

Ryan and Kossek, 2008). Organisational policies that support work/life balance are increasingly becoming ineffective without having adequate support from management and leadership. Thus, remote employees require a different approach from their head office counterparts, as different daily work experiences exist that include clarity, culture, empowerment, feedback, job satisfaction, professional development, and workload, although these experiences have varying levels of impact depending on the self-efficacy and wellbeing levels of the remote employees (Casper and Harris, 2008). Research by Jacobs (2008) of engineers working remotely concluded that commitment to an organisation was a key driver for organisational success.

Fundamentally, remote workers need to feel part of an organisation to move forward from their current disposition (Ryan and Kossek, 2008). This requires an enhanced approach to maintaining the levels of corporate commitment and wellbeing amongst this type of worker. Further studies highlighted that securing corporate commitment was essential in improving intrinsic motivation and productivity (Connaughton and Daly, 2004; Hertel, 2004; Mirchandani, 1999). The paradox of this finding is that the very notion of being remote damages the cornerstones of how corporate identities manifest themselves. Macleod and Clarke (2014) and Wiesenfield (1998) contend that employees need be physically exposed to shared structures and systems to maintain and reinforce their corporate identity. Without this linkage, remote employees become autonomous and start to operate for themselves rather than for a shared set of goals and values. Maintaining the commitment and motivation towards shared ideals and goals gives meaningful purpose and this has considerable benefits to employee wellbeing (Postmes *et al.*, 2001). Physical separation from each other and corporate tangible and intangible assets provides considerable challenge for an employer of remote employees with vertical and horizontal communication becoming an imperative for an organisation. However, this becomes a more complex proposition when all of the remote employees are also mobile. Both scholars and practitioners have described organisational commitment as the willingness of an employee to remain with an organisation and to promote and act in its best interests (Cheney and Tompkins, 1987; Meyer and Allen, 1997; Mowday, 1998; Postmes *et al.*, 2001). However, remaining with an employer can be for other reasons other than

commitment. Passing is commonly used as a way to remain superficially committed and hide behaviour that is more Machiavellian in nature. Moreover, a willingness to continue with an organisation does not indicate the type or level of intent of the employee (Purcell, 2012).

2.4 Job satisfaction

2.4.1 Creating and maintaining job satisfaction

According to Hsu and Wang (2008) job satisfaction is regarded by many employees as one of the most important elements relating to their work. Weiss (2002: 175) define job satisfaction as, 'a positive (or negative) evaluative judgment one makes about one's job or job situation'. A richness of literature discusses job satisfaction and its associated organisational variables that include absenteeism, job performance levels, organisational commitment, and staff attrition levels (Judge *et al.*, 2001; Kammeyer-Mueller *et al.*, 2005). Job satisfaction has been associated in supporting improved levels of wellbeing and a reduction in stress (Faragher *et al.*, 2005). In the study by de Menezes (2011) the importance of job satisfaction for both employee and organisational outcomes, associated with corporate commitment, productivity and quality were concluded. Furthermore, the failure or success of customer experiences (Akdere, 2009; Hsu and Wang, 2008), have also been associated with the satisfaction levels of employees. However, in explaining job satisfaction the extant research typically focuses on predictor variables in terms of levels of job satisfaction, but neglects the rates of growth (Keller and Semmer, 2013). Thus, it remains unclear how the levels of job satisfaction for an employee change over time and the underlying causes attributable to an organisation for such a change in these rates. Despite the importance of job satisfaction for employees and their organisations static values are commonly used to measure how employees are feeling using periodic surveys. Utilising a more dynamic approach that explores and reacts in real time to employees feelings offers a more contemporary and iterative solution. Keller and Semmer (2013) identified two key findings in their research conclusions that contributed to sustained levels of job satisfaction: job design that allowed defined levels of autonomy with sufficient and increasing levels of control and, appropriate levels of personal development being provided by the organisation. These two elements allowed employees to manage more effectively their initial levels and future

growth rates of job satisfaction by achieving a reasonable fit between their job characteristics and their needs and goals.

The demand on modern employees has increased with technological advances creating a culture of 24/7 availability to become more prevalent (Varje *et al.*, 2013). Indeed, this exponential growth of availability has led to a greater interest in the notion of employee engagement within the current research literature (Chalofsky, 2010; CIPD, 2016; Robertson and Cooper, 2010; Wollard and Shuck, 2011). Employee engagement has been positively linked to corporate commitment, job satisfaction and performance (Bakker and Demerouti, 2008; Saks, 2006; Shuck, 2011; Xanthopoulou *et al.*, 2009). Despite this current interest, the roots of modern employee engagement theory can be traced back to the original work of, Frederick Taylor, Lillian Gilbreth, Mary Parker Follett and Elton Mayo (Bedeian, 1998). Thus, the desire and component parts for employee engagement have been present and considered throughout management history. The concept and term employee engagement that is currently being used can be linked back to the research by Kahn (1990) that was centred on the psychological conditions associated with personal engagement and disengagement at work. This seminal work identified engagement as a construct with three dimensions, namely: absorption, dedication and vigour. As a result, these three dimensions have led to organisations being able to pursue a deeper understanding of how they influence the satisfaction and engagement levels of their employees (Wollard and Shuck, 2011).

Engaged employees have a plethora of benefits for an organisation ranging from having positive connections towards their work, feelings of being effective while performing their job role and readily accepting new challenges (Burke *et al.*, 2009; Staples *et al.*, 1999). Furthermore, these feelings towards their role can lead to an employee losing track of their time and entering into a euphoric 'flow' state with total absorption (Csikszentmihályi, 1990; Gonzalez-Roma *et al.*, 2006). Engaged employees also expend more effort whilst at work (Erickson, 2005) and need significantly less management time and effort because of their intrinsic motivation (Deci and Ryan, 1985) and have higher levels of organisational commitment

(Hakanen *et al.*, 2006). Yet, clear warnings for organisations and managers exist within the nuances of the literature discussing engagement and job satisfaction.

Employees need to be able to have the ability to accomplish what they aim for, and trust that they will be actively encouraged and supported to do so by their organisations. Intrinsic motivators drive an employee to perform a task because they have a deep-rooted belief that their action will make a difference for the organisation and its customers (Bandura, 1997, 2006). Thus, an employee must trust in their abilities to accomplish their aims and adjust to the expectations of others (Grachev and Rakitsky, 2013; Tams, 2008). An employee successfully exhibiting the behaviours necessary to yield a certain outcome is defined as self-efficacy (Bandura, 1977). Previous theoretical and empirical research has positively linked the performance of employees to their levels of self-efficacy (Judge *et al.*, 2007; Stajkovic and Luthans, 1998; Xanthopoulou *et al.*, 2007). However, this link has not clarified how self-efficacy relates to each dimension of employee engagement, and the impact that different dimensions have on the levels of self-efficacy for an employee (Schaufeli *et al.*, 2001; Xanthopoulou *et al.*, 2007).

2.4.2 Management style

Although self-efficacy is undoubtedly important for engagement and job satisfaction, management styles have a considerable influence and bearing on the levels of satisfaction and corporate engagement experienced by employees (Bedeian, 1998). The level and appropriateness of management support given to an employee is challenging and requires careful consideration. Managing the levels of commitment and motivation towards shared ideals and goals to allow meaningful purpose for employees has considerable benefits for organisations (Postmes *et al.*, 2001). Physical separation from other employees and corporate tangible and intangible assets provides considerable challenge for managers. Research by Jacobs (2008) of engineers working remotely, focussed on their commitment to an organisation and identified that this could be improved by having effective communication systems in place.

The bridge between the organisation and the remote employees is their manager who is responsible for maintaining the corporate identity by giving clear and

adequate feedback (Schachter, 2010). Thus, a manager needs to ensure that employees are being given meaningful work that promotes mental and emotional investment leading to improved engagement and wellbeing (Shuck and Wollard, 2009; Wagner-Tsukamoto, 2008). Improved industrial relations and human resource practices aid managers in their pursuit to earn the trust of their employees and enhance their motivation to collaborate and contribute to the success of an organisation (Novicevic *et al.*, 2011).

In a modern work environment, managers are expected to provide appropriate support to their employees in order for them to develop the necessary skills, competence and motivation to improve their levels of engagement and corporate commitment (Le Texier, 2013). Dagher *et al.* (2015) concluded their study with a declaration that future research is needed to gain an improved understanding of the current levels of employee engagement and commitment within the workplace, with a focus on supervisors and managers and their impact on employees. A further limitation from their findings and others (Bakker *et al.*, 2011; Jacobs, 2008; Le Texier, 2013; Novicevic *et al.*, 2011) is the absence of data relating to RMEs.

2.4.3 Job satisfaction and its links to employee wellbeing

Human beings have pursued wellbeing and its holistic benefits since ancient times. The wellbeing of employees is seen as a vital component in the on-going success and development of an organisation (Spreitzer and Porath, 2012). According to Zheng *et al.* (2015), three dimensions of wellbeing exist: life, psychological and workplace. Although, all three are intrinsically linked, the focus of this research is towards the workplace element to identify ways for an organisation to improve. The wellbeing of employees is affected by a plethora of factors and is driven by the perception an individual has of workplace events. A different life stage of an individual is one such factor and this can directly affect their wellbeing levels within the workplace causing fluctuations to the equilibrium (Sonnetag and Ilies, 2011; Xanthopoulou *et al.*, 2012).

Nowadays for most people, working is considered a crucial part of their lives, and as such, it applies a great deal of influence on their wellbeing. However, the situations in the workplace differ greatly from general life. This distinction has led

to the concept of employee wellbeing as a separate term being developed and distinguishable from general wellbeing. Up to now, researchers have not reached a consensus on the definition of employee wellbeing (Page and Vella-Brodrick, 2009). Employee wellbeing is a term that everyone uses and understands but nobody can give a precise definition of what it actually means (Lyubomirsky, 2001).

According to Ryan and Deci (2001), wellbeing consists of two key philosophical perspectives, the first perspective is happiness-oriented or hedonism, which defines wellbeing as the subjective experience of happiness. The second perspective relates to human potential power or eudaimonism being realised, which considers wellbeing to be the result of personal achievement, self-actualisation, or self-positioning. The validity of these two distinct paradigms have been mostly accepted in the current research and has led to either perspective being utilised and developed further (Diener and Ryan, 2011; Ryff and Singer, 2008). In the exploratory study by Zheng *et al.* (2015), six items were identified that strongly linked to employee wellbeing: satisfied with their work responsibilities, satisfied with their job, finding real enjoyment in their work, always able to discover methods to enrich their work, work as a meaningful experience, and feeling satisfied with their work achievements in their current job. Thus, finding ways to provide meaning, purpose and enrichment at work to drive job satisfaction and improved wellbeing levels are to be encouraged.

Line managers are pivotal in managing and enhancing employee wellbeing by implementing a holistic approach that is both preventative and proactive. Organisations need to take an approach to employee wellbeing needs that are sustainable and linked to both their corporate strategy and the needs of the workforce, and integrated within their people management activities (CIPD, 2016). Creating and maintaining a healthy and nurturing culture is possibly the greatest challenge for modern organisations in promoting employee wellbeing, as it requires committed leaders and managers and, for many, a reassessment of their key priorities. A culture that is not supportive of wellbeing can undermine the efforts of an organisation where there is a perceived disconnect between rhetoric and reality. However, the benefits of an embedded wellbeing culture are far reaching and go beyond just a reduction in employee absence and its associated

costs. Organisations that are able to promote and value the health and wellbeing of employees genuinely will benefit from improved levels of employee engagement, retention, performance and productivity (CIPD, 2016).

2.4.4 Strategic alignment and change

The new generation of employees have changed and developed different attitudes towards their work. As a result, employees have moved their focus away from job security and more towards experiences, learning opportunities and social relationships. Knowledge and experience are essential for the success of an organisation and changes in the ownership of intellectual capital from management to employees has potentially shifted the power balance in the direction of employees (Gollan and Xu, 2014). Thus, the traditional view of effective employees (satisfied and committed organisational citizens) that are unable to deal with the complexity and continuous changes associated with modern roles and organisations is questionable (Parker *et al.*, 2006).

Job related structures and roles for remote employees have the potential to become more ambiguous, loosely defined and malleable, leaving little or no structure to adapt (Gollan and Xu, 2014). This uncertainty offers an employee the opportunity to identify the optimal methods of execution of their current tasks and to support the long-term strategic needs of the organisation through a more proactive approach (Parker *et al.*, 2006). However, this requires a supporting culture of sustainability that accepts and encourages change and innovation while creating new ways of developing and re-developing employees and systems.

The long-term survival of the organisation in a complex and chaotic world relies upon its ability to adapt quickly and remain relevant to its customers (Gribbin, 2004). Thus, a key challenge for modern organisations is to manage and safeguard the intellectual capital or the 'corporate memory' of its employees by improving the levels of organisational synergy with its remote employees (Mulki *et al.*, 2009). Modern working practice is losing its spatial fixity because of knowledge workers (intellectual capital), changing employee needs, new technology and, cost saving practices (Felstead and Henseke, 2017). This paradigm shift provides a timely opportunity for the compositional factors associated with remote working to be explored further.

Classic thinking links back to Herzberg's (1968) two-factor theory of motivation, which identified that two sets of factors were needed to influence the motivational levels of employees. First, hygiene factors (external/extrinsic) were needed and provided the basic needs of an employee to create a foundation for the second tier. Thus, motivating factors (internal/intrinsic) were built upon this foundation to assist in the promotion of improved levels of satisfaction, commitment and discretionary effort. However, despite the limitations of this theory related to its attributional bias of self-reporting and its strong correlation to largely homogenous work patterns, it still remains influential and relevant today (Robinson, 2006). Despite its continued relevance the complexities associated with modern organisations and their employees overshadow its innate abilities to deliver the required levels of clarity and change (Wheatley, 2017).

In contrast, complexity theory proffers that an acceptance of the three cornerstones: chaos theory, dissipative structures and, complex adaptive systems will allow an organisation to be viewed as a complex and adaptive entity (Burnes, 2005; Stacey, 2011). Modern organisations exist in non-equilibrium conditions where cause and effect analysis becomes ineffective at predicting the future. Thus, employees should not be considered or treated as 'complicated' systems that can be fully explained and predicted. Instead, they should be considered a 'complex' system that is disordered and unpredictable (Murray, 2003).

The overarching metaphor of the work of Burnes (2005) and Stacey (2011) is that organisations/managers should be focusing on the small things as they have the potential to become the big things. All employees within an organisation have a residual effect and by moving away from them having a narrow participation in the change process will permit a stronger strategic alignment for an organisation with its employees. As a result, there should be less destabilizing actions to reduce the effects of the change and higher levels of corporate commitment (Houchin and Maclean, 2005).

2.5 Conclusion and conceptual framework

2.5.1 Conclusion

The review of the existing literature has highlighted the complexity that an organisation and its managers are faced with in maintaining a mutually beneficial relationship with its remote employees. Indeed, the focus of effective corporate commitment, the need for the manifestation of organisational identification for remote employees, the role of communication in maintaining knowledge transfer, and providing an effective foundation for intrinsic motivation and improved wellbeing are challenges for organisations and their managers. Given the continued popularity and continued growth of remote working, future research needs to consider carefully the different types of remote employees and their associated modes of operation. The levels of corporate commitment and wellbeing of employees are considered fundamental in maintaining a healthy and engaged workforce. However, it is evident from the literature review that there is at present a lack of information and research focussed principally upon RMEs. This gap in the focal literature reviewed here has provided the opportunity for our research questions to be developed hopefully leading to the generation of some new data and additional understanding.

2.5.2 Conceptual framework

Creating a new paradigm and framework to allow an improved organisational relationship to be enacted is a valuable contribution to move existing research and knowledge forward. Key findings from the literature review have been synthesised in graphical form and are shown in Figure 2.2. These findings contend that the three theoretical concepts reviewed: Role Identity, Remote Working and Job Satisfaction and their related components are strongly associated with remote employees developing a positive alignment with their organisation.

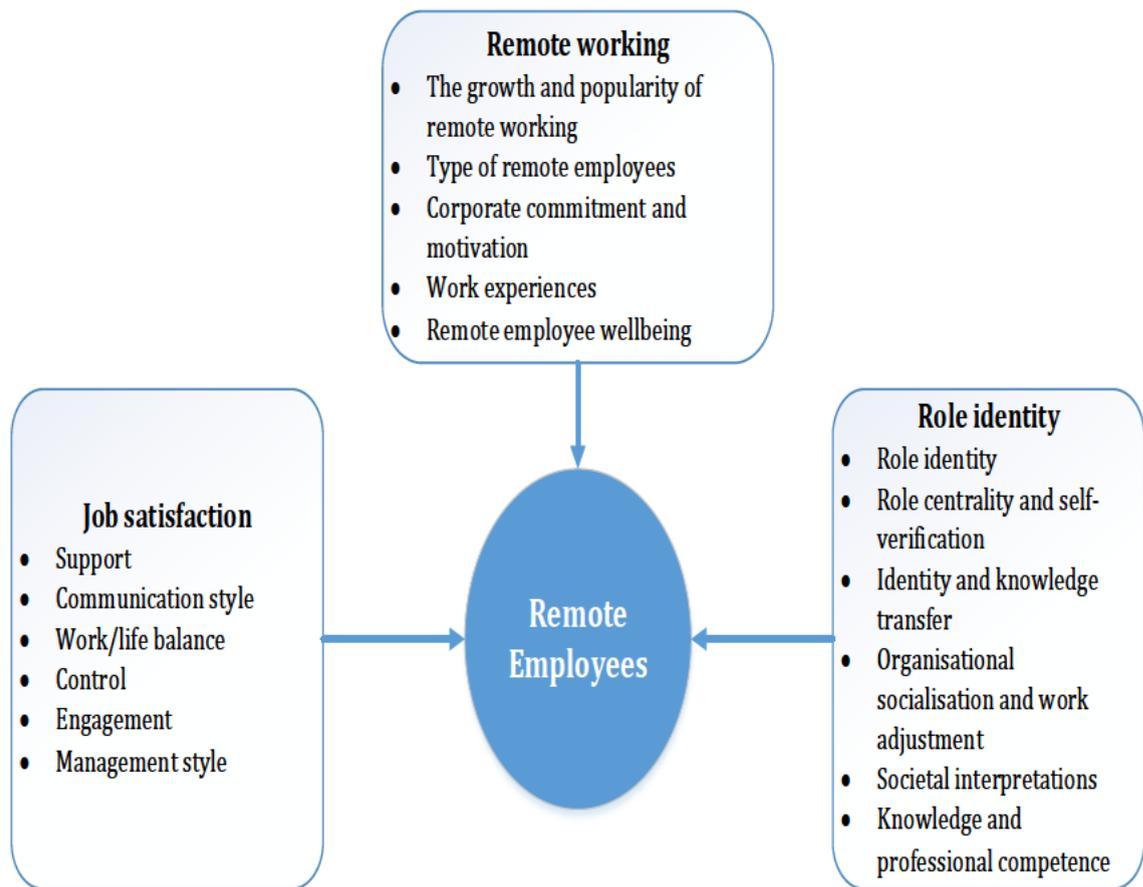


Figure 2.2: Key findings from the literature review

Using the key findings highlighted in Figure 2.2 as the basis for further synthesis, a conceptual framework for RMEs has been constructed and is shown in Figure 2.3. This framework links the three reviewed theoretical concepts to the two basic research questions for RMEs namely, ‘What are the key factors that contribute to the positive and negative levels of corporate commitment and wellbeing among RMEs?’ and ‘What dimensions of the RME role could be redesigned to help improve corporate commitment and wellbeing?’ The symbol context of role identity and remote working allows the interpretive scheme to manifest itself as job satisfaction with the resultant outcome of this leading to enhanced levels of corporate commitment and wellbeing among RMEs.

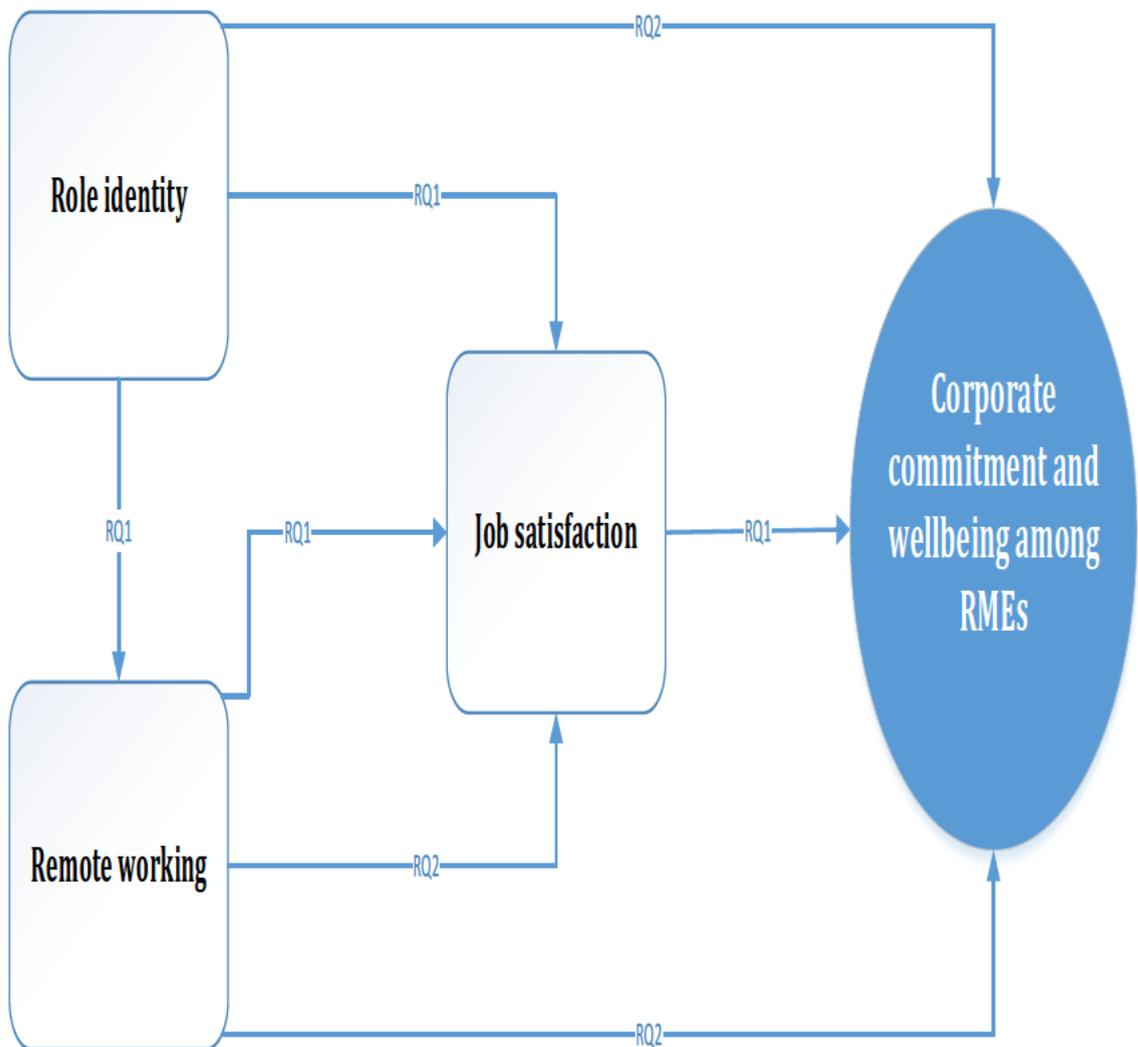
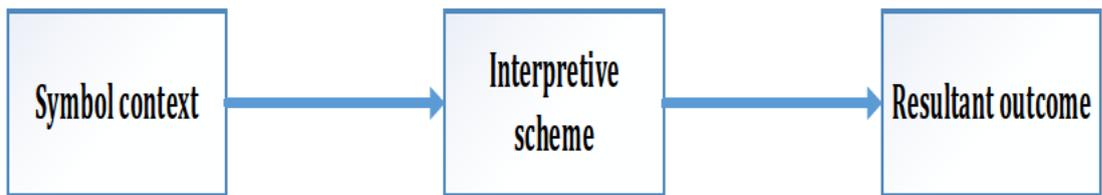


Figure 2.3: Conceptual framework for RMEs

This research will now investigate further the concept of RMEs and the impact an organisation has on their corporate commitment and wellbeing.

Chapter 3: Research methodology

3.1 Introduction

The preceding literature review chapter demonstrated the journey from the conception of a research idea to the construction of specific research questions. The literature review and gaps identified supported the creation of the RME conceptual framework. This framework contains distinct elements that require an appropriate research design. This chapter will begin with an insight into the philosophical position of the researcher, and will also consider the background of the research Organisation and its belief structure. The key considerations for the research design will then be discussed and linked to the process used for selecting a suitable methodology to address the research questions. The implementation procedures will then be discussed highlighting the methods deployed to collect and analyse the data. Finally, the salient ethical considerations for the study will be discussed.

3.2 Research methodology and context

3.2.1 Philosophical position of the researcher and the Organisation

Methodology is a broad term that is understood to mean, within the context of this research, the ontological and epistemological beliefs that decide the methods selected to explore the research questions (Kaplan, 2009). Methods are understood to mean the procedural tools or techniques that are used to collect data and include interviews, focus groups and questionnaires (Carter and Little, 2007). The Organisation forming the basis of the research operates from a corporate level positivist stance that emanates from its engineering and scientific heritage and its principal employees being engineers. This culture readily accepts deductive and quantitative research methods as the normative approach. Thus, the research culture has been identified as having a strong orientation to being process/task driven that is mechanistic in nature (Driskill and Brenton, 2005). It is recognised that the personal beliefs of the researcher will influence the design of the research. Thus, it is important to have a clear understanding of an individual's own beliefs, his 'personal paradigm' so to say, throughout the research process. Therefore, the bias of the researcher within this process is duly acknowledged and is now

declared. The researcher operates from an ontological position of critical realism and social constructionism. The researcher has an overarching desire to link the disciplines of traditional research and professional practice by being a critically reflexive research-practitioner (Cromby and Nightingale, 1999). Having an extensive engineering background (Chartered Engineer) before entering senior management within the Organisation researched here has allowed the researcher to have some appreciation of the benefits and limitations of positivism and its associated deductive and scientific methods that underpin this approach. However, throughout the duration of the doctoral training undertaken by the researcher, its limitations have become more apparent and acute with reference to subjectivity and the collection of rich and in-depth data. The research is mainly exploratory and will disregard hypothetico-deductive assumptions therefore a mixed methods approach will be undertaken for the research, one that hopefully combines the strengths of both quantitative and qualitative research.

The researcher will adopt a theoretical philosophical position within this research of a critical realist within a social constructionist paradigm. The selection of an appropriate methodology that supports the aims and objectives of the thesis, whilst remaining true to the underlying philosophical, ontological and epistemological views of the researcher is of paramount importance and will now be critically discussed.

3.2.2 Methodological selection process

Being a research-practitioner that is critically reflexive provides an awareness of the possible hazards associated with giving excessive credibility to research and practice that is commonly known and used (Isaacs and Fitzgerald, 2011). As a result, all assumptions must be accordingly challenged, whilst remaining mindful of alternative marginal theories. The assumptions and position of the researcher within their daily role and within the research process are no way mutually exclusive, but indistinguishably linked to the same paradigm. Therefore, the selected methodology must allow the researcher the ability to remain detached and objective from the RME (remote and mobile employee) participants of the research with respect to the gathering of the data and the subsequent analysis process. However, can a researcher ever be truly objective and detached from their

research? The researcher has acknowledged his arguably privileged insight into what the RME participants and the Organisation value and considers being the normal and accepted practice. The shared understanding of being an engineer and a senior manager that is acutely aware of strategic and organisation plans creates a transactional dynamic that can be either intentional or unintentional. This dynamic precludes the researcher from being able to remove themselves from the research process (Lilienfeld *et al.*, 2011).

In terms of assisting reflexivity, this observation could be regarded as advantageous, though there is, a related risk of the research data being interpreted from an emotional reaction that could affect the validity of the study. However, immunity from this affect can never be entirely removed, but the process of reflection allows the researcher to be more mindful on the introspections of others and not their own to maintain the validity of the study (Pronin *et al.*, 2004). The reflective process is vitally important and its benefits should not be reduced; nevertheless, the process should not dominate or overshadow the reflective views of others. Maintaining a suitable professional distance from the participants is required to provide an ethical barrier and to reduce biases.

The imperative of the research is to ensure that the historical perspective of the researcher (Pronin *et al.*, 2001) does not overshadow the voices of the participants. Therefore, to select an approach that would serve to support the power relationship within the research, after this potential issue has been highlighted would be remiss of the researcher. Thus, taking into account the stated problem, the aims and objectives of the study, the research questions and the philosophical position of the researcher, the salient points for the methodology to consider are shown in Table 3.1.

Table 3.1: *Research methodology considerations*

Point	Considerations
1	To address appropriately the stated problem, the aims and objectives of the study, and its research questions.
2	To be true to the philosophical position of the researcher and of the Organisation.
3	To consider and if possible resolve the ethical issues relating to the researcher working with the RMEs and their former and current professional experiences.
4	To consider, complex, multi-faceted discourses and, social constructions using a structure to bring clarity.
5	To provide a mechanism to record shared viewpoints, whilst ensuring that individual voices are heard and valued equally within the process of data collection and analysis.
6	To minimise the potential power dynamic between the researcher and the RMEs.
7	To provide professional distance for the researcher, to allow the voices of the RMEs to become dominant, and to minimise the influence of the researcher within the process of data collection and analysis.
8	To maintain the exploratory nature of the research, without imposing a priori assumptions or hypotheses.
9	To be able to accommodate participants from differing sample groups.

After carefully reviewing the nine considerations in Table 3.1 and critically reflecting on the findings from the literature review in Chapter 2, the most appropriate methodology to achieve the intended aims of the study was selected. Q methodology affords a unique opportunity for the researcher to use a mixed methods approach that had been unused previously for this type of study. It also provides a sufficiently strong and rigorous quantitative approach to satisfy the Organisation's positivist culture (see, 3.2.1) and combines this with an innate ability to gather individual viewpoints using its qualitative elements.

Q methodology will now be discussed giving a brief outline of its history and development followed by an in-depth review and explanation of its underpinning methods for data collection and analysis. A review of its strengths and limitations will also be conducted.

3.2.3 Q methodology in context

Q methodology was developed as a mechanism to study subjectivity by using quantitative and qualitative techniques to gather subjective viewpoints (Stenner, 2008). A glossary of common terms relating to Q methodology can be found directly after Chapter 6 to offer further explanation and detail.

Q methodology has been selected because it affords a strong foundation for the systematic study of subjectivity linked to personal viewpoints and opinions (Brown, 1993). It has two key strengths as a methodological approach for this study: First, the primary data collection method will be from using Q sorts, and these will be subjected to inter-correlation and by-person factor analysis. Second, it will suit the Organisation's research culture and quantitative paradigm with its scientific rigour and analysis techniques being incorporated within its mixed methods approach (Jones *et al.*, 2011). Watts and Stenner (2012) comment that, Q methodology can be considered an abductive process that is positioned centrally between deductive and inductive research and focusses on the exploration of observed phenomena and attempts to provide possible explanations.

William Stephenson first introduced Q methodology in a letter to the Journal, 'Nature' in 1935. It was advocated, as an alternative to the traditional empirical qualitative and quantitative methods being used. The fundamental proposition was an adaptation (transposal of the variable and people elements) to the 'R' methodology that normally identifies correlations between variables amongst a set of people. Its development took place from within a psychological study with the purpose of challenging the principal paradigms of psychological enquiry, specifically those of behaviourism and cognitivism (Stenner, 2008; Watts and Stenner, 2005a). Stephenson (1935) identified that the traditional methods of psychological psychometric testing were insufficient in that they only revealed commonalities between tests (for example, IQ scores or personality traits), by grouping together and correlating test scores (Brown, 1993). This process is commonly known as 'R methodology', or 'by-item factor analysis', and uses the participants as 'subjects' and the questions or test scores as the 'variables' (Webler *et al.*, 2009). The patterns across variables are used in R methodology to see if the value of one test score is associated with the value of another test score

for the same participant. In contrast, Stephenson (1935) created by-person factor analysis where the Q set became the 'subjects' and the individual Q sorts became the 'variables' which is an inversion of the original process. As a result, Q methodology is able to correlate the manner in which individual Q sorts cluster together to form similar or shared viewpoints (Plummer, 2012; Wint, 2013). Q methodology uses by-person factor analysis to highlight patterns that exist between Q sorts. This is accomplished by comparing the value of one Q sort with the value of another Q sort for the same Q sort statement (Webler *et al.*, 2009). As a result, Q methodology can be used to identify subjective viewpoints using a structured quantitative framework. Thus, it is by combining both qualitative and quantitative elements that results in it frequently being referred to as a 'qualiquantological' methodology (Stenner and Stainton Rogers, 2004). As such, it straddles the division between quantitative and qualitative paradigms, and combines the strengths of both, to elicit according to Stephenson (1935: 205), 'empirical discoveries of a qualitative kind.'

The main aim of Q methodology, is to examine and explore subjectivity by capturing 'operant behaviours' and 'states-of-feeling' within a given structure and form (Brown, 1996; Stephenson, 2005). The term operant behaviour is defined by Watts and Stenner (2012: 33) as one:

Which is made meaningful by the nature of its relationship with, and impact upon, the immediate environment. The term can also be used as a collective noun to denote a distinct class of behaviours, all of which make impact upon the environment in a similar fashion.

Q methodology can be viewed as a mechanism to gather shared viewpoints inside a social constructionist paradigm, by means of operant behaviours being explored at a subjective level. The exploratory nature of Q methodology fits comfortably within the social constructionist paradigm as it rejects the logic of hypothetico-deductive assumptions, and is not constrained by the priori assumptions of the researcher (Curt, 1994; Watts and Stenner, 2005a). Consequently, Q methodology can be considered an abductive process that regards the exploration of observed phenomena as a vehicle to provide possible explanations and clues instead of to prove or falsify truths (Peirce, 1931/1958; Watts, 2009). The process of abduction

is assisted by the structure and stages of Q methodology according to Watts and Stenner (2005a: 76) in that:

Q methodology does not impose meaning a priori, but asks a participant to decide what is meaningful and hence what does (and does not) have value and significance from their perspective.

A key strength of Q methodology is that it attempts to determine the structure and meaning of diverse events and stimuli from the perspective of a participant. This resonates with the work of Harvey (1997: 146), who describes this act as, ‘one of psychology’s most basic and well established principles.’

3.2.3.1 Structure and stages of Q methodology

Extensive literature on the use of Q methodology has been produced to support and promote its use as a research tool that can be used in diverse areas of research (Brown, 1993; Van Exel and de Graaf, 2005; Watts and Stenner, 2005a; Webler *et al.*, 2009). Implementing Q methodology has six distinct stages and these have been developed from the work of Brown (2009) and are shown in Table 3.2. The salient elements of Q methodology will now be discussed.

Table 3.2: Six stages of implementing Q methodology

Stage	Activity
1	Identify the areas of ‘discourse’ to explore (Concourse), and the relevant population (P set).
2	Conduct structured interviews with a sample of the relevant population to obtain a series of statements about the research interest (Concourse).
3	Make a selection from the gathered statements for use in the Q sorts (Q set).
4	Conduct the Q sort exercise with the selected participants (P set) who then rank the statements on a scale ranging from ‘Strongly agree’ to ‘Strongly disagree’. This set of ranked statements then constitutes the ‘Q sort’ for that individual.
5	The completed Q sorts are then used to perform statistical analysis using a proprietary computer package that allows the extraction of a small number of ‘typical’ Q sorts, which capture the common essence of the several individual Q sorts (Known as, factors or common viewpoints).

6	Finally, these factors (typical Q sorts) are then verbally interpreted to give the social discourses that have been uncovered by the statistical analysis. The created discourses reflect a 'pure' or 'ideal type' version of seeing the world.
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Source: Brown (2009)

Selecting the participants (P set) and compiling a concourse

The participants (P set) are a group (or groups) of people whose viewpoints the research aims to elicit. Watts and Stenner (2012) suggest there should be between 40 and 60 participants, whilst Brown (1993) advises that samples of more than 50 participants are rarely needed. Thus, the number of participants is considered less important than the possible range of viewpoints those participants may hold, as the focus in Q methodology is upon the subjective viewpoints of the participants and the degree to which those viewpoints are shared (Brown, 1993).

The concourse of the study consists of a comprehensive list of items compiled about a research topic or area of enquiry from a variety of sources (Brown, 1980). The list can contain hundreds of items that are obtained from, 'the flow of communicability in the ordinary conversation, commentary and discourse of everyday life' (Brown, 1993: 93). The sources can include published research, media, interviews and focus groups. The concourse may also include non-discursive elements, as Brown (1993: 94) highlights, a concourse should incorporate 'virtually all manifestations of human life, as expressed in the lingua franca of shared culture.'

Development of a Q set

The development of a Q set requires the concourse to be filtered and its essence to be captured in a series of numbered (in the region of 40-60) statements that are written on cards (or other stimuli if non-discursive) without losing its comprehensiveness (Van Exel and de Graaf, 2005). It is this developmental process that Curt (1994) considered an 'art form' and a 'craft'. A Q set can never be considered complete, however it can be considered to be robust providing that it contains a representative condensation of information (Plummer, 2012; Wint, 2013).

Watts and Stenner (2005a: 76) expand this concept further:

The main concern in a Q methodological context is not the Q set itself (which is, in any event, not considered to possess any specific meaning prior to the sorting process), but the relative likes and dislikes, meanings, interpretations and overall understandings, which inform the participants' engagement with the Q set.

Conducting the Q sort

Conducting the Q sort involves participants ranking individual statements depending upon their level of agreement and their subjective viewpoint and then placing the statements onto a grid (usually of quasi-normal distribution). The statements are all deemed to be of equal value and not considered to be facts. The ascribed meaning, value and significance of the statements are assigned by the participants (Watts and Stenner, 2005b). Stephenson (1983) established that an infinite amount of variations existed for the possible distribution of the statements and that there will always be fewer factors (viewpoints) created than the amount of participants undertaking the Q sort process. Stephenson (1983: 78) contends that:

It would be remarkable if any two sorts, from different persons, were exactly alike; and unlikely that all will be totally different. It is the purpose of factor theory to determine which distributions, if any, are approximately alike, on the theory that they have the same 'eigenwerken', the same 'characteristic value, the same feeling'.

This view suggests that different participants will construct different meanings for the same statement and this reinforces the focus upon individual subjectivity whilst acknowledging that similar viewpoints can be shared between participants (Brown, 1993).

Analysis of the collected data to create factors (viewpoints)

To analyse the completed Q sorts a proprietary computer program is used that uses by-person factor analysis to determine the degree to which individual Q sorts correlate with each other and as such share a 'family resemblance' that leads to the creation of a factor (Brown, 1993). Factor analysis summarises the patterns of correlations within the data to determine the underlying factors (Kitzinger, 1999). The number of factors that can be extracted from the selected

data and its subsequent interpretation is a judgement that is made by the researcher and will be dependent upon statistical, theoretical and holistic considerations (Stainton Rogers, 1995). The design of the research study will now be discussed and will include the methods deployed to collect the required data.

3.3 Research design

The previous section briefly outlined a typical approach for Q methodological study, that is:

- Selecting the participants (P set) and compiling a concourse
- Development of a Q set
- Conducting the Q sort
- Analysis of the collected data to create factors (viewpoints)

A detailed account for the implementation of the processes, the methodological decisions and, the ethical considerations will now be discussed. The research design is based on a two-year exploration of the subjective practices and perceptions of corporate commitment and wellbeing among RMEs. Specifically focussing on how the relationship between RMEs and their employing Organisation is mutually constructed and negotiated. Primary data will be initially obtained by means of semi-structured interviews lasting up to one hour with Area Engineers (AEs) and Regional Engineering Managers (REMs). This method will allow key subjective dimensions and implications of corporate commitment and wellbeing to be discussed and salient information gathered (Morgan, 2007). Subsequently, this data will then be used to create statements for the Q sort process. The objective of the research design is to capture all of the individual subjective viewpoints of the RMEs and to use these to create 'collective' or 'factor' viewpoints. These factors will then be interpreted and used to create new insight and a conceptual framework for these RMEs.

3.3.1 Participants

The identified gap in the research literature (that is, the vast majority of existing studies in this domain focused exclusively on remote workers based exclusively at home or commuting to the head office on a regular basis) provided an opportunity

to consider a different type of remote worker. Thus, a remote and mobile employee (RME) based at home, but traveling around in a geographically defined area for majority of their working week and not attending head office on a regular basis was selected. Two different types of RME existed, Area Engineers (AEs) and Regional Engineering Managers (REMs) and both of these will be considered within the same study to create a comprehensive and holistic picture. Having the opportunity to give a voice to the AEs and REMs to discover to what extent their views and experiences align or differ was a vital part of this research and could not be ignored or neglected. Thus, the decision was made to use both the Area Engineers (AEs) and Regional Engineering Managers (REMs) to construct the P set. The Organisation provided the researcher with a complete list of RMEs. This list was then used to contact all of the RMEs individually introducing the research project and its aims and objectives. All of the individuals were provided with the full research information and consent documentation (see, Appendices 2 and 3).

The P set

The participants of the study Area Engineers (AEs) and Regional Engineering Managers (REMs) were considered to be a purposive and homogenous sample (Stenner and Stainton Rogers, 2004). After the initial period of six weeks for the consent documentation to be returned had elapsed, the total RME sample that had agreed to participate in the research study was $N = 53$ and was split into two distinct categories, $N = 45$ Area Engineers (AEs) and $N = 8$ Regional Engineering Managers (REMs). Unfortunately, three AEs subsequently withdrew for personal reasons. This left a final sample of 50 available for the P set. However, in a Q methodological study the range of viewpoints of the participants is seen as more important than the number of participants taking part (Brown, 1980). All of the participants were selected based upon their opinions being regarded as relevant to the subject and in terms of diversity that included age range, geographic location, time in role and perceived experiences (Watts and Stenner, 2005a). Full demographic details for the RMEs can be found in Appendix 4.

3.3.2 Instruments and procedures

The research would only be conducted after ethical and board approval had been given. The timeframe for the collection of research data was optimistically set at

autumn/winter 2016. However, the access to the participants was flexible, so the data gathering process could be started as late as spring 2017 and would still allow sufficient time for all elements of the research thesis to be completed before April 2018. An overview of the data collection methods and sample size is shown in Figure 3.1.

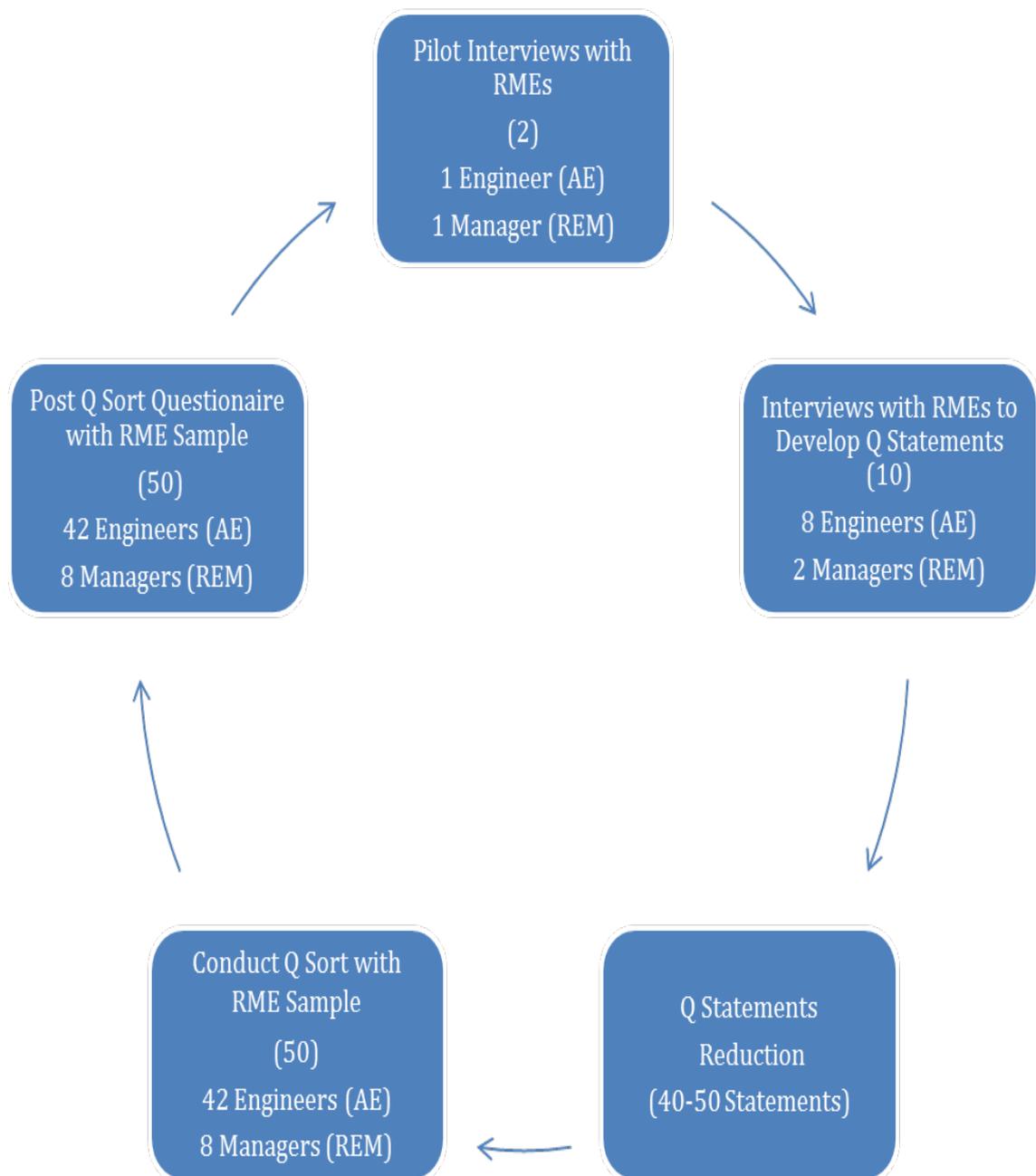


Figure 3.1: Overview of data collection methods

The process of developing the discourse for this study began by carrying out a literature search of articles and books relating to role identity, remote working and job satisfaction. The first stage of the data collection process would be initiated following a notice period of six weeks being given to allow the scheduling team suitable opportunity to book the client visits for the selected RMEs around the planned pilot/discourse interviews. The pilot interviews stage would randomly select two RMEs (one engineer (AE) and one manager (REM)) to trial the initial discourse gathering method. The two pilot interviews would provide valuable feedback on the questions and the process to allow any improvements to be made before undertaking the ten semi-structured discourse interviews. A randomly selected engineer (AE) from each of the eight field-based teams and two of their managers (REM) would be interviewed to collect the representative discourse for the RMEs.

All of the interviews will take place at the closest regional office to the RME and will be at the beginning of the data gathering process to minimise any perceived influence that the researcher may have on the participants. The vast majority of the data gathering process will be conducted privately and with complete anonymity for all of the participants. The collected discourse will then be used to provide insight and structure for the development of the Q set. The exact number of statements in Q methodology, is not pre-determined, and is usually dependent upon the participant group and the subject matter (Watts and Stenner, 2012). A standard range of between 40-60 statements is usually sufficient as too few can lead to restrictive coverage of a research topic and too many may present demands and impracticalities associated with increased reading and time demands for participants (Stainton Rogers, 1995; Watts and Stenner, 2012).

Initially, two pilot interviews will be conducted and these will highlight any changes that need to be made to the final interview questions (see, Appendix 5). Subsequently, a further ten interviews will be conducted (N = 8 AEs and N = 2 REMs) and these will be fully recorded and transcribed. These ten recordings and transcripts will be imported into proprietary software (QSR NVivo v10.04, 2013) to assist in producing the Q set of statements. The Q set will be developed through filtering and sampling of the collected discourse. A participant post Q sort

questionnaire will be developed to capture key details outside of the Q sorting process (see, Appendix 9). It will identify which two statements the participants most agreed with and alternatively the two they most disagreed with. It will also ask for any statements that they believe are missing from the Q sort and their overall experience of the Q sort activity.

After careful analysis of the recordings and transcripts the possible statements of interest will be produced using nodal analysis (that will incorporate coding and thematic analysis) linked to the three theoretical concepts of the research (Role Identity, Remote Working and Job Satisfaction). Subsequent exploratory analysis and data reduction techniques, including peer review, will lead to the creation of the final statements for the Q set (see, Appendix 6). 50 statements were considered to offer an adequate balance of content to answer the research questions and to be appropriate in terms of the practicalities of sorting for the RMEs. The Q sort activity will now be discussed in more detail.

Gathering the Q sort data

The Q set will consist of 50 individual statements printed on yellow laminated cards to improve the legibility. Each statement will be numbered 1 to 50 for the purposes of identification and all Q sets will be identical. All of the Q sorts will be completed directly with the researcher and will follow the same conditions of instruction (see, Appendix 7). The preliminary instructions that will be given to the RMEs before they start the Q sort activity will include:

- A reminder to the reasons behind the research and drawing their attention to the introductory letter, consent forms and glossary of definitions
- A reminder that their consent could be withdrawn at any time and that confidentiality would be maintained
- A request to complete a post Q sort questionnaire (see, Appendix 9) to give additional information after completing the Q sort activity

The RMEs will be supplied with a printed condition of instruction and informed that each of the numbered (1 to 50) statements in front of them were different and were developed from the ten interviews with their fellow RMEs. Thus, the central

point of the Q sort was for them to give their viewpoint, based on their own experience, instead of considering a statement right or wrong. The RMEs will be asked to read each statement carefully and then place it to begin with in one of three piles, depending on their level of agreement with it.

As it was possible to agree with all of the statements, it was decided that the RMEs would be asked to sort the statements from 'most agree' to 'least agree'. It was thought, furthermore, that the post Q sort questionnaire and the vertical line added by the RME on the grid to define where they started to disagree with the statements (if relevant), would be used to help highlight why statements had been sorted in the way that they had (see, Appendices 24, 25, 32 and 33). A forced distribution grid using a relatively flat distribution (kurtosis) with two statements placed at either end was selected as the most appropriate format. The shape or kurtosis of the statements within the grid does not affect the reliability of the data gathered nor the statistical analysis (Brown, 1980; McKeown and Thomas, 1988). This format is commonly used for participants who are both knowledgeable in the subject area, and who may hold strong views or greater judgement of the developed statements (Van Exel and de Graaf, 2005).

A horizontal strip to place over the top of the Q sort grid was developed that indicated a positive value for each of the nine columns (1 far left to 9 far right) and identifying the number of statements the RME needed to place within each column of the quasi-normal distribution grid (see, Appendix 8). The position of each statement in the distribution grid needs to have a positive or negative numerical value assigned (for example, +4 or -4) to prepare it for the subsequent data analysis phase (see, Chapter 4, 4.7). However these values are not required during the Q sort and as such it was decided that the horizontal strip placed over the top of the Q sort grid columns using a range of 1 to 9 would resolve any potential confusion associated with negative values.

The RMEs will initially be asked to read all of the 50 statements and then sort the statements into three piles (most agree, neutral, least agree). After this process had been completed, they will then select two statements from their 'most agree' pile with which they felt most strongly about the statements, and placed them in the far

right column (9) of the grid. Next, they will be asked to select two statements from their 'least agree' pile and place these statements into the far left column (1). This process will continue until the grid has been fully completed and will allow the RMEs to assess the significance of one statement in relation to another. After the grid has been completed the RMEs will be asked to review their choices and to change any statements if they felt that they were not representing their viewpoint. Following this review of the completed Q sort, the RMEs will be asked to carefully record the number and position of each statement onto a blank grid in an indelible pen. Finally, each of the RMEs will complete a post Q sort questionnaire (see, Appendix 9). This questionnaire will ask several questions that relate to their positioning of statements at the extreme ends of the grid (most/least agree), if there were any missing statements, and their overall thoughts on the Q sort process (see, Appendices 25 and 33). The field notes of the researcher (that recorded comments from the RMEs during the Q sort exercise) will add an additional layer of qualitative information to aid the factor interpretation process (see, Chapter 4).

3.3.3 Analysis

Data analysis will be conducted to conform to the Q methodological framework. This will encompass the examination of salient statistical data provided by a software package performing factor analysis and will include suitable factor extraction and rotation techniques. Qualitative data will also be utilised from interviews and post Q sort questionnaires to aid the interpretation of the Q sort patterns. This will then provide a suitable basis to construct a description of the viewpoint that emerges, the meaning of which is summarised by the title or theme given to the factor (Stenner, 2008). An outline of the methods used to examine and analyse the data, perform factor analysis, extract and interpret the factors will now be discussed with further detail being given in the beginning of Chapter 4.

A proprietary computer package will be used, PQMethod (v2.35, 2014) to analyse the Q sorts, which will be entered independently into the program using two separate files (Area Engineers (AEs) N = 42 and Regional Engineering Managers (REMs) N = 8). All Q sorts will then be subjected to inter-correlation and by-person factor analysis. Subsequently, all of the emerging factors that represent an

'ideal' Q sort with their corresponding factor arrays will be extracted. A systematic 'crib sheet' will be used for each factor to aid interpretation and to explain the viewpoints of the RMEs at a qualitative level (Watts and Stenner, 2012). The process requires the researcher to be acutely aware of their biases when interpreting the statistical and qualitative data. Prior awareness of the thought processes, pre-conceived notions, prior knowledge, and subjective experiences of the researcher will allow more quality and rigour to be applied to the process (Tashakkori and Teddlie, 2009).

The aim of the researcher is to remain objective throughout the data collection and the subsequent analysis process, to minimise any negative effects. Realistically, objectivity cannot be completely assured as the researcher has his own biases through their own position as an engineer, researcher, and senior manager. Thus, bias can only be minimised, but not eradicated. The employed research methodology affords an opportunity for the researcher to remain objective and detached from the research participants, with regard to the data gathering and analysis process (see, Section 3.3). Acknowledging the position of the researcher within the Organisation and the existence of a transactional dynamic (consciously or subconsciously) prevents complete objectivity from the research process. While this could be viewed as being advantageous, in terms of assisting the process of reflexivity, there remains an equally affiliated risk that the research data is interpreted by the emotional reaction it provokes in the researcher. Therefore, the researcher will try to be mindful not to rely too greatly on their own introspections rather than focus on others (Lilienfeld *et al.*, 2011; Pronin *et al.*, 2004).

To support this process and to be transparent about their position the researcher will complete the Q sort activity to make visible their thoughts and perceptions (see, Appendices 34 and 35). This insight will then be used this to minimise the manifestation of their biases within the research. The systematic analysis of each RME factor array will be conducted using a standardised crib sheet created by Watts and Stenner (2012) to maintain a level of consistency and scientific rigour.

3.3.4 Research limitations and implications

The strengths of Q methodology are that it offers an objective framework with clear structure and processes to bring lucidity to complex and socially challenged domains. Despite being seen as an 'alternative' methodology, it offers participants an opportunity to construct their individual viewpoint by taking part in an activity that is both thought provoking and engaging. Data is not deconstructed during the data analysis process, and as such authentically represents the responses given by the RMEs. Thus, factors represent all of the individual viewpoints that are considered to be equal in the analysis process, and as such, it offers a mechanism for eliciting all types of viewpoints (Watts, 2009).

Potential limitations of Q methodology are associated with its 'innovative' and 'alternative' nature that can lead to researchers and their community misunderstanding the processes and the findings of the research (Dziopa and Ahern, 2011; Watts and Stenner, 2005a). This has led to the validity, reliability and generalisability of Q methodological studies being questioned (Van Exel and de Graaf, 2005). However, as Stenner and Stainton Rogers (2004: 102) highlight, a Q methodological study should not be evaluated or compared with quantitative research that is experimental in nature as it, 'lays no claims to be measuring anything, and hence adopts a completely different relationship to questions of validity and reliability.'

In contrast, Guba and Lincoln (1986) discuss the evaluation of qualitative research using alternative constructions of 'credibility', and 'dependability' that specifically focus upon the concepts of 'ontological authenticity' (that is, increased understanding) and 'educative authenticity' (that is, increased awareness of the positions of others). Thus, both of these principles are supported by Q methodology, as it does not claim to provide generalizable research findings that can be extrapolated across a population (Plummer, 2012; Wint, 2013). According to several authors (Brown, 1980; Stephenson, 1953; Watts and Stenner, 2005b) the results from the shared viewpoints expressed in Q methodological studies have been reliable and stable over time.

In contrast, individual viewpoints of the participants may change over a period of time, however, Watts and Stenner (2005a: 86), summarise accordingly:

Q methodology makes no claim to have identified viewpoints that are consistent within individuals across time [as this would] impose a priori counterintuitive assumption that a given participant is capable of expressing only one coherent viewpoint on an issue. (...) Whilst this leaves individual exemplars free to 'change their minds', we might nonetheless expect the emergent manifold of shared viewpoints to show a degree of consistency over time.

Notwithstanding these limitations, the sample rate will include sufficient members of the two selected categories (Area Engineers and Regional Engineering Managers) of RMEs to perform the required analysis.

3.4 Ethical considerations

Ethical considerations are of paramount importance for high quality research to maintain its integrity and value to society. As such, before commencing on this thesis the researcher has undertaken the compulsory and optional ethical training for research that involves human participation delivered by the University of Northampton. This increased knowledge and awareness was used to ensure that the submitted research proposal met all the required ethical considerations. The research proposal for this study was subjected to a rigorous University process that included being reviewed and approved by a Research Degrees Board, an Ethics Committee, and Research Degrees Committee to ensure the integrity and appropriateness of the research (see, Appendix 1 for confirmation of ethical approval). Furthermore, ethical considerations throughout the study were considered as an imperative that underpinned all of the decision-making processes. Ethical and health and safety considerations have been considered throughout all stages of the research. The research has been conducted in a social context that focusses upon subjective viewpoints of the research participants. Because of this, the relationship between the researcher and the participants has been one of respect, justice and beneficence (Gillon, 2003). As the researcher is employed by the Organisation (Head of Schemes and Operations) being researched, it is acknowledged that they are in a position of power to the RMEs. Consideration has been given to the effects of this power relationship within the research design and analysis. As a result, it is critical that participation within the

research is seen as voluntary by the RMEs (BPS, 2010). A key factor in reducing the power relationship is that the researcher has no direct line management responsibility for any of the RMEs, and this allows a level of professional distance to be achieved. All of the RMEs are white-collar workers who are degree level educated with professional qualifications. As a result, it allows them to evaluate all aspects of the research fully and its potential value to the Organisation. All of the RMEs are remotely based and this factor reduces the effect of any spatial control being present by the researcher as they work mainly within Head Office.

Organisational approval will have been gained to undertake the required research from the Chief Executive Officer, Directors, and the Head of Field Performance (Sponsor for DBA course). According to Flewitt (2005), exploratory research can be problematic as it commonly leads to unpredictable and unexpected changes. Thus, RME consent will be based upon an initial broadly outlined framework and the RMEs will be reminded of their right to withdraw throughout the research process. Appropriate safeguards will be put in place by the Organisation to ensure that all of the RMEs participating in the research will be aware of the role of the researcher and their boundaries, and to minimise the effect of the power relationship. The RMEs will be able to contact the HR department directly about any issues or concerns surrounding the research and/or the researcher/senior manager. Appropriate guidance will be produced for all RMEs that cover the role of researcher and states that their names, personal details and all other personal information being disclosed would remain confidential unless it raised issues involving safeguarding or illegal activities (see, Appendices 2, 3 and 4).

All data has been stored remotely from the Organisation at the University of Northampton to reinforce the assurances to participants of privacy and anonymity. Protocols for participant and data withdrawal will be put in place. These protocols will clarify that a participant may withdraw at any time. However, their collected data and information will have a deadline for when it cannot be extracted from the analysis and findings of the study. This date will be clearly communicated to all participants. All collected data will be securely destroyed and as such will not form any part of any subsequent research. A suitable communication strategy will be developed in advance of the research and this will be continually reviewed

throughout the research process. This strategy will aim to promote transparency about the purpose of the research and to disseminate sufficient information to allow informed choice about participation. It will use existing communication channels that are currently being used by the Organisation (weekly field team email, intranet, and monthly 1:1 meetings with line managers) and the quality and appropriateness of all research activities and communications will be closely monitored by the Organisation.

3.5 Research timescales

The plan for the completion of the DBA thesis was two years (see, Figures 1.1, 1.2 and Appendix 36) from gaining full approval from the relevant University Boards and Committees in June 2016. An exact breakdown of the research project's time management was created using the latest version of MS Project software. This will be closely monitored by the researcher to maintain key project milestones with the support of his supervisory team.

3.6 Conclusion

This chapter has attempted to explain the philosophical position of the researcher and explored the pathway to the selection of Q methodology as an appropriate design to answer the research questions. Both theoretical and procedural aspects of this methodological study have been discussed with appropriate links to the ethical considerations of the study. The following findings chapter will initially develop and explain this summary further and will include a rationale for analysing the data of the participants using two separate groups, as opposed to one. The findings chapter will now provide a suitable context to explain the findings and analysis from the study.

Chapter 4: Research findings

4.1 Introduction

This chapter will begin with a brief description of RMEs and the intended pathway to achieve the aims and objectives of the research. Subsequently, an outline of Q methodology and by-person factor analysis followed by a more detailed description of the factor extraction and factor interpretation processes that will be utilised within this study. Additionally, as part of this description, a rationale will be given relating to the decision making process to analyse the collected data from the remote and mobile employees (RMEs) in two separate sets, Area Engineers (AEs) and Regional Engineering Managers (REMs), as opposed to conjointly. The methods and type of data collected including all of the relevant data analysis and interpretation needed in a Q methodological study will be given. To hopefully aid clarity for the reader, an outline of the practical steps relating to the analytic and interpretative stages will be specified. This will include the initial data entry into the proprietary software and will conclude with the creation of the final descriptive account for each factor. Finally, each factor array and its details will be displayed graphically and described qualitatively, by referring to additional salient data gathered through interviews, post Q sort comments, field notes and relevant demographic information. All the names of the participants have been removed to ensure confidentiality and replaced with an alphanumeric code ranging from RME/01 to RME/99 (see, Appendix 4).

4.2 Overview of RMEs

The research has been conducted within an Organisation categorised as a medium sized enterprise, which is a leading third party certification body. Its main purpose is to conduct compliance audits within the electrical contracting industry for over 36,000 registered clients each year. These technical audits are undertaken by over 75 RMEs who are located throughout the UK. These RMEs are highly qualified electrical engineers who are home based and spend most of their working week travelling around their pre-determined regional area assessing the compliance of their clients. They have a dedicated home office period every second week, or more, if there are cancellations or void visits. Two categories of RMEs exist within the Organisation: Area Engineers (AEs) and Regional Engineering Managers

(REMs). All of the AEs are directly line managed by an REM. The central focus of the research will be to develop a critical understanding of the subjective views of the RMEs on role identity, remote working and job satisfaction. This critical insight will be used to create a conceptual framework to support the development of the required strategic and operational changes within the Organisation to improve corporate commitment and wellbeing amongst its RMEs.

4.3 Q methodology

Q methodology is unique in its approach as it uses both quantitative and qualitative methods to analyse data. Underpinning Q methodology from a mathematical perspective is an inverted form of R methodology, which inter-correlates and factors people instead of tests or traits (Stainton Rogers, 1995). Thus, each participant's Q sort of statements is compared to every other participant's Q sort. According to Brown (2006), the statistical and mathematical aspect of Q methodology serves primarily to prepare the collected data to reveal its qualitative structure and factor interpretation.

According to Watts and Stenner (2012), there are three key transitions within the data analysis process of a Q methodological study. The first transition involves transforming the Q sorts into factors. This process can be achieved either manually or electronically, the latter being a more expedient and commonly used method. All of the completed Q sorts must be manually entered individually into the proprietary software (PQMethod v2.35, 2014) and a numerical value assigned for each statement. The values in general have a range from, -6 through to 0 and finishing at, +6 depending upon the statement's position within the grid. The actual range will be dependent upon several factors; these include the number of statements within the Q set, the complexity of the subject matter and the required level of kurtosis (Brown, 1980). Using the guiding principles of Watts and Stenner (2012), a range of, -4 through 0 and finishing at, +4 has been selected and used in this study. After all of the Q sorts have been entered, an inter-correlation matrix is produced. At a basic level, this matrix identifies the relationship between all individual Q sorts in respect to each other. Subsequently, factor analysis is used to determine the level of agreement or disagreement, at a statistical level, between them and to reduce the data further to aid interpretation. At its most simple level, a

factor can be considered a Q sort that represents a family of similar viewpoints. The factors are created by identifying patterns of similarity found in other Q sort configurations. Thus, if participants have similar accounts relating to the statements, it can be inferred that they have a similar view and a factor is created with those participants loading on it. Typically studies can identify anywhere between two to seven factors (Watts and Stenner, 2012). The second transition is the production of factor arrays. This process requires the creation of a weighted average associated with all of the Q sorts that correlate or load highly with an extracted factor. A factor array can be considered as a representative Q sort that exemplifies the software calculated positions of the statements within that factor. The third and final transition is from the creation of a factor array to the interpretation of the factor. This process requires the researcher to examine the factor array at a qualitative level and interpret the associated arrangement of statements. The key imperative within this crucial process is to consider the factor array in its entirety and to preserve the integrity of the social viewpoint that the factor represents. The descriptive account for each factor is written in a style that 'brings to life' the emerging social viewpoint that it represents. This process is further assisted by using qualitative comments gathered from interviews and post Q sort feedback sheets (Watts and Stenner, 2012).

4.4 Data analysis options

The data in this study was gathered from a total of N = 50 RMEs (N = 42 AEs and N = 8 REMs) using the materials and condition of instruction outlined in the methodology chapter (full details and information can be found in the Appendices). In terms of data analysis for the collected data, there were three possible options available to the researcher:

- **Option 1:** To analyse all of the 50 Q sorts together in one data set.
- **Option 2:** To analyse the two data sets separately (AEs and REMs).
- **Option 3:** To analyse the two data sets separately (Option 2) and then using the extracted factors obtained by option two, conduct second-order factor analyses.

All of the three listed options were prudently considered and after due consideration to the research objectives, option two was selected as the most

appropriate with which to continue. Options one and three were rejected for the following reasons. Option one would have created a universal viewpoint for the AEs and REMs in terms of the levels of inter-correlation and what it is like to be an RME. However, this shared viewpoint would have been too restrictive to allow the nuances and experiences of the two separate roles to be fully explored and bring clarity and insight to the research. It is vitally important that the shared views from within each separate group (AEs and REMs) be carefully considered to extrapolate any differing experiences and circumstances linked to being an RME. Finally, when later discussing the results of the extracted factors having two separate groups would lead to improved ownership and clarity of the findings with the participants.

Option three would have required all of the initially extracted factor arrays being used as the basis for second-order analysis, AEs (four factor arrays) and REMs (two factor arrays). This would have had the advantage of evaluating the level of correlation between the shared viewpoints of the AEs and REMs by producing second-order factors that would capture any shared viewpoints or differences of the two original groups (AEs and REMs). This additional layer of analysis, would have added an extra dimension to the study, however, it would have led to a significantly larger amount of data being produced and critically evaluated. Thus, making it a prohibitive option within the prescribed boundaries of this research project.

Thus, option two was selected as the preferred option, as it would allow each data set to have its shared viewpoints. This would allow the AE and REMs factors to be compared and contrasted within the discussion chapter at a qualitative level, this was considered the most appropriate, and manageable option of the three listed.

4.5 Data collection methods

The conducted research has allowed a comprehensive and representative set of data to be collected. This information has been collected from semi-structured interviews, Q sorts and post Q sort questionnaires with participants (RMEs) from an Organisation categorised as a medium sized enterprise. Initially, two pilot interviews were conducted with RMEs (AE and REM) and these interviews led to a couple of very minor changes (to improve the clarity and grammar) being made to

the final interview questions (see, Appendix 5). Subsequently, a further ten interviews were conducted (N = 8 AEs and N = 2 REMs) and these were fully recorded and transcribed. These ten recordings and transcripts were imported into proprietary software (QSR NVivo v10.04, 2013) to assist in producing the Q set of statements. After careful analysis of the recordings and transcripts an initial 590 possible statements of interest were produced using nodal analysis (that included coding and thematic analysis) linked to the three theoretical concepts of the research (Role Identity, Remote Working and Job Satisfaction).

Subsequent exploratory analysis and data reduction techniques, including peer review, led to the creation of the final 50 statements for the Q set. These 50 statements and their corresponding theoretical concepts category can be found in Appendix 6. The Q sort instructions for the RMEs can be found in Appendix 7. The post Q sort questionnaire used can be found in Appendix 9. The collected data is predominantly qualitative with additional clarification and insight gained from the quantitative element of the Q sort process using the proprietary software. Overall, the collected data will be sufficient to be effective in allowing the research questions to be fully answered and allowing the aims and objectives of the project to be fully met. The complete findings and analysis underpinning the Q sort activity can be found in the Appendices.

4.6 Software used

Proprietary software was used to support the quantitative and qualitative elements of the data analysis process. PQMethod (v2.35, 2014) software was used for the quantitative analysis in this study. This software was selected for two reasons. One, it was the most common and widely cited software available for Q methodology analysis. Secondly, it is specifically designed for Q methodology and is freely available on the Internet with open licence protocols. QSR NVivo (v10.04, 2013) software was used via a University licence for the qualitative analysis in this study. All ten interview recordings and transcriptions were uploaded, reviewed and analysed using QSR NVivo (v10.04, 2013) software to create the final 50 Q set statements.

4.7 Data entry

Initially the proprietary software (PQMethod v2.35, 2014) was configured to accept two different data sets (AEs and REMs) and the 50 statements used within the research were uploaded. The level of kurtosis for the fixed distribution grid was established and the selected nine values ranged from, -4 (most disagree) through to 0 and finishing at, +4 (most agree). Values of 1 to 9 were utilised during the data collection stage with the participants using a specifically created 'Q sort horizontal strip' (see, Appendix 8) to reduce their perception of the 0 value being seen as a neutral response. Finally, each of the Q sorts for the 50 participants were entered into the software individually into their respective data sets and subsequently analysed.

4.8 Factor extraction

The proprietary software (PQMethod v2.35, 2014) was then used to extract a number of factors from the inputted data with the primary objective of simplifying the subsequent interpretative phase. Each of the extracted factors represented a group of participants who gave a similar viewpoint on the research's 50 statements (ranging from three (AE Factor 3) to twenty-four (AE Factor 1) defining sorts).

There are two methods of factor extraction included in the proprietary software: Centroid Factor Analysis (CFA) and Principal Component Analysis (PCA). CFA was selected in preference over PCA on the basis that CFA is the only 'true' method that extracts factors, and it also allows factors to be rotated until a solution can be decided upon which is not only good mathematically, but can be seen as a 'richer' or a more 'informative account' by the researcher (Stainton Rogers, 1995). In contrast, PCA focusses purely upon providing the best mathematical solution; Watts and Stenner (2012: 99) contend that:

Most Q methodologists do not think that the best mathematical solution is necessarily also the best, i.e. the most meaningful or the most informative solution from a substantive or theoretical perspective.

4.8.1 How many factors should be extracted for the RMEs?

The maximum number of factors that can be extracted using the proprietary software (PQMethod v2.35, 2014) is currently eight. Watts and Stenner (2012) suggest that a factor should be extracted for every six to eight sorts within a study. As a result there were two sets that needed to be analysed separately (N = 42 AEs and N = 8 REMs) it was decided that seven factors (42/6) for the AEs and two factors (8/6) for the REMs would be extracted using CFA. Theoretically, each factor can be considered to be a segment of subjectivity (Stephenson, 1953). The extraction and interpretation of factors is usually dependent upon the following four statistical and theoretical guiding principles (Brown, 1980; McKeown and Thomas, 1988; Watts and Stenner, 2012):

1. According to the Kaiser-Guttman criterion, factors should generally only be retained with an eigenvalue greater than or equal to a value of 1.00.
2. All factors should have at least two defining Q sorts loading on them.
3. The statistical significance of the defining sorts to be at least equal to:
 $p < 0.01 = 2.58 * (1/\sqrt{\text{number of statements in the Q set}})$.
4. Have an overall combined variance for all factors of at least 40 percent.

The statistical calculation for this study was conducted using the following calculation:

$$\begin{aligned} p < 0.01 &= 2.58 * (1/\sqrt{\text{number of statements in the Q set}}) \\ &= 2.58 * (1/\sqrt{50}) \\ &= 2.58 * (1/7.0710) \\ &= 2.58 * (0.1414) \\ &= 0.3648 \text{ rounded up to } \pm 0.37 \end{aligned}$$

After further examination of the data, and in order to allow the maximum number of Q sorts to load clearly onto a factor as defining sorts, the level of significance was raised to a value of ± 0.43 . Revaluating the level of significance to minimise the amount of non-significant or confounding Q sorts is considered an appropriate measure in Q methodology to provide a more inclusive outcome (McKeown and Thomas, 1988; Plummer, 2012; Watts and Stenner, 2005). Varimax rotation is an automatic system generated process that allows the data to be examined from

majority of the participants' viewpoints to maximise the amount of study variance explained (Watts and Stenner, 2012). In contrast, the alternative manual or judgemental rotation process relies upon the skill of the researcher not to impose his or her own subjectivity onto the findings. In order to reduce the level of researcher subjective bias and to be consistent with the exploratory nature of the research, Varimax rotation was selected and undertaken. The Varimax rotation process generated a final four factor solution for the AEs (see, Table 4.1) and a two factor solution for the REMs (see, Table 4.2). These factors will now be described in more detail.

4.9 Research findings for the Area Engineers and Regional Engineering Managers

4.9.1 Four factor solution for the Area Engineers

Following the Varimax rotation, a four factor solution was retained and interpreted for the Area Engineers' data. This solution explained a total of 52 percent of the study variance. Thirty-nine out of the forty-two participants loaded significantly onto one of the four factors, with three of the participants' Q sorts being confounding (see, participants 24, 30 and 31 highlighted in red in Table 4.1). Table 4.1 indicates the participants and their factor loadings (statistical significance = ± 0.43). All figures are rounded to two decimal places.

Table 4.1: Four factor solution matrix for the Area Engineers

Participant	Factor 1	Factor 2	Factor 3	Factor 4
RME/01	0.25	0.09	0.51x	0.08
RME/02	-0.11	0.43x	-0.40	-0.11
RME/03	0.69x	0.07	-0.05	-0.05
RME/04	0.43x	0.39	0.28	0.42
RME/05	0.26	0.06	0.25	0.58x
RME/06	0.26	0.63x	0.17	0.07
RME/07	0.02	0.44x	0.36	-0.07
RME/08	0.08	0.23	-0.41	0.62x
RME/09	0.72x	0.12	0.27	0.34
RME/10	0.11	0.21	0.59x	0.19
RME/11	0.58x	0.42	-0.06	-0.14
RME/12	0.63x	0.30	-0.11	0.37

RME/13	0.82x	0.23	0.20	0.09
RME/14	0.70x	0.17	0.36	0.12
RME/15	0.76x	-0.01	0.10	0.29
RME/16	0.12	0.25	0.06	0.57x
RME/17	0.12	0.63x	0.16	0.11
RME/18	0.31	0.60x	-0.32	-0.07
RME/19	-0.06	-0.18	0.61x	0.05
RME/20	0.09	-0.30	0.17	0.47x
RME/21	0.62x	0.10	0.12	0.09
RME/22	0.48x	0.41	0.01	0.42
RME/23	0.60x	0.10	-0.18	0.27
RME/24	-0.13	-0.02	-0.43	0.48
RME/25	0.08	0.67x	0.06	0.26
RME/26	0.13	0.61x	0.18	0.26
RME/27	0.45x	0.13	0.04	0.39
RME/28	0.79x	0.24	0.28	0.18
RME/29	0.74x	0.19	0.20	0.34
RME/30	0.56	0.02	0.19	0.56
RME/31	0.45	0.19	-0.18	0.61
RME/32	0.84x	0.07	0.04	0.25
RME/33	0.65x	0.38	-0.02	0.25
RME/34	0.47x	0.19	-0.41	-0.01
RME/35	0.43x	0.13	0.11	0.35
RME/36	0.42	-0.01	-0.06	0.49x
RME/37	0.69x	0.03	0.16	0.12
RME/38	0.67x	0.15	0.01	0.37
RME/39	0.61x	0.31	0.14	0.25
RME/40	0.45x	0.10	-0.37	0.18
RME/41	0.63x	-0.06	-0.25	0.04
RME/42	0.75x	-0.14	0.08	-0.07
Defining Sorts	24	7	3	5
Variance	26%	9%	7%	10%
Eigenvalue	13.91	3.12	2.81	2.30
Total Defining Sorts (24 + 7 + 3 + 5) = 39				
Total Variance (26% + 9% + 7% + 10%) = 52%				

Key:

Green, bold and an x = A 'Q sort' with a significant loading (statistical significance = ≥ 0.43) onto the factor. All figures are rounded to two decimal places.

Red = A 'Q sort' which is confounding (loads significantly onto more than one factor).

4.9.2 Two factor solution for the Regional Engineering Managers

Following the Varimax rotation, a two factor solution was retained and interpreted for the Regional Engineering Managers' data. This solution explained a total of 65 percent of the study variance. All eight participants loaded significantly onto one of the two factors. Table 4.2 indicates the participants and their associated factor loadings (statistical significance = ± 0.43). All the figures are rounded to two decimal places.

Table 4.2: Two factor solution matrix for the Regional Engineering Managers

Participant	Factor 1	Factor 2
RME/91	0.33	0.75x
RME/92	0.81x	0.18
RME/93	0.76x	0.31
RME/94	0.39	0.51x
RME/95	0.42	0.59x
RME/96	0.77x	0.17
RME/97	0.87x	0.29
RME/98	0.02	0.85x
Defining Sorts	4	4
Variance	38%	27%
Eigenvalue	4.16	1.05
Total Defining Sorts (4 + 4) = 8		
Total Variance (38% + 27%) = 65%		

Key:

Green, Bold and an x = A 'Q sort' with a significant loading (statistical significance = ≥ 0.43) onto the factor. All figures are rounded to two decimal places.

4.9.3 Factor arrays for the Area Engineers and Regional Engineering Managers

A factor array can be likened to an estimate of how a hypothetical participant, who exclusively loaded onto a given factor, would have ordered all of their statements within the Q set (Van Exel and de Graaf, 2005). The proprietary software (PQMethod v2.35, 2014) creates factor arrays automatically using a weighted averages procedure. Hence, all of the Q sorts that significantly load onto one factor are used to create a factor array. All of the confounded or non-significant Q sorts are excluded from the factor arrays process. In summary, the factor arrays represent the merged viewpoints of all the significantly loaded participants. Three of the AEs' Q sorts were confounded and as such were not included within the factor arrays. However, to remain true to the aim of the research, which is to consider all the RME viewpoints, these three Q sorts were considered at the interpretative stage to ensure that nothing of value was lost. The factor arrays for the AEs and their four factors are outlined in Table 4.3.

Table 4.3: Factor arrays for the Area Engineers

No.	Statement	F1	F2	F3	F4
1	The greatest challenge for me is trying to complete everything that I need to do	-1	-2	-3	-1
2	A lot of what I do is reactive	-3	-3	-3	-3
3	It is a consumer safety role – it is making sure these people carry out work that does not put themselves or other people in danger	+2	+3	0	+2
4	I see my role as a pinnacle position within the industry	+2	+2	0	0
5	I enjoy the flexibility of my role and the variety of what I do	+3	+4	-2	+1
6	You need to be prepared to grow with the role and constantly adapt	+2	+1	+3	+3
7	The role has changed considerably since I started	-2	-3	0	+2
8	The role has not changed much in that you are going out and assessing contractors for compliance	+1	+1	-2	-2
9	The contractor's perception of us has changed, they can see behind the scenes that we have now become a business	0	+1	0	0
10	I feel that I have lost a certain degree of control of my area	-2	-2	+4	-1
11	Most of my family and friends still have no understanding of what my role involves and who I work for	0	-2	-2	-1

12	I have always taken ownership of my area and managed it	+1	+4	+4	+4
13	It is an important role, not to be taken lightly, it is more than just an audit, there is a lot of responsibility	+3	+3	-1	+3
14	It is a difficult balance between doing the job as an auditor and still being customer focussed	-1	-4	-1	0
15	I would not have got this role without an apprenticeship and the training and education to become an electrician	+2	-1	-2	+2
16	I feel isolated	-4	-2	-4	0
17	IT has always been an issue for a remote worker	0	-1	-1	+2
18	I feel managing your work/life balance is the most difficult thing as a remote worker	-3	-4	-3	+1
19	It is very easy to spend a considerable amount of your own time working	-1	+2	0	+4
20	I am a remote worker, but fundamentally I am my own boss	+1	+2	-4	-1
21	Because you are a remote worker you are not involved in any office politics	+1	0	+1	0
22	There are too many emails sent and this means that important ones might get missed	-1	+1	0	-2
23	Being a remote worker does not feel lonely, I know that colleagues are a phone call away and I am in contact with customers daily	+2	-1	+3	-2
24	Being a remote worker requires a lot of self-discipline to switch off from work	0	-1	-3	+3
25	You can literally hear nothing from anybody other than the people you meet	-3	0	-1	-3
26	I have a good working relationship with other remote and mobile employees (RMEs)	+1	-1	-1	-2
27	I can speak to my manager about any problems that I have	+4	0	+3	+2
28	We do not see an awful lot of each other, it is only at Regional meetings	0	+2	+2	+1
29	The communication I have with my colleagues is limited, I have got one or two close colleagues	0	+1	-2	+1
30	I feel that everyone in Head Office is going to find out things before me	-1	+1	0	-1
31	I feel like a new starter every time I go to Head Office because things have changed round and I feel that I am out of my comfort zone	-3	0	+1	-3
32	The relationship with Head Office has drastically changed and I feel no longer part of something	-2	-2	0	-4
33	When I ring Head Office up, and they ask who I work for, that does not make me feel positive, motivated and valued	-2	0	+1	0
34	Because there are no longer teams, there is no connections, small talk or responsibility	-1	0	+1	-2
35	I think that I have got a good working relationship with Head office	+1	-3	-1	+1

36	I have a great sense of pride working for the company	+4	+2	+1	+3
37	I feel that I am well supported	+3	-1	+2	0
38	The focus should be on the working together as opposed to the performance of the individual departments	+1	0	+1	0
39	I feel that I am just out there doing units and nobody really cares about me	-4	0	0	-3
40	The AEs, REMs and the management team, are the basis of what makes us all tick really	+1	-1	-1	+1
41	We have drifted away from our core technical values	-2	0	+1	-1
42	We should get back to our core values and not focus all the time on just making money which can be detrimental to our core commodity, which is selling electrical safety	0	+1	0	+1
43	I have got a good working relationship with my colleagues and my manager	+3	0	+2	+1
44	Being home-based allows me to manage my personal life around work more effectively	+2	+3	+3	-2
45	I would change the structure of the relationship with Head Office, I would go back to teams	-2	-2	+1	-4
46	I would like more social interactions and face-to-face contact with colleagues	0	+1	-2	+2
47	We do move very slowly and that sometimes that can be frustrating	-1	-1	+2	-1
48	We tend to go to a new technology which has got a lot more facilities but sometimes we lose some of the key facilities that we had previously	0	-3	-1	0
49	I think that poor communication causes frustration and some of it is a simple lack of professional courtesy	-1	+2	+2	+1
50	We need to listen more to the field staff regarding what the issues are and not assume things	0	+3	+2	0

Key:

Green and bold = Highest statements in that factor.

Yellow and bold = Lowest statements in that factor.

The factor arrays for the REMs and their two factors are outlined in Table 4.4.

Table 4.4: Factor arrays for the Regional Engineering Managers

No.	Statement	F1	F2
1	The greatest challenge for me is trying to complete everything that I need to do	-1	+1
2	A lot of what I do is reactive	-1	-2
3	It is a consumer safety role – it is making sure these people carry out work that doesn't put themselves or other people in danger	+2	-1
4	I see my role as a pinnacle position within the industry	+2	0
5	I enjoy the flexibility of my role and the variety of what I do	+4	-1
6	You need to be prepared to grow with the role and constantly adapt	+2	+2
7	The role has changed considerably since I started	0	+2
8	The role has not changed much in that you are going out and assessing contractors for compliance	+1	+2
9	The contractor's perception of us has changed, they can see behind the scenes that we have now become a business	0	0
10	I feel that I have lost a certain degree of control of my area	-2	-4
11	Most of my family and friends still have no understanding of what my role involves and who I work for	0	-2
12	I have always taken ownership of my area and managed it	+1	+1
13	It is an important role, not to be taken lightly, it is more than just an audit, there is a lot of responsibility	+2	+1
14	It is a difficult balance between doing the job as an auditor and still being customer focussed	0	-2
15	I would not have got this role without an apprenticeship and the training and education to become an electrician	0	+3
16	I feel isolated	-4	-3
17	IT has always been an issue for a remote worker	-2	0
18	I feel managing your work/life balance is the most difficult thing as a remote worker	-1	+1
19	It is very easy to spend a considerable amount of your own time working	0	+3
20	I am a remote worker, but fundamentally I am my own boss	+1	-3
21	Because you are a remote worker you are not involved in any office politics	0	-2
22	There are too many emails sent and this means that important ones might get missed	0	0
23	Being a remote worker does not feel lonely, I know that colleagues are a phone call away and I'm in contact with customers daily	+1	0
24	Being a remote worker requires a lot of self-discipline to switch off from work	+1	+1

25	You can literally hear nothing from anybody other than the people you meet	-3	-1
26	I have a good working relationship with other RMEs	+2	+1
27	I can speak to my manager about any problems that I have	+3	+4
28	We do not see an awful lot of each other, it's only at Regional meetings	-1	0
29	The communication I have with my colleagues is limited, I have got one or two close colleagues	-1	-4
30	I feel that everyone in Head Office is going to find out things before me	-2	-1
31	I feel like a new starter every time I go to Head Office because things have changed round and I feel that I am out of my comfort zone	-3	-3
32	The relationship with Head Office has drastically changed and I feel no longer part of something	-4	-1
33	When I ring Head Office up, and they ask who I work for, that doesn't make me feel positive, motivated and valued	-2	-1
34	Because there are no longer teams, there is no connections, small talk or responsibility	-3	+1
35	I think that I have got a good working relationship with Head office	+3	-1
36	I have a great sense of pride working for the company	+4	+4
37	I feel that I am well supported	+3	+2
38	The focus should be on the working together as opposed to the performance of the individual departments	+1	+1
39	I feel that I am just out there doing units and nobody really cares about me	-3	-3
40	The AEs, REMs and the management team, are the basis of what makes us all tick really	+1	+2
41	We have drifted away from our core technical values	-2	-2
42	We should get back to our core values and not focus all the time on just making money which can be detrimental to our core commodity, which is selling electrical safety	-1	-2
43	I have got a good working relationship with my colleagues and my manager	+3	+3
44	Being home-based allows me to manage my personal life around work more effectively	+2	-1
45	I would change the structure of the relationship with Head Office, I would go back to teams	-2	+3
46	I would like more social interactions and face-to-face contact with colleagues	0	0
47	We do move very slowly and that sometimes that can be frustrating	-1	0
48	We tend to go to a new technology which has got a lot more facilities but sometimes we lose some of the key facilities that we had previously	-1	0

49	I think that poor communication causes frustration and some of it is a simple lack of professional courtesy	+1	+2
50	We need to listen more to the field staff regarding what the issues are and not assume things	0	0

Key:

Green and bold = Highest statements in that factor.

Yellow and bold = Lowest statements in that factor.

4.9.4 Interpretation of the factors

The final stage of the analysis process requires the researcher to examine all of the gathered quantitative and qualitative data of a factor carefully and interpret it to construct the viewpoint that is being expressed by the participants. The descriptive viewpoint that emerges from this process gives the factor meaning and brings it to life. This process is further enhanced by each factor being given an overall theme or title. In order to minimise, as much as possible, the researcher's potential biases and assumptions influencing the outcome of the factor interpretation process a number of measures were put in place. First, the Q sort activity was completed by the researcher, and subsequently critically reflected upon it (see, 4.10) to extrapolate their viewpoint and to allow the factor interpretations to be constructed using the appropriate context. Secondly, each factor array (see, Tables 4.3 and 4.4) was subjected to the same systematic analysis by using a proprietary tool (A crib sheet designed by Watts and Stenner, 2012) to ensure that all the factor arrays were examined in a consistent and robust manner.

Distinguishing (see, Appendices 11, 12, 13, 14 and 27) and consensus (see, Appendices 10 and 26) statements for each factor were also carefully considered to help create a holistic picture of the viewpoint being expressed by the participants. A crib sheet for each factor was created and these can be found in Appendices 15, 16, 17, 18 (AEs) and, 28 and 29 (REMs).

Finally, a post Q sort questionnaire was completed by all of the participants (see, Appendices 25 (AEs) and 33 (REMs)) to provide additional qualitative data to assist the factor interpretation process and to improve its validity. The harvested information included: time in their current role, rationale for sorting the two most agree and two most disagree statements at the extreme ends of the Q sort

grid, whether they considered any statements were missing and what they would be and, their comments on the Q sort experience. All of this information combined with the ten RME interviews conducted (pre Q sort) and the researcher's field notes allowed confidence that all of the factor interpretations would respectively reflect the participants' viewpoints.

In the factor descriptions given in 4.9.5 the statements being discussed will be followed by two numbers within brackets. The first of these numbers will refer to the statement being highlighted, and the second number to its position within the factor array, for example: 'I have a great sense of pride working for the company' (36: +4), means that statement number 36 has been placed in position +4 on the factor array grid.

4.9.5 Interpretation of the Area Engineers' factors

4.9.5.1 Area Engineers' factor 1: 'Supported and Proud'

Factor 1 has an eigenvalue of 13.91 and explains 26 percent of the study variance. Twenty-four participants (RMEs: 03, 04, 09, 11, 12, 13, 14, 15, 21, 22, 23, 27, 28, 29, 32, 33, 34, 35, 37, 38, 39, 40, 41 and 42) are significantly associated with this factor. The average time in role for these participants is 9.79 years. The highest loading participant in this factor is RME/32 and they have been in their role for 5 years. The mean point where the participants start to disagree with the statements has been calculated as -1.80.

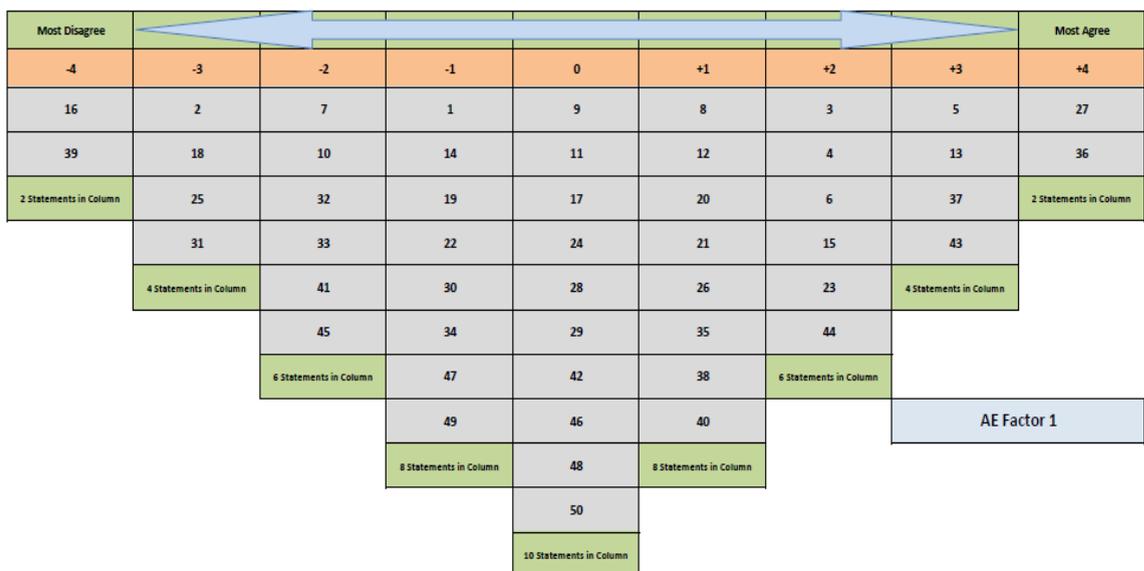


Figure 4.1: Factor array for the Area Engineers' factor 1: 'Supported and Proud'

(The crib sheet for this factor can be found in Appendix 15)

The Area Engineers who represent this viewpoint have a great sense of pride working for the Organisation (4: +2; 36: +4), and believe that the technical values and purpose of the Organisation are being adhered to (3: +2; 41: -2), this view was confirmed by a participant of this factor in their post Q sort questionnaire: 'The company provides quality to the industry' (RME/40). They feel that they are well supported (37: +3), and that they can speak to their managers about any problems they may have (27: +4). Relationships with colleagues and managers are strong

(35: +1; 43: +3), although poor and limited communication causes frustration (29: 0; 49: -1) and this is associated with administration teams becoming part of another business unit (34: -1). However, they have a good working relationship with other RMEs (26: +1) and know that colleagues are always just a phone call away and that they are in contact with customers daily (23: +2). However, they find that there are too many emails being sent which can lead to important ones getting missed (22: -1). They have a positive outlook on work and their role, 'I find it difficult to comprehend sometimes that somebody's in a job that they might not be happy with' (RME/09 – Interview). They feel comfortable when calling and attending Head Office (31: -3; 33: -2), with office politics not being an issue (21: +1). The ownership of their regional areas is an important part of their identity and place within the Organisation (12: +1), with a participant commenting that:

Managing my area was always seen as an important part of the role – my employment contract mentioned it I believe. Always aspired to the role and remain proud to be part of the Organisation (RME/04).

Engagement and commitment is achieved by them believing that they are their own boss (20: +1) and in charge of their daily workload and clients: 'I like the freedom to run things my way. I feel ownership gets/makes for better outcomes e.g. unit targets etc.' (RME/21). This ownership combined with good organisational skills has supported efficient working practices and remaining in control of their areas (2: -3). However, within the efficient practice is a heavy reliance upon IT as an essential tool for the remote worker and, as such, this can lead to issues when problems occur (17: 0), 'IT support is a nightmare' (RME/40). Furthermore, the implementation of new technology can also lead to frustrations being felt by the RMEs without suitable approaches being taken to consider their needs and requirements (48: 0). Being a remote worker doesn't lead them to feel isolated (16: -4), 'I don't in the least feel isolated as wherever my visit is, I see as my workplace interacting with ACs [Clients]' (RME/12), and they believe that the Organisation cares about them and recognises their work and its value for the Organisation and its clients (39: -4). Their workload is being managed effectively and is not affecting their work/life balance (18: -3; 19: -1), 'There is no challenge to complete everything as we are given all the time we need. Also it's not just a number game to me as there is so much more to the role' (RME/13). However, this way of working does require a lot of self-discipline for them to switch off from

their work and this has become an easier task with the length of time in the role for many (24: 0), a participant comments:

Although I work from home I am definitely not isolated, phone/email support is readily available. This job allows me to balance work/life much better than most jobs. It has got easier to balance after time in role (RME/09).

In contrast, a participant of this factor has a differing view owing to the size of their area and the geographic spread of work within it:

My personal life is affected by my work due to many hours driving and staying away which causes issues within my family support (RME/40).

Despite this isolated view within the factor the overarching responses from the participants is that the Organisation cares and provides high levels of support to reduce any work related issues:

The Organisation actively shows their appreciation and is prepared to accept any feedback – positive and negative (RME/23).

This support has led to high levels of job satisfaction and this, in part, has been developed from a culture of accountability and openness (40: +1), 'The leadership, vision and mission of the company help us work collectively to these goals' (RME/14). It has also been created through the role providing a sense of purpose that is directly aligned to the Organisation's mission and this has led to the participants feeling galvanized and clear about the Organisation's purpose and direction. A participant commented about the importance of management support:

Pride and integrity in what you do is self-motivating and knowing support is always available from REM [Manager] means you know you are valued (RME/32).

Having clearly defined roles that support and drive the Organisation forward is an imperative. A participant commented:

I believe that the role is essentially clear and has fundamentally remained unchanged in its ethos over the years (RME/39).

Overall, this viewpoint represents participants who are 'Supported and Proud' to work for the Organisation.

4.9.5.2 Area Engineers' factor 2: 'Remote and Distant'

Factor 2 has an eigenvalue of 3.12 and explains 9 percent of the study variance. Seven participants (RMEs: 02, 06, 07, 17, 18, 25 and 26) are significantly associated with this factor. The average time in role for these participants is 11.86 years. The highest loading participant in this factor is RME/25 and they have been in their role for 5 years. The mean point where the participants start to disagree with the statements has been calculated as -1.67.



Figure 4.2: Factor array for the Area Engineers' factor 2: 'Remote and Distant'
(The crib sheet for this factor can be found in Appendix 16)

The Area Engineers expressing this viewpoint have an estranged relationship with Head Office (35: -3) which creates the perception that support for them is limited (37: -1). Poor communication has now led to this frustration becoming normalized and accepted by the participants (49: +2). One participant comments:

I send emails but often receive no replies. I manage my own scheduling and very rarely communicate with my REM [Manager] (RME/25).

As such, working relationships with colleagues and their manager is the lowest of all four of the Area Engineers' factors (27: 0; 43: 0) with strong feelings of not being important or listened too (50: +3). These participants have strong feelings of

being remote and organizationally distant which has led to them to focusing strongly on their own role and seeing it at an individual level only (20: +2; 22: +1). According to one participant:

Most of the time [I am] sorting [out my] own problems, [with] little contact with [my] REM [Manager] or H/O [Head Office] [I am] left alone to get on with the job. Emails intended for me i.e. 'it is my birthday and cakes on my desk [at Head Office]' global emails [are] pointless (RME/02).

This sense of distance has led to them feeling everyone in Head Office will find out things before them (30: +1) and this isolation is compounded by feelings that they will only be able to communicate with clients on a regular basis (25: 0) as one participant comments:

Can feel very isolated and not having face-to-face contact with colleagues, although seeing different people every day there is no continuity (RME/02).

The participants do spend majority of their time with clients and as such can empathize with their frustrations with the Organisation. These frustrations commonly link to communication or financial issues that often lead to inner conflict for the Area Engineers because of their own perceptions and relationship with the Organisation (9: +1; 42: +1). Despite this distance from the Organisation, the participants of this factor agree that the flexibility of the role and, the ownership and management of their area are the top two statements (5: +4; 12: +4). They have no difficulty in doing the job and still remaining customer focused (14: -4). As one participant states:

I have no difficulty completing my schedule of work as I plan it all myself and have very good systems. I have very good technical and people skills, and combine both easily (RME/25).

Their role gives them great satisfaction and pride by improving consumer safety (3: +3) and is perceived as a pinnacle role within the industry (4: +2; 7: -3), as one participant comments:

I take great pride in what I do and truly feel I improve the industry and that the Organisation's reputation is important (RME/06).

Working remotely and from home appears to have no issues with wellbeing and provides an overall positive experience for the RMEs:

Working from home seems to suit me personally and enables me to focus on what I do without the politics at a large company (RME/06).

Organisational skills are high and this leads to a sense of control and order over the work that is needed (2: -3; 18: -4). This in turn reduces the levels of reactivity and uncertainty, creating balance, 'My work life is planned and aspects of my life are down to me' (RME/17). Although there is an acceptance that it is very easy to spend a considerable amount of your own time working to achieve the required level of performance for their area (19: +2). Overall, this viewpoint represents participants who are 'Remote and Distant' working for the Organisation.

4.9.5.3 Area Engineers' factor 3: 'Controlled and Concerned'

Factor 3 has an eigenvalue of 2.81 and explains 7 percent of the study variance. Three participants (RMEs: 01, 10 and 19) are significantly associated with this factor. The average time in role for these participants is 10 years. The highest loading participant in this factor is RME/19 and they have been in their role for 1 year. The mean point where the participants start to disagree with the statements has been calculated as -2.00.

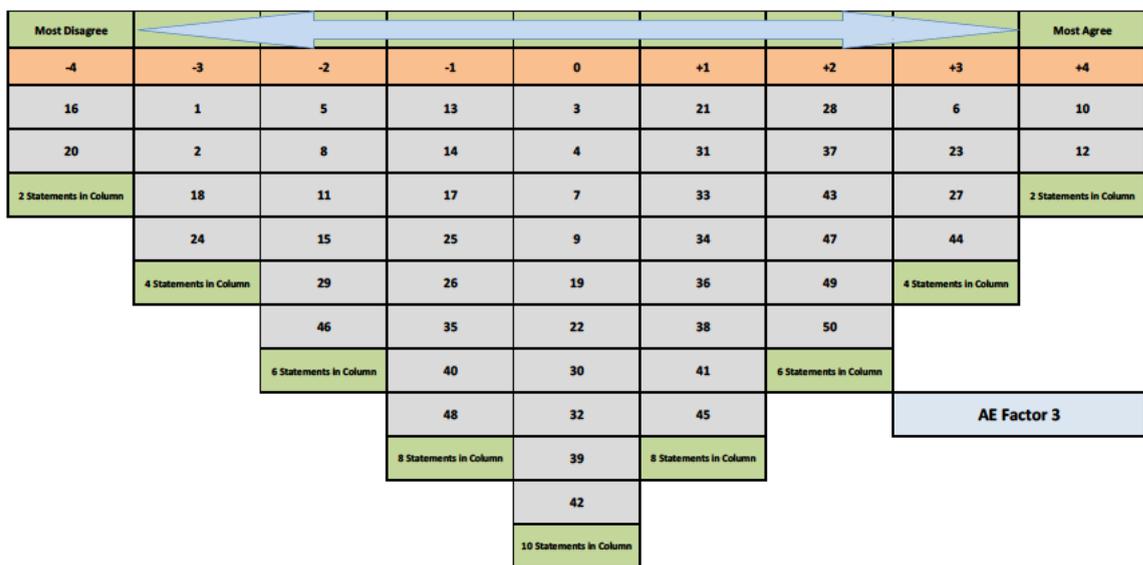


Figure 4.3: Factor array for the Area Engineers' factor 3: 'Controlled and Concerned' (The crib sheet for this factor can be found in Appendix 17)

The Area Engineers communicating this viewpoint are engaged in regular contact with colleagues and clients who help to remove any feelings of them being lonely and isolated (16: -4; 23: +3; 29: -2). As such, these feelings have led to the levels of social interaction with colleagues being seen as adequate (46: -2). Despite these feelings, there are fundamental issues with their perception of Head Office colleagues on several levels. They take their role and the management of their area very seriously (12: +4):

The Area Engineer has always taken ownership of his or her area and managed it, you know, and that was the job description when I joined, you know, you're responsible for your own area, managing it, dealing with queries (RME/01 – Interview).

Despite this strong role identity they now feel that they have lost a certain degree of control, 'I would like more control' (RME/19). These feelings of anxiety and oppression are directed towards the changes made at Head Office (10: +4):

I think there have a been a lot of changes in management structure, a lot of changes in the way people perceive what we do, but we still do what we do and the hours are still the same, you know (RME/01 – Interview).

This viewpoint is further illustrated by their fears of visiting Head Office and feeling like a new starter outside of their comfort zones despite working for the Organisation for an average of 10 years (31: +1). The control element has led to feelings that their relationship with Head Office has drastically changed and they feel no longer part of something (32: 0; 35: -1; 39: 0). These feelings were directly linked to the separation of the administration teams from the field teams. This separation and lack of multi-discipline teams has led to the loss of connections, small talk and responsibility (34: +1):

When I first joined, we operated in teams in the office so I always knew I had an administrator who would be responsible for workloads that I sent in so if there were any problems I could call them up and deal with it. I don't have that personal contact and I would, on a personal opinion, that doesn't really work as well because you simply don't get to build a relationship with somebody, you know there could be, I don't know, 10, 15 customer service staff in Warwick House [Head Office], I could probably name two (RME/01 – Interview).

This is further demonstrated by the Area Engineers contacting Head Office and their colleagues asking them who they work for, which leaves them to feel less positive, motivated and valued (33: +1). Limited communication and involvement with the Organisation leads to the field staff feeling their views of 'what the issues are' not being considered properly (50: +2). This detachment has led to feelings that the Organisation moves very slowly, which can sometimes be frustrating (47: +2) and an overarching feeling that the structure at Head Office should revert back to the former approach of administration teams working directly with field teams (45: +1). The feelings of being their own boss and being proud to work for the Organisation are the lowest ratings of all the Area Engineers' factors (20: -4; 36: +1). This is linked to the perceived lack of flexibility of their role (5: -2) and the control and power being imposed by Head Office, which has led to drift away from

the former core technical values (41: +1). Despite these feelings, they are good at switching off from their role, which helps them maintain a healthy work/life balance (1: -3; 24: -3). They also give less priority to the role's purpose and responsibility (3: 0; 13: -1; 15: -2) than other factors, but still see the role as important on a technical and social level:

I've known many of my contractors for 16 years and we've gone through the personal emotional turmoil that contractors and families go through on a daily basis, kids becoming ill, family members dying, people becoming seriously ill, so I don't just see it as a job where I'm auditing contractors against various standards, I also see it that I'm there to reassure my customers (RME/01 – Interview).

Overall, this viewpoint represents participants who are 'Controlled and Concerned'.

4.9.5.4 Area Engineers' factor 4: 'Work and Life Balance'

Factor 4 has an eigenvalue of 2.30 and explains 10 percent of the study variance. Five participants (RMEs: 05, 08, 16, 20 and 36) are significantly associated with this factor. The average time in role for these participants is 18 years. The highest loading participant in this factor is RME/08 and they have been in their role for 18 years. The mean point where the participants start to disagree with the statements has been calculated as -1.50.

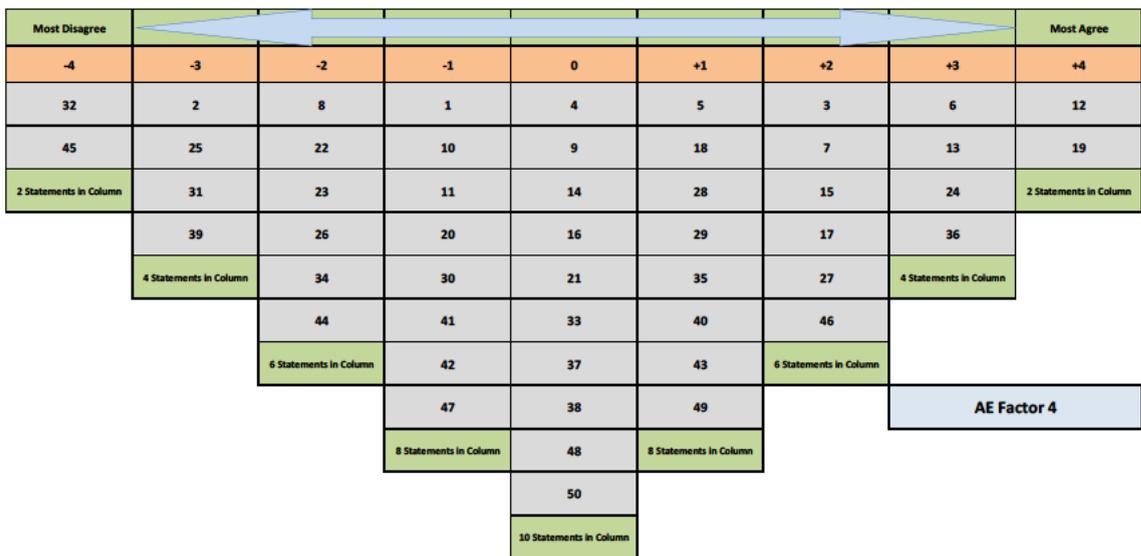


Figure 4.4: Factor array for the Area Engineers' factor 4: 'Work and Life Balance' (The crib sheet for this factor can be found in Appendix 18)

The Area Engineers conveying this viewpoint have worked for the Organisation for the longest period of time and have seen many changes take place (7: +2); this is echoed by one participant's comment:

Company approach, management systems have changed out of all recognition since November 1999 (RME/08).

Despite the number of changes witnessed they would not want to change the structure of Head Office (34: -2; 45: -4) 'I feel involved with the company despite structural changes' (RME/31) and they still believe that their relationship with Head Office remains unchanged (31: -3; 32: -4) as one participant commented:

Having worked at HO [Head Office], I understand that they work as hard as we work and have many problems they are trying to sort out at the same time as my queries. We work well as a team, without them, I could not complete my duties (RME/36).

Nevertheless, their work and the time needed to achieve it successfully, is leading to a significant amount of their own time being used (19: +4; 23: -2). Being a remote worker requires a lot of self-discipline to switch off from work and this is not being achieved irrespective of their length of service (18: +1; 24: +3). However, the intent is there to work effectively as possible:

I try to prepare well for all situations and so avoid having to be reactive. I like to manage my time efficiently (RME/16).

I manage my time effectively and do not worry too much about issues outside my influence (RME/05).

One cause of frustration is information technology (IT) which leads to additional time being needed to complete routine tasks (17: +2), 'Unfortunately I have recently had a great deal of issues with IT which had taken a number of months to resolve' (RME/36). They have very supportive relationships with their contractors and believe that a good technical background is essential to provide meaningful assessments (15: +2). However, the balance between being an auditor and remaining customer focused is more difficult (14: 0). Area ownership and management is very important and fundamental to their role (10: -1; 12: +4):

I take pride in being 'there' for my ACs [Approved Contractors], ensuring standards and dare I say it – having few complaints (RME/20).

I have always considered part of the role to include an element of managing the area and building relationships (RME/05).

Despite their feelings of being in control and their good relationships with contractors there are signs that elements of their working practice are leading to wellbeing issues (16: 0; 20: -1; 44: -2), 'It is very easy to eat into your family time in this role' (RME/31). Being home-based has led to feelings of being lonely and not being able to manage their personal life around work commitments (23: -2).

Several participants have commented:

I enjoy the variety of what I do but at the same time; [I] do not feel there is much flexibility (RME/08).

I think the company do care about my wellbeing but the nature of the job is a remote one. Personally, the job is what it is (RME/05).

Relationships are a central part of the Area Engineers' needs that are currently misaligned internally with other RMEs and Head Office staff (26: -2). They feel overall that the Organisation is supportive and cares (37: 0; 39: -3). Emails are a major source of internal communication that rely heavily on IT and nuances of language to allow the recipient to understand fully the sender's feelings (22: -2). Thus, these Area Engineers would like more social interactions and face-to-face contact with their colleagues (46: +2):

[The] nature of the job, geographical spread of my colleagues makes personal contact difficult (RME/08).

Overall, this viewpoint represents participants who are trying to achieve a 'Work and Life Balance'.

4.9.6 Interpretation of the Regional Engineering Managers' Factors

4.9.6.1 Regional Engineering Managers' factor 1: 'Engaged and Focused'

Factor 1 has an eigenvalue of 4.16 and explains 38 percent of the study variance. Four participants (RMEs: 92, 93, 96 and 97) are significantly associated with this factor. The average time in role for these participants is 10.50 years. The highest loading participant in this factor is RME/97 and they have been in their role for 13 years. The mean point where the participants start to disagree with the statements has been calculated as -1.00.

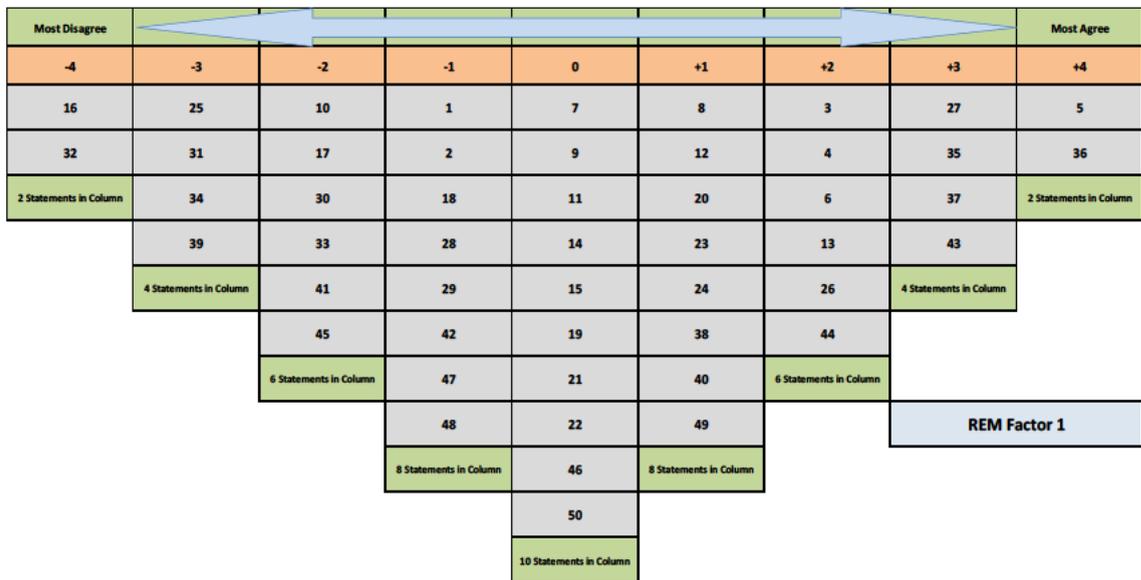


Figure 4.5: Factor array for the Regional Engineering Managers' factor 1: 'Engaged and Focused' (The crib sheet for this factor can be found in Appendix 28)

The Regional Engineering Managers who share this viewpoint enjoy their role and are proud of the position of the Organisation within the industry (4: +2; 5: +4; 36:+4). They feel supported and have a good relationship with their line manager and rarely feel out of their comfort zone (25: -3; 27: +3; 37: +3), 'I rarely ever feel out of my comfort zone and office staff are helpful and friendly' (RME/92) and this helps them to manage their workloads effectively (1: -1; 2: -1), 'I am supported by the company management and colleagues' (RME/93). They are focussed on maintaining good relationships with all colleagues (26: +2; 35: +3; 40 +1) and this

provides a stable platform for them to feel secure and engaged (16: -4). The role is seen as an important one (3: +2; 13: +2) of which they still feel in control of their area and workload (10: -2; 20:+1). They appreciate that over time the role organically changes and they are prepared to grow and constantly adapt by having a flexible and agile mindset (6: +2; 7: 0). They maintain good communications links with colleagues (23: +1; 29: -1). As a manager, they are in contact more frequently with Head Office and as such, they still feel they are affected by office politics (21: 0). One participant discusses the political issues:

Politics I would say, in that we seem to have a number of different silos within the Organisation that don't seem to gel well together or at least talk openly to resolve issues and you know have a consistent approach (RME/96 - Interview).

The focus of this comment is on structural remoteness 'silos' which are perceived as being counterproductive for organisational success and potentially divisive. A further comment identifies this in further detail:

I would change the structure of the Organisation so that we did not have all the different silos that exist, to improve the communication, so it means that people talk together, that the direction that we would be going in would be the same (RME/96 - Interview).

Despite an underlying viewpoint that highlights a desire to improve the Organisation's culture, the overall viewpoint would not change the structure at Head Office (45: -2). As a result, they still feel part of the Organisation (32: -4) and are aligned to its core values and direction (42: -1). Poor communication is cited as a cause for frustration (22: 0; 49: +1) and this links to the quantity, content and their relevance to the recipient, 'I don't like being cc'd into meaningless emails' (RME/93). However, they feel there is clarity and transparency of information dissemination from Head Office (30: -2). IT and technological developments are not seen as an issue for the participants (17: -2; 48: -1).

Work/life balance is not an issue for the participants (18: -1) and this is linked to them being able to complete their workloads (1: -1). They agree that being able to switch off from their work requires a lot of self-discipline (24: +1) and do find it

easy to spend their own time working (19: 0). Although, being home-based allows them to manage their personal life more effectively around work commitments (44: +2) and this is providing balance. Remote working has provided positive and negatively linked issues discussed by one participant:

From my perspective as a Manager, although the role is quite remote, I do have contact with the likes of my fellow colleagues, the REMs, your good self and my line manager. However, working by yourself, I do spend quite a lot of time in the office, which can be in many cases quite lonely, but you do get quite a lot of work done, but it is quite an insular lifestyle. There are times when I feel the need to ring a colleague of mine just for a quick chat just to run something past them or to have a laugh (RME/96 – Interview).

The participants of this viewpoint feel well supported in many ways and are fully engaged with their teams, their role and the Organisation. Overall, this viewpoint represents participants who are 'Engaged and Focused'.

4.9.6.2 Regional Engineering Managers' factor 2: 'Challenged Leaders'

Factor 2 has an eigenvalue of 1.05 and explains 27 percent of the study variance. Four participants (RMEs: 91, 94, 95 and 98) are significantly associated with this factor. The average time in role for these participants is 13.50 years. The highest loading participant in this factor is RME/98 and they have been in their role for 30 years. The mean point where the participants start to disagree with the statements has been calculated as -2.50.

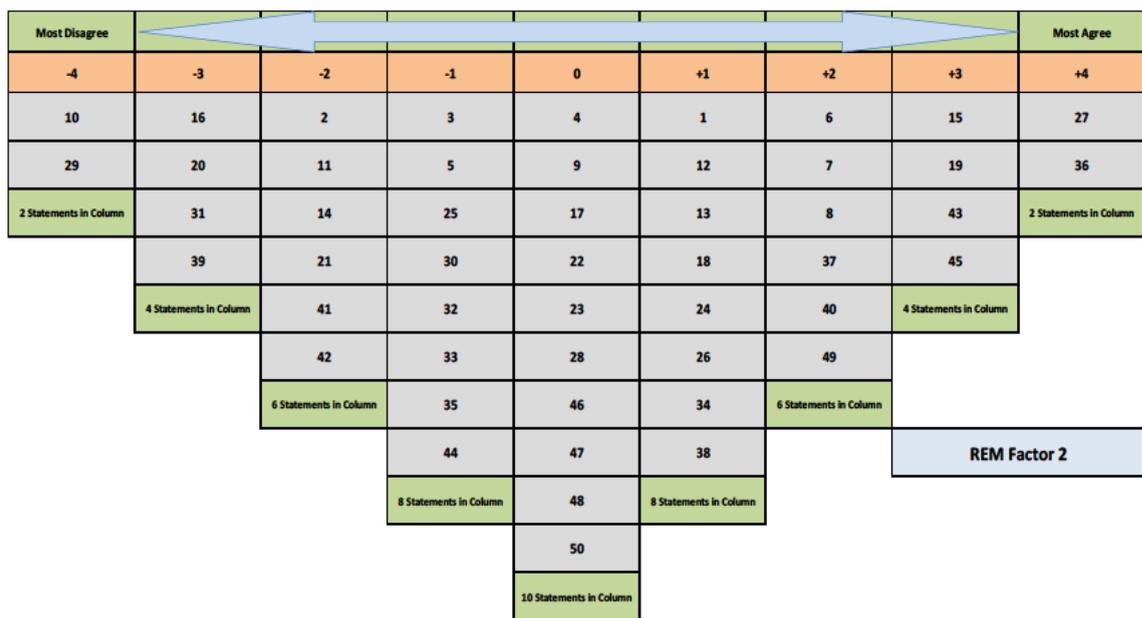


Figure 4.6: Factor array for the Regional Engineering Managers' factor 2: 'Challenged Leaders' (The crib sheet for this factor can be found in Appendix 29)

The Regional Engineering Managers holding this viewpoint believe that their role has changed considerably since they started (7: +2). However, the role of an Area Engineer has remained relatively unchanged with regards to the assessment of contractors for compliance (8: +2). Their apprenticeship and training to become an electrician was fundamental in their gaining a role with the Organisation (15: +3). They find challenge in completing everything that they need to do (1: +1), 'the greatest challenge is trying to achieve everything you need to achieve' (RME/98 – Interview) and this leads to them spending a considerable amount of their own time working (17:0; 19: +3).

As one participant comments, 'Switching off is difficult, as the job can be 24/7 if you let it' (RME/94) and this leads to feelings that their work/life balance is difficult to achieve (18: +1):

It is very easy to spend a considerable amount of your own time when working from home, you may well pop up to do one little thing and end up being up there still three, four hours later (RME/98 – Interview).

Despite this they are being fulfilled by the role (10: -4; 13: +1), 'I enjoy the job and being involved in various items especially technical' (RME/94). One participant views the two RME roles as pivotal for the success of the Organisation:

I have been in the Organisation for many years and the REM/AE [Manager/Area Engineer] role is fundamental to the existence and continuity (RME/91).

This view is further supported by seeing these key roles as what makes them tick (40: +2) and the value they place upon the support that is being given to them by their manager (27: +4) and fellow RMEs (26: +1). They do not feel isolated (16: -3; 29: -4), but would like more face-to-face contact with colleagues other than at Regional meetings (25: -1; 28: 0). They believe that the Organisation does care about their wellbeing (37: +2; 39: -3), 'The Organisation does care about the wellbeing of its employees' (RME/91). They have a great sense of pride working for the Organisation (36: +4), but despite being a remote worker they still feel that they are controlled and lack freedom (5: -1; 20: -3; 44: -1). Their relationship with Head Office presents challenges (32: -1; 33: -1; 35: -1) as they believe Head office will find out things before them (30: -1) and office politics are still being felt (21: -2). They believe that the views of the field team need to be listened to more (50: 0) and a change in the structure at Head Office is needed to bring back teams. This change would facilitate an improvement in the communication between Head Office and the Field Teams (34: +1; 45: +3) as this causes frustration (47: 0; 49: +2):

I feel we have lost the team approach in resolving problems. I feel that even as a remote worker because I am an REM [Manager] I am involved in office politics (REM/98).

The actual administrator that was covering that team would be fully aware of all the engineers, fully aware of the contractors and therefore they were able to assist in resolving any problems and quite often a lot of those issues wouldn't reach me, you know, so they acted as like a buffer if you like (REM/98 –Interview).

A considerable amount of their time is now spent with administration and logistics which leads to feelings that their role has changed considerably (4: 0). The strategic focus of the Organisation and its core technical values appear to have moved slightly (41: -2; 42: -2). Interestingly, the highest loading participant of this factor has been with the Organisation for the longest period of any other RME within this study (30 years).

Overall, this viewpoint represents participants who are 'Challenged Leaders'.

4.10 Researcher's Q sort reflections

Most Disagree								Most Agree
-4	-3	-2	-1	0	+1	+2	+3	+4
10	16	14	41	45	1	6	15	19
12	39	8	17	49	2	47	5	36
2 Statements in Column	25	21	46	20	37	4	24	2 Statements in Column
	30	7	28	9	27	43	40	
	4 Statements in Column	32	29	33	11	44	4 Statements in Column	
		31	23	3	38	22		
		6 Statements in Column	34	50	26	6 Statements in Column		
		Disagree with this Column	48	42	18			
			8 Statements in Column	13	8 Statements in Column			
				35				
				10 Statements in Column				
								RME Q Sort 2017
								Reference: RME/99
								Time in role: 9 years / 11 months

Figure 4.7: Factor array for the Researcher (The crib sheet for this factor can be found in Appendix 35)

The researcher's reflections on their Q sort and the process are needed to clarify their position as a person, senior leader within the Organisation and as a researcher. It has been previously outlined in Chapter 3 that the aim of the research is to allow the participants' viewpoints to be heard through the collected and analysed data, whilst attempting to minimise the potential (conscious or unconscious) researcher biases. Thus, part of this process is for the researcher to complete the Q sort activity as a participant, which would achieve two outcomes. Firstly, it would allow them to gain a fuller understanding of how the Q sort process worked and felt for the RMEs. Secondly, it would provide a completed factor interpretation that would allow the researcher's own position and viewpoint to become transparent. This measure, used in conjunction with the systematic crib sheets (see, Appendices 15, 16, 17, 18, 28 and 29) allowed the six RME factor interpretations to be as 'objective' as possible, and to standardise the interpretations.

Completing the Q sort activity was a more difficult process than initially anticipated and required the researcher to position the statements on the grid without overthinking their responses too critically. Thus, the statements were sorted at an instinctual level without specific thought processes or theoretical lens

being used. Inevitably, therefore, the finished grid represents a hybrid of perceptions and feelings, based on past and present experiences, and of defined and undefined roles. The researcher's factor array was analysed against the two Regional Engineering Managers factor arrays to identify any similarities or differences of viewpoint. The Regional Engineering Managers factors were selected, as they were the most similar in role type and level of responsibility within the Organisation. The researcher's factor shared the closest association with the REM factor 2 'Challenged Leaders'. A detailed description relating to the position of each of the statements will not be provided, but the completed factor array can be found in Appendix 34 for further information.

4.11 Summary and RME conceptual map

The overarching aim of the research was to understand the subjective viewpoint of RMEs towards corporate commitment and wellbeing. Initially three abstractions were considered: purpose, security and happiness. These abstractions led to three key theoretical strands: role identity, remote working and job satisfaction being identified to critically explore in the data collection process following the literature review. A plethora of findings and analysis has been presented within this chapter and within the Appendices. Four distinct factors (viewpoints) have been constructed for the Area Engineers: Supported and Proud; Remote and Distant; Controlled and Concerned; and Work and Life Balance. Two factors distinct (viewpoints) have been constructed for the Regional Engineering Managers: Engaged and Focused; and Challenged Leaders. As a result of the literature review and the findings from the data collection process a conceptual continuum has been constructed to summarize the findings and is shown in Figure 4.8.

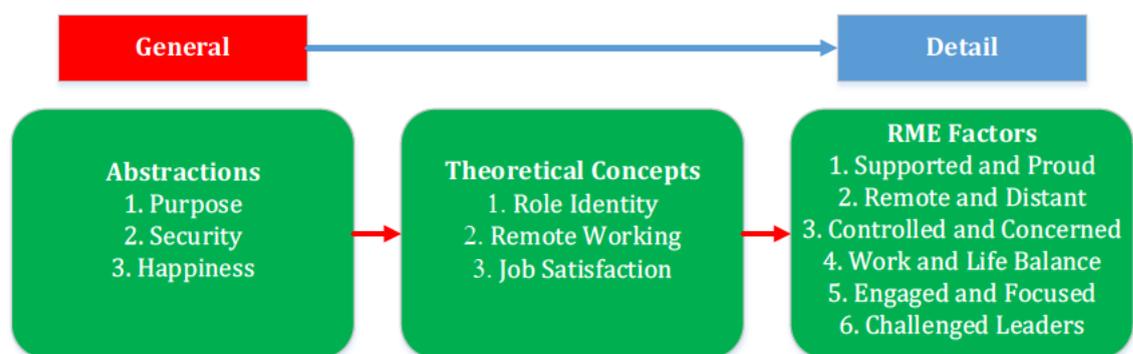


Figure 4.8: Abstractions, theoretical concepts and RME factors

A conceptual map for the theoretical concepts and their links to the RME factors is shown in Figure 4.9. This graphically depicts the links between the three theoretical concepts and the six RME factors.

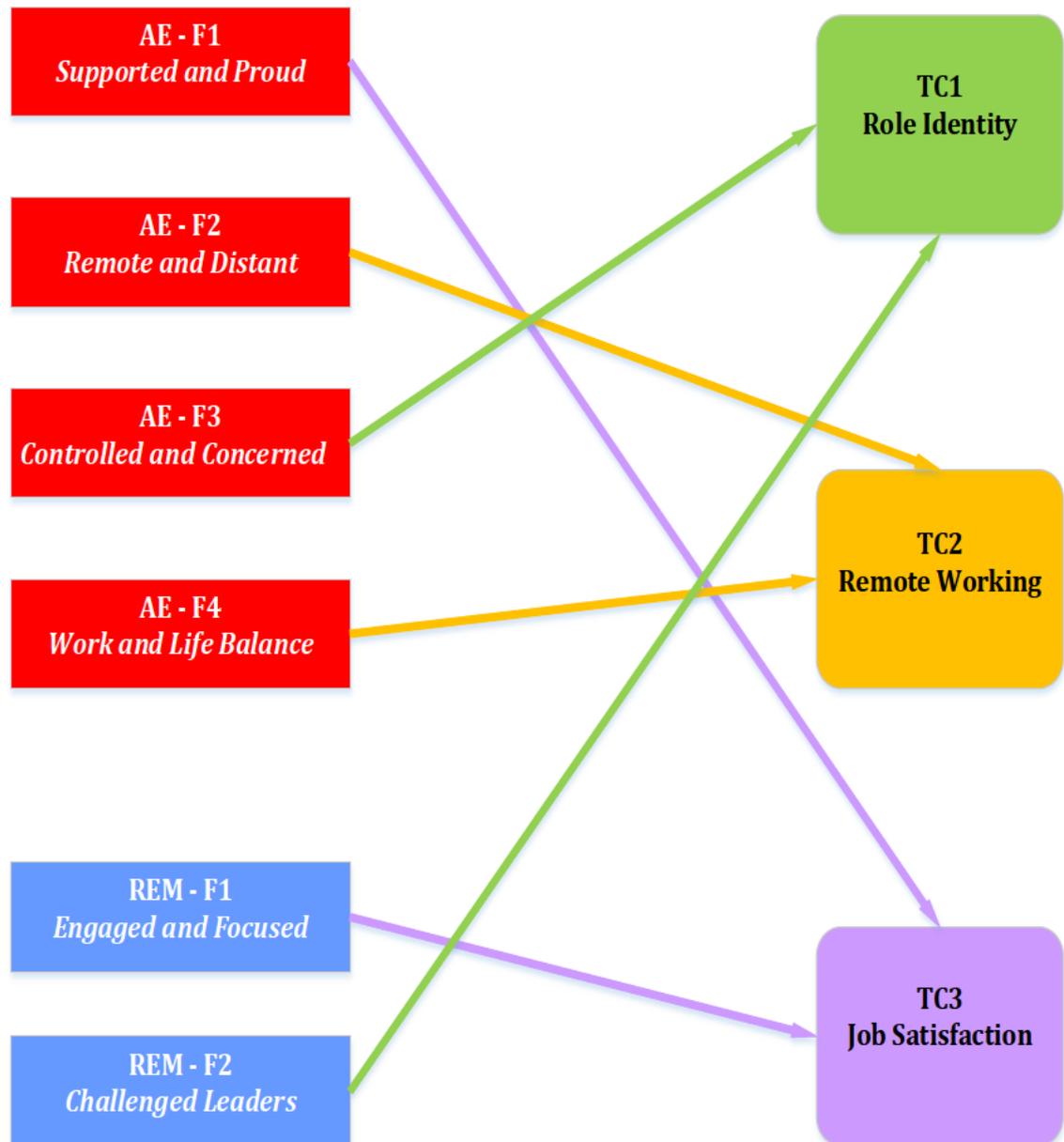


Figure 4.9: A conceptual map for the theoretical concepts and RME factors

The discussion chapter will now critically evaluate these findings against the research questions and the literature review. Conclusions and salient linkages will be then drawn to try to answer the research questions fully in the conclusions chapter.

Chapter 5: Research discussion and analysis

5.1 Introduction

The purpose of this chapter is to relate the findings to the literature and to flag up findings not already covered by the literature that might open up further research and perhaps theorising.

I am conscious that in the prior presentation of findings I have been at pains to demonstrate the methodological rigour of the study, hopefully as evidence of its authenticity.

Before proceeding, however, I would like to give a more simple and brief portrait of our engineers (RMEs), leaving the methodology as said.

5.1.1 Portrait of the RMEs

What are the RMEs like?

The RMEs are highly qualified and experienced electrical engineers that take great pride in their work and its value to society. They have all started their careers in very similar ways and this mostly involves them leaving school at sixteen and undertaking an electrical apprenticeship to become a qualified electrician. Subsequently they have continued their vocational studies on a part-time basis to the highest level and their careers have progressed to supervisory and management roles. At this stage in their career they commonly undertake more academically focused training relating to electrical engineering and building services that includes: higher national certificates and diplomas (HNC/Ds), degrees and professional qualifications. The RME role is seen by the vast majority as a pinnacle career achievement and the age range profile for starting the role is generally between 30 to 50 years old.

What do they like?

The RMEs like to feel that they are part of a well-organised team that supports and aligns with their strong values and sense of purpose. They like to feel empowered to manage their area and to be the central focus for their clients (electricians) as they

enjoy imparting their knowledge and seeing their clients improve and become more proficient. This nurturing behaviour provides the RMEs with the satisfaction that the end users with domestic, commercial and industrial electrical installations are safer because of their role and its impact.

What don't they like?

The RMEs are organised engineers that like to understand fully why things are changed and what the intended benefits will be. They have reservations, however, about the communication, professionalism, and readiness to take ownership of tasks by (some of) their non-technical colleagues. They set high standards for themselves and their clients and this drives them to expect the same from their colleagues. Relationships are important for RMEs because of their spatial distance (geographic, social and physiological) from Head Office. High levels of attrition in the administration department at Head Office and the removal of dedicated teams for RMEs have led to more difficult and estranged relationships emerging.

What do they want to change or change back?

They fully understand the commercial pressures that a modern business faces. However, they are strongly committed to the primary purpose of the Organisation, which is to improve electrical safety and to keep the end users of electricity safe. Thus, they would like to see a greater focus upon technical instead of commercially orientated initiatives. They would also like to see a more holistic structure that removes silo mentality and working practices to create greater harmony and respect.

Are the RMEs the same over time, or have they changed?

Time has changed the structure and focus of the Organisation, which has led to a more customer centric approach being currently applied. Contemporary RMEs are generally not as technically qualified as their predecessors, which can be linked to the increased level of University attendance and reduction of apprenticeships that has occurred. Despite this, people skills are more strongly valued now as these are viewed as a vital ingredient in offering improved levels of customer experience. A healthier balance between technical and interpersonal skills is now seen as the optimum requirement for an RME. However, the core purpose of the RME role remains unchanged despite over sixty years of evolution.

5.2 Analysis of the viewpoints

5.2.1 Introduction

Q methodology was selected as it provided subjective viewpoints that can be considered as prototypical exemplars rather than typologies using discrete data and clear discontinuities between typological categories. Thus, the focus within this research was to identify typical characteristics for each factor (viewpoint) and not numerical distribution amongst the participants of the study. Indeed, varying levels of fit exist for all of the four factors identified for the Area Engineers (see, Table 4.1) and the two factors identified for the Regional Engineering Managers (see, Table 4.2). However, the primary aim of the research was to obtain critical insight using individual contexts that remained true to the subjective perspective of the individuals. Thus, this chapter will now discuss the findings of the reported study in relation to the existing literature.

This analysis will focus on the three theoretical concepts that were used to develop the Q sort statements (see, Appendix 6), as these will provide a clear framework for the discussion of the identified six RME factors.

5.2.2 Analysis of the Area Engineers' viewpoints

The findings chapter revealed there to be four distinct factors (viewpoints) for the Area Engineers. The viewpoints revealed by this Q methodological study have provided an effective means to clarify the existing maelstrom of conflicting definitions regarding remote working in the existing literature. The Area Engineers' viewpoints have revealed a plethora of insight relating to the three theoretical concepts (TC): TC1/Role Identity (RI); TC2/Remote Working (RW); TC3/Job Satisfaction (JS). Thus, to aid understanding, before further discussion, a conceptual space diagram is shown in Figure 5.1 that identifies the three theoretical concepts (TC) and how the four factors (viewpoints) that have been identified for the Area Engineers are related: Factor 1 (F1)/Supported and Proud (SP); Factor 2 (F2)/Remote and Distant (RD); Factor 3 (F3)/Controlled and Concerned (CC); Factor 4 (F4)/Work and Life Balance (WLB).

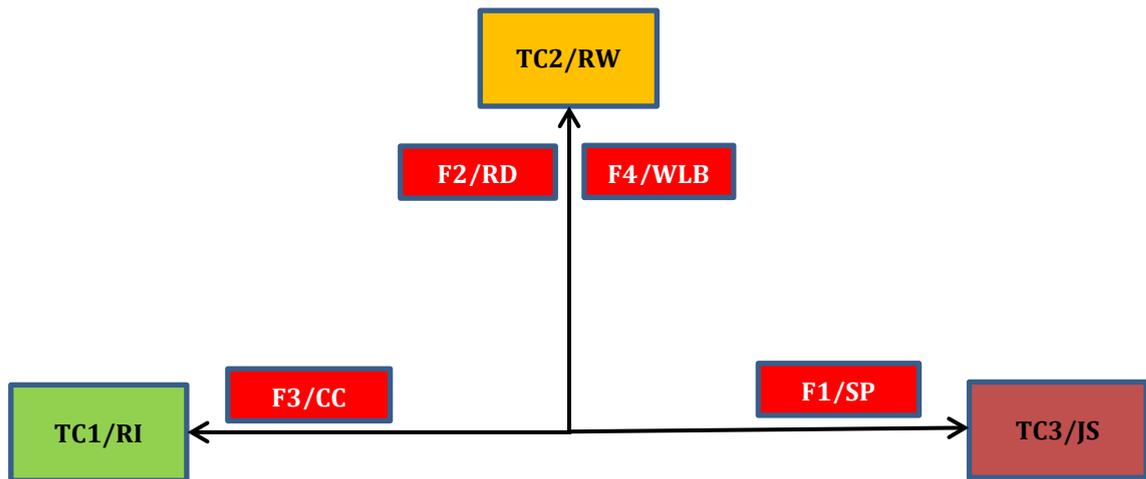


Figure 5.1: A conceptual space diagram identifying the relationship between the four factors identified for the Area Engineers and the three theoretical concepts of the study

The implications and impact of the viewpoints of the Area Engineers (see, Chapter 4, Appendices 10-25 and Table 5.1) will now be compared and contrasted using the three theoretical concepts and the existing theoretical literature that was selected and evaluated in Chapter 2.

Table 5.1: Extreme statement scores by factor/opinion types for the Area Engineers

No.	Statement	F1	F2	F3	F4
5	I enjoy the flexibility of my role and the variety of what I do	+3	+4	-2	+1
10	I feel that I have lost a certain degree of control of my area	-2	-2	+4	-1
12	I have always taken ownership of my area and managed it	+1	+4	+4	+4
14	It is a difficult balance between doing the job as an auditor and still being customer focussed	-1	-4	-1	0
16	I feel isolated	-4	-2	-4	0
18	I feel managing your work/life balance is the most difficult thing as a remote worker	-3	-4	-3	+1
19	It is very easy to spend a considerable amount of your own time working	-1	+2	0	+4
20	I am a remote worker, but fundamentally I am my own boss	+1	+2	-4	-1
27	I can speak to my manager about any problems that I have	+4	0	+3	+2
32	The relationship with Head Office has drastically changed and I feel no longer part of something	-2	-2	0	-4

36	I have a great sense of pride working for the company	+4	+2	+1	+3
39	I feel that I am just out there doing units and nobody really cares about me	-4	0	0	-3
45	I would change the structure of the relationship with Head Office, I would go back to teams	-2	-2	+1	-4

Key:

Green and bold = Highest statements in that factor.

Yellow and bold = Lowest statements in that factor.

5.2.2.1 Theoretical Concept 1: Role Identity

The role of being an Area Engineer is considered by the majority of the participants as a pivotal method of defining their identity as engineers with their overall behaviours demonstrating a strong alignment to the corporate paradigm (Burke and Stets, 2009; Grube and Piliavin, 2000). There were only two consensus statements (2 and 21) amongst all of the four Area Engineer factors (see, Appendix 10). Statement 2 related to role identity (A lot of what I do is reactive) and this was consistently rated as (-3) and supported that the Area Engineers were all being proactive in their daily activities. This consistent viewpoint is also further supported by their commitment to engage in behaviours that support the needs of their clients and the management of their area.

The highest rated statement overall for the Area Engineers was statement 12 (I have always taken ownership of my area and managed it) which was rated as (+4) for three out of the four factors (see, Table 5.1). Thus, having a clear understanding of the primary purpose of the role supports and promotes feelings of ownership, which is consistent with Parker *et al.* (2006) findings. Furthermore, when a role in an organisation is clearly defined and understood, and the corresponding expectations are clear and non-conflicting, the engagement of an employee increases and work-based stress is minimised (Arnold *et al.*, 2010).

However, factor three (Controlled and Concerned) highlighted that external influences from Head Office were responsible for creating levels of role conflict and ambiguity of purpose. The impact of this finding was that the benefits posited by Arnold *et al.* (2010) were being undermined and have led to a reduction in organisational commitment amongst the Area Engineers sharing this viewpoint (Glazer and Beehr, 1995; O'Driscoll and Brough, 2010). The levels of role conflict

being experienced by some of the Area Engineers has arisen from not having a clear understanding about their role's objectives, expectations and responsibilities due to strategic drift and poor communication from Head Office. Role conflict exists when an employee has irreconcilable job demands that lead to feelings of being torn between doing what they believe is expected of them and what is being asked of them by other employees (Arnold *et al.*, 2010; Hoang and Gimeno, 2010).

This situation has also led to role ambiguity, which is a state that can occur at the outset of an employee's employment through badly defined job descriptions or inadequate selection processes (Beehr, 1995). However, role ambiguity can also occur over a period of time because of strategic drift caused by an organisation's strategy changing without considering its employees existing roles and leaving them misaligned. The participants represented by factor 3 have an average time in the Area Engineer role of 10 years. However, the highest loading participant (RME/19) has been in this role for just one year. This key finding would suggest that both of the highlighted causes (job descriptions/recruitment and strategic alignment/communication) by Arnold *et al.* (2010), Beehr (1995) and, Hoang and Gimeno (2010) are evident for this viewpoint. This is further evidenced by statement 10 (I feel that I have lost a certain degree of control of my area) being the joint highest rated statement (+4) for factor 3 (see, Table 5.1).

Furthermore, the flexibility and variety of the role (5: -2) and feelings that they were in charge of their daily workload and empowered to manage their areas (20: -4) were also the lowest of all the four factors for the Area Engineers. The overarching feelings of being controlled is leading to concern which can be correlated with the lowest levels of pride to work for the company (36: +1) and feelings that they were just currently being viewed as a human resource divorced of feelings and ownership (39: 0). In fact, these feelings are routed to the perceived relationship with Head Office changing incrementally and creating perceptions of no longer being part of something (32: 0; 35: -1; 39: 0). This viewpoint is further illustrated by their fears of visiting Head Office and feeling like a new starter outside of their comfort zones despite working for the Organisation for an average of 10 years (31: +1). These feelings are directly linked to the separation of the administration teams from the field teams. This separation and lack of multi-

discipline teams has led to the loss of connections, small talk and responsibility (34: +1). A desire is evident to change the structure of the relationship with Head Office and revert back to the previous approach of multi-disciplined (Administration and Customer Services) teams (45: +1):

When I first joined, we operated in teams in the office so I always knew I had an administrator who would be responsible for workloads that I sent in so if there were any problems I could call them up and deal with it. I don't have that personal contact and I would, on a personal opinion, that doesn't really work as well because you simply don't get to build a relationship with somebody, you know there could be, I don't know, 10, 15 customer service staff in Warwick House, I could probably name two (RME/01 – Interview).

How an employee identifies and responds to the behavioural scripts and expectations of a particular role, and the interactions they have with other employees directly effects how obligated and motivated they are to perform behaviours that they define as being in role (Morrison, 1994). Jiao *et al.* (2013) remonstrate that compared with other factors such as leadership, management style, organisation and personality, role identity is paramount in securing and maintaining employee organisational commitment. Job autonomy that supports an employee to determine their own approaches and, pace and intensity to accomplish their work tasks allows role identity to become more salient and securely embedded (Hackman and Oldham, 1980; Spector, 1986; Thoits, 2003). Thus, creating purpose and meaning for an employee that is aligned to an organisation's strategic objectives is paramount. As a result, attention should be given to aligning job descriptions to the Organisation's strategic objectives and maintaining a fluid approach to existing employees to reduce strategic drift and to minimise further role conflict and ambiguity. This viewpoint has identified the facilitators of, and barriers to, improve role identity and these will be discussed further in 5.2.4 and summarised in 5.2.4.5 and 6.1.

5.2.2.2 Theoretical Concept 2: Remote Working

Area Engineers can be described as employees who work away from a traditional Head Office full-time, live in different geographic regions and experience nearly full-time separation from other employees. Valuing the differences and benefits of Area Engineers to their Head Office counterparts is paramount for the Organisation to create a culture of inclusiveness. Having a central focus on productivity instead

of physical/geographic location, whilst recognising and effectively supporting the differing daily work experiences is vital (Mor Barak, 2000; Pless and Maak, 2004; Ryan and Kossek, 2008). Area Engineers should feel an integral part of the Organisation, yet this is paradoxical as the very notion of being remote damages the traditional cornerstones of how corporate identities manifest themselves. Macleod and Clarke (2014) and Wiesenfield (1998) contend that employees need be physically exposed to shared structures and systems to maintain and reinforce their corporate identity. Without this linkage, remote employees become autonomous and start to operate for themselves rather than for a shared set of goals and values. Thus, physical separation from each other and corporate tangible and intangible assets provides considerable challenge for an employer of RMEs.

The Area Engineers strongly aligning with the theoretical concept of remote working (Factors 2 and 4) all cited poor communication as a central reason for feelings of frustration towards Head Office colleagues (Factor 2, 49: +2; Factor 4, 49: +1). Indeed, this finding has galvanised feelings for factor 2 of being 'remote and distant' and has led to these participants focussing on their role at an individual level only (20: +2). As such, working relationships with colleagues and their manager is the lowest of all four of the Area Engineers' factors (27: 0; 43: 0) with strong feelings of not being important or listened too (50: +3). According to one participant:

Most of the time [I am] sorting [out my] own problems, [with] little contact with [my] REM [Manager] or H/O [Head Office] [I am] left alone to get on with the job. Emails intended for me i.e. 'it is my birthday and cakes on my desk [at Head Office]' global emails [are] pointless (RME/02).

Remote working can be isolating and lead to insular behaviours that may become a disruptive factor for organisations in their wish to promote teamwork and collaboration. This finding links to the work of Gajendran and Harrison (2007) and Monge *et al.* (1985) who contend that the exchange relationship between remote employees and their manager worsens due to greater managerial distance and absence from the Head Office leading to significant adverse consequences. Thus, managers play a pivotal role in shaping the work experiences and outcomes of remote employees (Gerstner and Day, 1997; Golden and Fromen, 2011). Kossek *et al.* (2006) remonstrate that managerial approaches may be out of date

because most were developed based upon on homogeneous Head Office schedules, with mostly face-to-face supervision. Thus, this presents different challenges for organisations and managers of RMEs (Golden and Fromen, 2011). However, the Area Engineers do have a mutually supportive relationship with most of their clients. They believe that a good technical background is essential to provide meaningful assessments (15: +2) and that area ownership, and its management, is very important and a fundamental part of their role (10: -2; 12: +4):

I have always considered part of the role to include an element of managing the area and building relationships (RME/05).

The principal face-to-face contact for the Area Engineers takes place with their clients and they use this relationship to maintain their corporate identity, whilst providing both technical and social level care to their clients. It is this relationship that forms a central part of an Area Engineer's role and also provides external social exchanges that replace the traditional internal connectedness gained from working in Head Office. The social dimension according to the CIPD (2016) forms a principal part of employee engagement and subjective wellbeing:

I've known many of my contractors for 16 years and we've gone through the personal emotional turmoil that contractors and families go through on a daily basis, kids becoming ill, family members dying, people becoming seriously ill, so I don't just see it as a job where I'm auditing contractors against various standards, I also see it that I'm there to reassure my customers (RME/01 – Interview).

I take pride in being 'there' for my ACs [Clients], ensuring standards and dare I say it – having few complaints (RME/20).

This highlights that the Area Engineers are becoming part of their clients' lives and as such, they become torn when issues are raised that concern the strategic direction of the Organisation or Head Office actions that cause problems for their clients (9: +1; 42: +1). They do have great pride in their work (3: +3; 12: +4; 13: +3) and working for the Organisation (4: +2; 36: +3) despite their estranged relationship with Head Office (35: -3). Being a remote worker requires self-discipline to switch off from work as their office is based within the home. The temptation to continue to work on after normal office hours have finished is high

and this has led to a significant amount of their own time being used (19: +4). Despite this, the intent is there to work effectively as possible:

I try to prepare well for all situations and so avoid having to be reactive. I like to manage my time efficiently (RME/16).

I manage my time effectively and do not worry too much about issues outside my influence (RME/05).

Working from home requires IT and technological support to be maintained as it represents an essential interface between the clients and Organisation. Continual improvements in technology require significant support and this has led to frustrations when problems have occurred. One cause of frustration is information technology (IT) which leads to additional time being needed to complete routine tasks (17: +2):

Unfortunately I have recently had a great deal of issues with IT which had taken a number of months to resolve (RME/36).

IT support is a nightmare (RME/40).

Despite their feelings of being in control and their good relationships with clients, there are signs that elements of their remote working practice are leading to wellbeing issues (16: 0; 19: +4; 44: -2). The experience of working remotely should be able to offer employees the opportunity to manage their family responsibilities or achieve an improved work/life balance. If these benefits are not realised it can lead to feelings of loneliness and apathy for an employee (Foster, 2012; Johns and Gratton, 2013). Thus, the Organisation needs to ensure that its remote working policy receives appropriate support throughout the organisational supply chain to allow it to be fully embraced and embedded within its culture (Ryan and Kossek, 2008). Despite this, several participants have commented that being home-based has led to feelings of being lonely and not being able to manage their personal life around work commitments:

It is very easy to eat into your family time in this role (RME/31).

I enjoy the variety of what I do but at the same time; [I] do not feel there is much flexibility (RME/08).

I think the company do care about my wellbeing but the nature of the job is a remote one. Personally, the job is what it is (RME/05).

My personal life is affected by my work due to many hours, driving and staying away which causes issues within my family support (RME/40).

Relationships are a central part of the Area Engineers' needs that are currently misaligned internally with other RMEs and Head Office staff (26: -2). They do feel overall that the Organisation is supportive and cares (37: 0; 39: -3). However, despite this, there is an overarching feeling that the type and quality of information dissemination could be improved (22: -2). Emails are a major source of internal communication that rely heavily on IT and nuances of language to allow the recipient to understand fully the sender's feelings. These have been seen as less effective than interacting face-to-face with employees (Daft and Lengel, 1986). The Organisation and its management are responsible for defining the quality and frequency of exchanges enacted with its remote employees (Golden and Fromen, 2011). The followings comments refer to the over-reliance on emails in preference to phone calls and meetings/events:

Remote working has not always been an issue; just new circumstances due to the types and amounts of new communication media, in particular the likelihood of misunderstanding (RME/18).

[The] nature of the job, geographical spread of my colleagues makes personal contact difficult (RME/08).

Thus, these Area Engineers would like more social interactions and face-to-face contact with their colleagues (46: +2) to help improve knowledge transfer and cultural alignment. Maintaining a healthy balance between work and home life is more than an ideal that should be aimed for; it is an essential ingredient to maintain wellbeing (CIPD, 2016). Organisations need to offer a workplace (Head Office or remote/home office) that offers all of its employees an exceptional work experience that has the same level of value placed upon it as is given to its customers. Remote working is fast becoming the new normative approach, yet the level of understanding and holistic methods of working needed to maintain engaged and healthy employees, needs to be improved (Maruyama and Tietze, 2012). These viewpoints have identified the facilitators of, and barriers to, improve

remote working and these will be discussed further in 5.2.4 and summarised in 5.2.4.5 and 6.1.

5.2.2.3 Theoretical Concept 3: Job Satisfaction

Job satisfaction is regarded by many employees as one of the most important elements relating to their work. Weiss (2002: 175) define job satisfaction as, 'a positive (or negative) evaluative judgment one makes about one's job or job situation'. The largest number of Area Engineers (24) loaded onto factor 1 which was aligned to this theoretical concept. The Area Engineers who represent this viewpoint have a great sense of pride working for the Organisation (4: +2; 36: +4), and believe that the technical values and purpose of the Organisation are being adhered to (3: +2; 41: -2). This view was confirmed by a participant of this factor in their post Q sort questionnaire, 'The Company provides quality to the industry' (RME/40). Job satisfaction has been associated in supporting improved levels of wellbeing and a reduction in stress (Faragher *et al.*, 2005). Keller and Semmer (2013) identified two key findings in their research conclusions that contributed to sustained levels of job satisfaction: job design that allowed defined levels of autonomy with sufficient and increasing levels of control and, appropriate levels of personal development being provided by the Organisation. These two elements allowed employees to manage more effectively their initial levels and future growth rates of job satisfaction by achieving a reasonable fit between their job characteristics and their needs and goals.

The Area Engineers have a positive outlook on their work and role, 'I find it difficult to comprehend sometimes that somebody's in a job that they might not be happy with' (RME/09 - Interview). These feelings are underpinned from being well supported by the Organisation (37: +3) and having strong relationships with colleagues and managers (27: +4; 35: +1; 43: +3). It is this level of support that has led to high levels of job satisfaction and this, in part, has been developed from a culture of accountability and openness (40: +1), 'The leadership, vision and mission of the company help us work collectively to these goals' (RME/14). The role also provides a strong sense of purpose, as it is directly aligned to the Organisation's mission and this has led to the participants feeling galvanized and clear about the Organisation's purpose and direction. However, it is the

relationship that the Area Engineers have with their managers that provides the secure foundation for these feelings to remain strong.

Several participants commented about the importance of management support:

Pride and integrity in what you do is self-motivating and knowing support is always available from REM [Manager] means you know you are valued (RME/32).

My REM [Manager] has supported me since my start, very understanding (RME/23).

He [Manager] listens and understands and values work and personal life (RME/40).

Good support from REM [Manager], some colleagues (RME/41).

Employee engagement has been positively linked to corporate commitment, job satisfaction and performance (Bakker and Demerouti, 2008; Saks, 2006; Shuck, 2011; Xanthopoulou *et al.*, 2009). Indeed, employees need to be able to have the ability to accomplish what they aim for, and trust that they will be actively encouraged and supported to do so by their Organisations. The Area Engineers believe that the Organisation cares about them and recognises their work and its value for the Organisation and its clients (39: -4):

The Organisation actively shows their appreciation and is prepared to accept any feedback – positive and negative (RME/23).

AE [Area Engineer], it is a great job and important to me, because I do feel valued and not just a new starter (RME/03).

I enjoy the job because of the variety – no day is the same and always a challenge (RME/12).

I am very proud to work for the company. The leadership, vision and mission of the company help us work collectively to these goals (RME/14).

Intrinsic motivators drive an employee to perform a task because they have a deep-rooted belief that their action will make a difference for the organisation and its customers (Bandura, 2006). These motivators are present for the Area

Engineers from having defined levels of autonomy and believing that they are their own boss (20: +1) and in charge of their daily workload and clients, 'I like the freedom to run things my way. I feel ownership gets/makes for better outcomes e.g. unit targets etc.' (RME/21). Being a remote worker does not lead them to feel isolated (16: -4), 'I don't in the least feel isolated as wherever my visit is, I see as my workplace interacting with ACs [Clients]' (RME/12). However, this way of working does require a lot of self-discipline for them to switch off from their work and this has become an easier task with the length of time in the role for many Area Engineers (24: 0), a participant comments:

Although I work from home I am definitely not isolated, phone/email support is readily available. This job allows me to balance work/life much better than most jobs. It has got easier to balance after time in role (RME/09).

According to Zheng *et al.* (2015), three dimensions of wellbeing exist: life, psychological and workplace. The wellbeing of employees (workplace) is affected by a plethora of factors and is driven by the perception an individual has of workplace events. Zheng *et al.* (2015) identified six items that were strongly linked to employee wellbeing: satisfied with their work responsibilities, satisfied with their job, finding real enjoyment in their work, always able to discover methods to enrich their work, work is a meaningful experience, and feeling satisfied with their work achievements in their current job. Thus, finding ways to provide meaning, purpose and enrichment at work to drive job satisfaction and improved wellbeing levels are to be encouraged. Line managers are pivotal in managing and enhancing employee wellbeing by implementing a holistic approach that is both preventative and proactive. Knowledge and experience are essential for the success of an organisation and a key challenge for modern organisations is to manage and safeguard the intellectual capital or the 'corporate memory' of its employees (Felstead and Henseke, 2017; Mulki *et al.*, 2009). Historically, Area Engineers have been the longest serving of all the Organisation's employees. This presents strong evidence of job satisfaction and alignment with the Organisation's core principles and has now been evidenced within this viewpoint.

However, it does present challenges for the Organisation as new starters are only needed upon the retirement of existing Area Engineers or through the growth of

the client base. The new generation of Area Engineers being employed have developed different attitudes and needs towards their work. As a result, there has been a move away from job security and more towards experiences, learning opportunities and social relationships. The same can be said about the needs and desires of the Organisation's clients (CIPD, 2016; Gollan and Xu, 2014).

The long-term survival of an organisation in a complex and chaotic world relies upon its ability to adapt quickly and remain relevant to its customers (Gribbin, 2004). The overarching metaphor of the work of Burnes (2005) and Stacey (2011) is that organisations/managers should be focusing on the small things as they have the potential to become the big things.

All employees within an organisation have a residual effect and by moving away from them having a narrow participation in the change process will permit a stronger strategic alignment for an organisation with its employees. As a result, there should be less destabilizing actions to reduce the effects of the change and create higher levels of corporate commitment (Houchin and Maclean, 2005). This viewpoint has identified the facilitators of, and barriers to, improve job satisfaction and these will be discussed further in 5.2.4 and summarised in 5.2.4.5 and 6.1.

5.2.3 Analysis of the Regional Engineering Managers' viewpoints

The findings chapter revealed there to be two distinct factors (viewpoints) for the Regional Engineering Managers. The viewpoints revealed by this Q methodological study have provided an effective means to clarify and enhance the existing maelstrom of conflicting definitions regarding remote working in the existing literature. The Regional Engineering Managers' viewpoints have revealed a plethora of insight relating to the three theoretical concepts (TC): TC1/Role Identity (RI); TC2/Remote Working (RW); TC3/Job Satisfaction (JS). Thus, to aid understanding, before further discussion, a conceptual space diagram is shown in Figure 5.2 that identifies the three theoretical concepts (TC) and how the two factors (viewpoints) that have been identified for the Regional Engineering Managers are related: Factor 1 (F1)/Engaged and Focused (EF); Factor 2 (F2)/Challenged Leaders (CL).

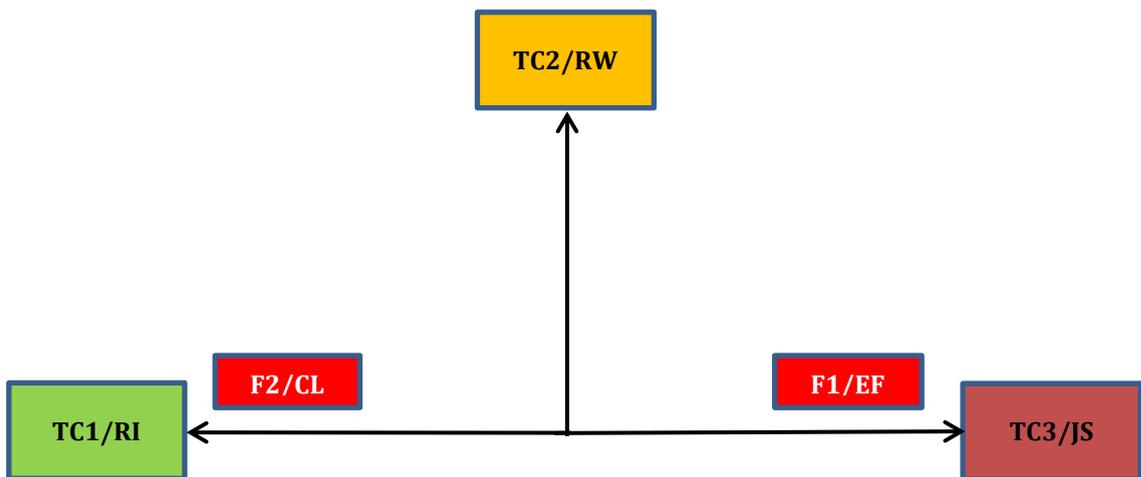


Figure 5.2: A conceptual space diagram identifying the relationship between the two factors identified for the Regional Engineering Managers and the three theoretical concepts of the study

The implications and impact of the viewpoints of the Regional Engineering Managers (see, Chapter 4, Appendices 26-33 and Table 5.2) will now be compared and contrasted with the existing theoretical literature that was selected and critically evaluated in Chapter 2.

Table 5.2: Extreme statement scores by factor/opinion types for the Regional Engineering Managers

No.	Statement	F1	F2
5	I enjoy the flexibility of my role and the variety of what I do	+4	-1
10	I feel that I have lost a certain degree of control of my area	-2	-4
16	I feel isolated	-4	-3
27	I can speak to my manager about any problems that I have	+3	+4
29	The communication I have with my colleagues is limited, I have got one or two close colleagues	-1	-4
32	The relationship with Head Office has drastically changed and I feel no longer part of something	-4	-1
36	I have a great sense of pride working for the company	+4	+4

Key:

Green and bold = Highest statements in that factor.

Yellow and bold = Lowest statements in that factor.

5.2.3.1 Theoretical Concept 1: Role Identity

There were thirty four consensus statements (items that were ranked or valued very similar by both factors) amongst the two Regional Engineering Manager factors (see, Appendix 26) compared with just two for the Area Engineers. This finding identifies the fact that there are considerable levels of correlation and agreement amongst the Regional Engineering Managers despite there being differing overall viewpoints emerging (Factor 1 (EF): TC3/Job Satisfaction and Factor 2 (CL): TC1/Role Identity). The highest rated consensus statement for the Regional Engineering Managers was statement 36 (I have a great sense of pride working for the company) which was rated as (+4) for both of the two factors (see, Table 5.2). The role of being a Regional Engineering Manager is considered by the majority of the participants as a pinnacle RME role that provides them with a 'dual identity' as both an engineer and manager (Glynn, 2008). All of the Regional Engineering Managers have been an Area Engineer previously and they believe that this role has remained relatively unchanged with regards to the assessment of contractors for compliance (8: +2). Having served an apprenticeship and undertaken training to become an electrician was ranked higher in this viewpoint (Factor 2) than any of the other five RME factors (15: +3).

They consider both of the RME roles (Area Engineer and Regional Engineering Manager) to be strategically important for the company and this, in part, instils strong feelings of pride working for the Organisation (36:+4). However, they value their role within the industry less highly (4: 0).

Where employees have more than one central identity and share activities in common (for example, Area Engineer and Regional Engineering Manager) integrated identities are created that are a hybrid of the principal features of each central institution and role identity (Glynn, 2008). These identities are constructed from integrating meanings and behaviours associated with the roles undertaken and are important to facilitate personal emotional, psychological, and physiological wellbeing (Creed *et al.*, 2010; Marks, 1977; Settles, 2004). According to Jain *et al.* (2009), individuals manage multiple identities using a variety of strategies in order to retain the meaningfulness of those considered most central, while minimising conflict between them. The value that these Regional Engineering Managers (4: 0) have attributed to their role within the industry suggests that the external validation of their role identity is being suppressed by focussing too intently upon their daily administrative tasks (Stets and Burke, 2000). As a result, this has led to an insular perspective of their role's value and position/standing within the industry:

The role used to be quite technically orientated in that I was more of a Technical Manager responsible for resolving technical queries with the team, all be that over the past number of years the technical role has changed more to rely on the technical helpline side of the business where the engineers would probably direct their technical query to them or that the search or technical forum sub-committee that meets, whereas I sort of sit back outside the loop now with that, I don't get asked as many technical questions as I used to, so more or less, the role that I see myself in is more of a Personal Manager where I am managing personalities and managing customer services orientated questions and issues as opposed to managing the technical side of the business (RME/96 - Interview).

Focusing on the external identity of their role to create regional impact and improved awareness would prove a positive step in improving this situation (Morrison, 1994; Thoits, 2003). The Regional Engineering Managers holding this viewpoint (Factor 2) believe that their role has changed considerably since they started (7: +2) and the two Regional Engineering Managers having the highest

loading on this factor have worked for the Organisation for an average of 22 years (see, Appendix 31). This finding highlights a significant difference between the two factors for enjoyment of the flexibility of the role (Factor 1, 5: +4; Factor 2, 5: -1). This is linked to the Regional Engineering Managers expressing that one of their greatest challenges is to be able to complete everything that they need to do on a daily basis (1: +1), 'the greatest challenge is trying to achieve everything you need to achieve' (RME/98 – Interview) and this has led to them spending a considerable amount of their own time working (19: +3). As a result of this finding, feelings have developed that challenge their ability to switch off from work activities. As one participant comments, 'Switching off is difficult, as the job can be 24/7 if you let it' (RME/94) and this can lead to their work/life balance being difficult to achieve (18: +1):

It is very easy to spend a considerable amount of your own time when working from home, you may well pop up to do one little thing and end up being up there still three, four hours later (RME/98 – Interview).

I find these two statement numbers (1: +4; 19: +4) are most prevalent to the REM [Manager] role (RME/95).

The Regional Engineering Managers feel that they are being too widely utilised in their daily activities and this is a major cause of them having the challenges associated with their workload and ability to successfully manage it. Despite this, they do feel that they are supported and have a good relationship with their line manager (27: +4; 37: +2) and are being fulfilled by the role (13: +1), 'I enjoy the job and being involved in various items especially technical' (RME/94). One participant views the two RME roles as pivotal for the success of the Organisation:

I have been in the Organisation for many years and the REM/AE [Manager/Area Engineer] role is fundamental to the existence and continuity (RME/91).

They also have a good working relationship and actively support the needs of the Area Engineers for whom they are responsible for as they are acutely aware of the needs of being a remote worker (Maruyama and Tietze, 2012). They do not feel isolated (16: -3; 29: -4), but would like more face-to-face contact with colleagues other than at Regional meetings (25: -1; 28: 0). They believe that the Organisation

does care about their wellbeing (37: +2; 39: -3), 'The Organisation does care about the wellbeing of its employees' (RME/91). However, despite being managers they still feel that they are controlled and lack the freedom and autonomy that they desire (5: -1; 20: -3; 44: -1). Job autonomy that supports an employee to determine their own approaches and, pace and intensity to accomplish their work tasks allows role identity to become more salient and securely embedded (Hackman and Oldham, 1980; Spector, 1986; Thoits, 2003). Their relationship with Head Office presents challenges (32: -1; 33: -1; 35: -1) as they believe Head Office will find out things before them (30: -1) and office politics are still being felt despite being a remote worker (21: -2):

I feel we have lost the team approach in resolving problems. I feel that even as a remote worker because I am an REM [Manager] I am involved in office politics (REM/98).

They believe that the views of the field team need to be listened to more (50: 0) and that a change in the structure of Head Office is needed to bring back teams (45: +3). They believe that his change would facilitate an improvement in the communication and knowledge transfer between Head Office and the field teams (34: +1) as this presently causes frustration for them (47: 0; 49: +2):

The actual administrator that was covering that team would be fully aware of all the engineers, fully aware of the contractors and therefore they were able to assist in resolving any problems and quite often a lot of those issues wouldn't reach me, you know, so they acted as like a buffer if you like (REM/98 -Interview).

As a result of this a considerable amount of their time is now being spent with administration and logistical issues, which is leading to feelings that their role has changed considerably (4: 0) and has become misaligned and devalued. They believe that the strategic focus of the Organisation and its core technical values have moved slightly too far towards being administration focussed (41: -2; 42: -2). This viewpoint has identified the facilitators of, and barriers to, improved role identity and these will be discussed further in 5.2.4 and summarised in 5.2.4.5 and 6.1.

5.2.3.2 Theoretical Concept 2: Remote Working

The Regional Engineering Managers can be defined as employees who work away from a traditional Head Office full-time, live in different geographic regions and experience relatively high levels of separation from other employees. However, unlike the Area Engineers neither of the two factors (viewpoints) for the Regional Engineering Managers aligned with the theoretical concept of remote working (see, Figure 5.2). Remote working is not seen as an issue for the Regional Engineering Managers compared to some of the Area Engineers (Factors 2 and 4) for two key reasons. First, they generally attend Head Office for management/project meetings every month. Second, they visit all of their Area Engineers at least annually to conduct face-to-face appraisals and audits. As a result, they do have higher levels of interaction and face-to-face contact with Head Office employees and other RMEs compared to the Area Engineers. Thus, the Regional Engineering Managers corporate identity and alignment is being enhanced from this additional contact being made available. This was confirmed by a Regional Engineering Manager when they were asked how they manage their relationship with Head Office differently to other Remote Mobile Employees (Area Engineers):

I think it's important to maintain that contact and I certainly think that the engineers that sort of work for me, we need to try and sort of make sure that they actually see these people (Head Office) face-to-face on occasions, because they're talking to them on the phone, I think you really do need to meet face-to-face to build a better relationship (RME/98 – Interview).

The improved levels of visibility and enhanced abilities to influence new communication networks for the Regional Engineering Managers are linked to being physically, and not virtually, present within Head Office (Taskin and Edwards, 2007; Tietze *et al.*, 2006). This finding aligns with Macleod and Clarke (2014) and Wiesenfield (1998) who contend that employees need be physically exposed to shared structures and systems to maintain and reinforce their corporate identity. Without this linkage, remote employees become autonomous and start to operate for themselves rather than for a shared set of goals and values. Lautsch *et al.* (2009) also suggest that organisational knowledge systems and flows need to incorporate and effectively manage the cultural and social topography of remote employees to maximise competitive advantage. The Organisation now

arranges an annual conference with all company employees invited that takes place at a remote location. This facilitates limited cross pollination of RMEs and Head Office employees. However, the Area Engineers needs are being generally met through the Regional Engineering Managers mode of working.

The Regional Engineering Managers have great pride working for the Organisation and both viewpoints have reflected this from it being one of their extreme statements (Factor 1, 36: +4; Factor 2, 36: +4). They are not feeling isolated despite being an RME (Factor 1, 16: -4; Factor 2, 16: -3). One reason cited for not feeling isolated and lonely was given by one Regional Engineering Manager who commented:

I'd say its frequent conversations, frequent discussions and the fact that we do meet on a monthly basis and have 2 days together (RME/98 – Interview).

I say contact with colleagues, what I mean is that compared to the role as an Area Engineer who is out in the field on a daily basis; they rarely have contact with anyone apart from myself if they need to talk something through. From my perspective as a Manager, although the role is quite remote, I do have contact with the likes of my fellow colleagues, the REMs, your good self and my line manager, who I tend to talk to probably every day in fact, so I don't feel that remote (RME/96 – Interview).

This highlights a key finding linked to the Area Engineers (Factors 1 and 3) who also feel that they are not isolated (Factor 1, 16: -4; Factor 3, 16: -4) and both of these viewpoints have rated this as one of their extreme statements. This can be partially associated to the positive relationship that they have with their manager (Factor 1, 27: +4; Factor 3, 27: +3). The exchange relationship between remote employees and their manager due to the greater managerial distance and absence from the Head Office can have significant adverse consequences (Gajendran and Harrison, 2007; Monge *et al.*, 1985). This physical separation from each other and corporate tangible and intangible assets does provide considerable challenge for an employer and manager of RMEs. Consequently, managers play a pivotal role in shaping the work experiences and outcomes of remote employees (Gerstner and Day, 1997). As a result, the Regional Engineering Managers are an important conduit of information and provide stability for the Area Engineers to remain engaged and focussed. However, this symbiotic relationship relies heavily

on the level of engagement and corporate alignment of the Regional Engineering Managers. The Area Engineers are using their Regional Engineering Manager and clients to maintain their social interaction needs. In contrast, the Regional Engineering Managers are utilising their Area Engineers and Head Office employees for this purpose (Factor 1, 40: +1; Factor 2, 40: +2).

However, as remote workers the Regional Engineering Managers are susceptible to the same feelings of isolation, work-family conflicts, reduced visibility and feedback as their staff (Cooper and Kurland, 2002; Golden *et al.*, 2006; Golden *et al.*, 2008; Hill *et al.*, 1998). This commonality of needs for the RMEs can lead to a domino effect being created without the needs of the Regional Engineering Managers being adequately supported by the Organisation. Maintaining a healthy exchange relationship is an imperative for remote employees and their managers as without it significant adverse consequences can ensue (stress, wellbeing and job satisfaction) linked to reduced levels of corporate commitment and motivation (Gerstner and Day, 1997; Golden *et al.*, 2008). Remote working within the managerial ranks is increasing with the advancement of modern technology, and from managers demanding more flexibility within their own roles (Bailey and Kurland, 2002; Golden *et al.*, 2009). Thus, finding ways to improve the experiences of remote managers and their remote direct reports is now an imperative. These viewpoints have identified the facilitators of, and barriers to, improving remote working and these will be discussed further in 5.2.4 and summarised in 5.2.4.5 and 6.1.

5.2.3.3 Theoretical Concept 3: Job Satisfaction

The Regional Engineering Managers who share this viewpoint (Factor 1) represented the highest level of variance being explained (38 percent) within the two factor solution matrix (see, Table 4.2). They enjoy their role and are proud of the position of the Organisation within the industry (4: +2; 5: +4; 36:+4):

The best thing about working for the Organisation is, for me personally, I have a great sense of pride working for the company, despite the slight issues that everybody would have, I've always been proud to work for the company. They look after you. I feel that I am well supported in many ways and highly, well, well, highly thought of by your good self and the colleagues that I work with and I think that goes a long way to make me feel that I'm happy in the role and I think as long as you've got that support, it just makes the job feel more worthwhile (RME/96 – Interview).

They feel supported and have a good relationship with their line manager and rarely feel out of their comfort zone (27: +3; 37: +3), 'I rarely ever feel out of my comfort zone and office staff are helpful and friendly' (RME/92) and this helps them to manage their workloads effectively (1: -1; 2: -1), 'I am supported by the company management and colleagues' (RME/93). They are focussed on maintaining good relationships with all colleagues (26: +2; 35: +3) and this provides a stable platform for them to feel secure and engaged. The role is seen as an important one (3: +2; 13: +2) of which they still feel in control of their area and workload (10: -2; 20:+1). They appreciate that over time the role organically changes and they are prepared to grow and constantly adapt by having a flexible and agile mind-set (6: +2; 7: 0). They maintain good communications links with colleagues (23: +1; 29: -1). As a manager, they are in contact more frequently with Head Office and as such, they still feel that they are affected by office politics (21: 0). One participant discusses the political issues associated with Head Office:

Politics I would say, in that we seem to have a number of different silos within the Organisation that don't seem to gel well together or at least talk openly to resolve issues and you know have a consistent approach. Everybody is very keen within the Organisation but I think they work within their own little areas and don't seem to communicate well together to look at the big picture and where we should be going. The focus really should be on the working together as opposed to the performance of the individual departments which I think, which is where the biggest problem, for me that is, lies within the company (RME/96 - Interview).

The key message held within this comment is on a feeling of structural remoteness 'silos' which are perceived as being counterproductive for organisational success and potentially divisive. A further comment offers a potential solution to the identified issue:

I would change the structure of the Organisation so that we did not have all the different silos that exist, to improve the communication, so it means that people talk together, that the direction that we would be going in would be the same (RME/96 - Interview).

Despite this individual viewpoint, that highlights a desire to improve the Organisation's culture and structure, the overall viewpoint would not change the structure at Head Office (45: -2). As a result, the Regional Engineering Managers still feel part of the Organisation (32: -4) and are aligned to its core values and

direction (42: -1). Poor communication is cited as a cause for frustration (22: 0; 49: +1) and this has linkages to the quantity, content and the relevance to the recipient of the emails received, 'I don't like being cc'd into meaningless emails' (RME/93). However, they do feel that there is clarity and transparency of information dissemination from Head Office (30: -2) despite its current structure. IT and technological developments are not seen as an issue for the participants (17: -2; 48: -1). This has been assisted by having the Regional Engineering Managers being involved with projects related with these areas of development:

Because of my IT expertise in certain areas, I am asked to get involved with a number of projects to assist the Organisation you know implementing new technologies, like iPads and things like that (RME/96 – Interview).

Work/life balance is not an issue for the participants of this viewpoint (18: -1) and this is linked to them being able to complete their workloads (1: -1). However, they do agree that being able to switch off from their work requires a lot of self-discipline (24: +1) and as such they still find it very easy to spend their own time working outside of normal working hours (19: 0). Being a remote worker and home-based allows them to manage their personal life more effectively around work commitments than being based in Head Office full time (44: +2) and this is providing reciprocal balance. Further clarification regarding the positive and negative issues of remote working with respect to their levels of job satisfaction and wellbeing are discussed by one participant:

From my perspective as a Manager, although the role is quite remote, I do have contact with the likes of my fellow colleagues, the REMs, your good self and my line manager. However, working by yourself, I do spend quite a lot of time in the office, which can be in many cases quite lonely, but you do get quite a lot of work done, but it is quite an insular lifestyle. There are times when I feel the need to ring a colleague of mine just for a quick chat just to run something past them or to have a laugh (RME/96 – Interview).

Overall, the participants of this viewpoint feel well supported in many ways and are fully engaged with their teams, their role and the Organisation. This viewpoint has identified the facilitators of, and barriers to, improve job satisfaction and these will be discussed further in 5.2.4 and summarised in 5.2.4.5 and 6.1.

5.2.4 Comparison of the Area Engineers and the Regional Engineering Managers' viewpoints

5.2.4.1 Introduction

The data for the Area Engineers and the Regional Engineering Managers elicited four and two distinct factors, respectively. Within these reported factors were a range of positive and negative viewpoints that were discussed in relation to the selected three theoretical concepts: Role Identity, Remote Working and, Job Satisfaction. A holistic examination of the collected and analysed data allowed the shared and differing viewpoints for the Area Engineers and the Regional Engineering Managers to be revealed. Whilst this analysis is based upon the data gathered within this research project (quantitative and qualitative, which includes: factor solution matrices, factor arrays, factor descriptions, crib sheets and the comparisons between the factors and the theoretical concepts within each data set), it will also be based, inevitably, upon the subjective responses of the researcher to that data. Thus, the two sets of data serve as clues that are open to interpretation and are partially bounded by the scope and context of the research study. However, it is possible, that the findings can be used in the wider community and become the stimulus for further interest and research among RMEs. A summary of the extreme statement scores by factor/opinion types for the Area Engineers and the Regional Engineering Managers is shown in Table 5.3.

Table 5.3: Extreme statement scores by factor/opinion types for the Area Engineers and the Regional Engineering Managers

No.	Statement	AE				REM	
		F1	F2	F3	F4	F1	F2
5	I enjoy the flexibility of my role and the variety of what I do	+3	+4	-2	+1	+4	-1
10	I feel that I have lost a certain degree of control of my area	-2	-2	+4	-1	-2	-4
12	I have always taken ownership of my area and managed it	+1	+4	+4	+4	+1	+1
14	It is a difficult balance between doing the job as an auditor and still being customer focussed	-1	-4	-1	0	0	-2
16	I feel isolated	-4	-2	-4	0	-4	-3
18	I feel managing your work/life balance is the most difficult thing as a remote worker	-3	-4	-3	+1	-1	+1

19	It is very easy to spend a considerable amount of your own time working	-1	+2	0	+4	0	+3
20	I am a remote worker, but fundamentally I am my own boss	+1	+2	-4	-1	+1	-3
27	I can speak to my manager about any problems that I have	+4	0	+3	+2	+3	+4
29	The communication I have with my colleagues is limited, I have got one or two close colleagues	0	+1	-2	+1	-1	-4
32	The relationship with Head Office has drastically changed and I feel no longer part of something	-2	-2	0	-4	-4	-1
36	I have a great sense of pride working for the company	+4	+2	+1	+3	+4	+4
39	I feel that I am just out there doing units and nobody really cares about me	-4	0	0	-3	-3	-3
45	I would change the structure of the relationship with Head Office, I would go back to teams	-2	-2	+1	-4	-2	+3

Key:

Green and bold = Highest statements in that factor.

Yellow and bold = Lowest statements in that factor.

5.2.4.2 Role Identity: Similarities and Differences for the Area Engineers and the Regional Engineering Managers

In terms of role identity a particularly strong overall feature of the Area Engineers' viewpoints was the ownership and management of their areas. This was ranked as the highest overall statement for the Area Engineers. However, these feelings had been compromised for the viewpoint within factor 3 as they believe that they have lost a certain degree of control over their area (extreme statement, 10: +4), which had led to feelings of being controlled and concerned.

In comparison, the Regional Engineering Managers still had a positive and aligned view of the ownership and management of their areas, but put less emphasis on this individual element of their role. This was in part because of their not seeing themselves as Area Engineers anymore who have clients in a predefined area. It was also due to their role being more fluid with wider and more blurred boundaries. This is especially true for the viewpoint within factor 2 for the Regional Engineering Managers (Challenged Leaders) who have difficulties and frustrations from not being able to realise fully their aspirations for the role. These frustrations manifest themselves from the role changing over time and becoming more administratively instead of technically focussed. There were only two consensus statements (2 and 21) amongst all of the four Area Engineer factors.

Statement 2 related to role identity (A lot of what I do is reactive) and this was consistently rated as (-3). In comparison, the Regional Engineering Managers had a similar viewpoint and this supports the view that the Area Engineers and Regional Engineering Managers were all being proactive in their daily activities.

The role of being an Area Engineer or a Regional Engineering Manager is considered by the majority of the participants as a pivotal method of defining their identity as engineers and as a pinnacle position within the industry with all six viewpoints ranging from (0 to +2). Their overall behaviours demonstrate a strong alignment to the corporate paradigm. Enjoying the flexibility and variety of the role for the Area Engineers ranged from (-2 to +4) and this directly correlated to the level of feeling that they were in charge of their daily workload and empowered to manage their areas with values ranging from (-2 to +4) respectively. Thus, the viewpoint within factor 3 for the Area Engineers received the lowest values for both statements.

In comparison, a similar difference exists between the two factors for enjoyment of the flexibility of the role for the Regional Engineering Managers (Factor 1, 5: +4; Factor 2, 5: -1). This difference, which is similar in range to the Area Engineers, is linked to the Regional Engineering Managers expressing that one of their greatest challenges is to be able to complete everything that they need to do on a daily basis (Factor 2, 1: +1). The Regional Engineering Managers feel that they are being too widely utilised in their daily activities and this is a major cause of them having the challenges associated with their workload and ability to successfully manage it.

5.2.4.3 Remote Working: Similarities and Differences for the Area Engineers and the Regional Engineering Managers

In relation to remote working, two of the Area Engineers' viewpoints (Factors 2 and 4) strongly aligned with this theoretical concept. The central reasons for negative feelings of being 'remote and distant' (Factor 2) were linked to having an estranged relationship with Head Office (35: -3) and communication and relationship issues with their Manager (27: 0) and other RMEs (26: -1; 29: +1). The central reasons for having negative feelings towards 'work and life balance' (Factor 4) were aligned to spending their own time working (19: +4), a lack of autonomy

(20: -1) and feeling empowered to manage their own work/life balance (18: +1). The two other Area Engineers' viewpoints (Factors 1 and 3) were positive about having a supportive and nurturing relationship with their manager (Factor 1, 27: +4; Factor 3, 27: +3), had no issues with feeling isolated (Factor 1, 16: -4; Factor 3, 16: -3) and managing their work/life balance (Factor 1, 18: -3; Factor 3, 18: -3). In contrast, neither of the viewpoints for the two factors of the Regional Engineering Managers aligned with the theoretical concept of remote working.

Remote working is not seen as an issue for the Regional Engineering Managers as they do attend Head Office for management/project meetings which provides them with improved levels of visibility and enhanced abilities to influence new communication networks. It also provides them with higher levels of support that promotes feelings of corporate identity and alignment. This is further enhanced by, face-to-face appraisals and audits with their Area Engineers. As a result, they do not feel isolated (Factor 1, 16: -4; Factor 2, 16: -3), they can speak to their manager about problems (Factor 1, 27: +3; Factor 2, 27: +4), and other RMEs (Factor 1, 26: +2; 29: -1; Factor 2, 26: +1; 29: -4). However, there is a divergence in the two Regional Engineering Managers' viewpoints with regard to managing their work/life balance (Factor 1, 18: -1; Factor 2, 18: +1), spending their own time working (Factor 1, 19: 0; Factor 2, 19: +3), and a lack of autonomy (Factor 1, 20: +1; Factor 2, 20: -3).

5.2.4.4 Job Satisfaction: Similarities and Differences for the Area Engineers and the Regional Engineering Managers

Job satisfaction is regarded by many employees as one of the most important elements relating to their work. Overall, the Area Engineers have a great sense of pride working for the Organisation and believe that the technical values and purpose of the Organisation are being adhered to. The Regional Engineering Managers also share a similar viewpoint. They enjoy their role and are proud of the Organisation's position within the industry. The Area Engineers have mixed feelings regarding how well supported they are by the Organisation (Factor 1, 37: +3; Factor 3, 37: +2) believe they are well supported, whereas (Factor 2, 37: -1; Factor 4, 37: 0) are less positive about the levels of support being offered by the

Organisation. The relationship the Area Engineers have with their manager is good, except for Factor 2 (27: 0). In comparison, all of the Regional Engineering Managers feel supported by the Organisation (Factor 1, 37: +3; Factor 2, 37: +2) and this is enhanced by having a good relationship with their line manager (Factor 1, 27: +3; Factor 2, 27: +4) which provides a stable platform for them to feel secure and engaged.

The Area Engineers have a dichotomised view of their relationship with Head Office colleagues (Factor 1, 35: +1; Factor 4, 35: +1) have a positive view of this relationship. In contrast, (Factor 2, 35: -3; Factor 3, 35: -1) have an opposite viewpoint. Interestingly, the Regional Engineering Managers share the same dichotomised view as the Area Engineers, (Factor 1, 35: +3; Factor 2, 35: -1). This difference regarding the relationship with Head Office can be attributed and linked to the types of viewpoint being expressed by the Area Engineers (Factor 2 – Remote and Distant; Factor 3: Controlled and Concerned) and Regional Engineering Managers (Factor 2 – Challenged Leaders).

All of these three viewpoints see cultural, organisational and geographic separation as barriers and areas of concern. With the key message being the feelings of structural remoteness ‘silos’ which are being perceived by these viewpoints. Overall, the Area Engineers and the Regional Engineering Managers are experiencing differing levels of job satisfaction, corporate commitment and wellbeing. The wellbeing of employees is affected by a plethora of factors and is driven by the perception an individual has of workplace events. Thus, finding ways to provide meaning, purpose and enrichment at work to drive job satisfaction and improved wellbeing levels are to be encouraged.

5.2.4.5 Summary of the Area Engineers and Regional Engineering Managers’ Analysis

Several key areas have been identified across all six remote and mobile employee (Area Engineers and Regional Engineering Managers) factors (viewpoints). First, consistent and meaningful communication is essential for any healthy relationship, and none more so than for a remote and mobile employee. This

involves regular meetings with fellow RMEs, Head Office colleagues and managers/leaders. Second, the RMEs need to be allowed the flexibility and freedom in their role to explore new ideas and to decide how to achieve their aims and objectives to maintain strategic and cultural alignment. Third, the RMEs need to be given new work-related challenges to maintain involvement and help to minimise the Head Office, remote worker mental/physical distance. All employees need an opportunity for growth and stimulation, and this should not be an opportunity that is linked to ease and convenience for an organisation. Finally, providing an excellent employee experience is as equally important as a first class customer experience as most customer experience relies upon, in differing levels, employee interaction. Thus, implementing programmes that can offer levels of personalization for all employees to remain healthy and engaged is of paramount importance. Remote workers are perceived to be more difficult to understand and manage, and as such, they are left feeling 'remote' when they should feel like every other employee.

The following conclusions chapter will begin by briefly revisiting the context, aims and objectives of the study, followed by a reminder of the research questions. Each of the research questions will be addressed in light of the study's findings and discussion. It will also reflect upon the research findings in terms of the implications and recommendations for professional practice and their contribution to the creation of new theoretical and methodological knowledge. Finally, it will highlight the limitations of the research, the recommendations for further research and, the final reflections of the researcher.

Chapter 6: Conclusions

6.1 Implications and recommendations for professional practice

The research conducted used a medium sized enterprise that is a leading third party certification body. The primary purpose of this enterprise is to conduct compliance audits within the electrical contracting industry for over 36,000 clients each year. These audits are undertaken by over 75 remote and mobile employees (RMEs) who are located throughout the UK. These RMEs are highly qualified and experienced electrical engineers that are home based and spend most of their working week travelling around their pre-determined regional area assessing the technical compliance of clients.

The aim of this research was to gain a critical understanding of the subjective viewpoints of these RMEs on corporate commitment and wellbeing and, to create an RME conceptual framework to inform the future strategic plans of the Organisation. The research questions to address the aim consisted of the following fundamental parts:

- i. What are the key factors that contribute to the positive and negative levels of corporate commitment and wellbeing among RMEs?*
- ii. What dimensions of the RME role could be redesigned to help improve corporate commitment and wellbeing?*

These research questions led to a literature search that revealed a stratum of complex, multi-faceted discourse and social constructions around the subject of remote workers in terms of their definition, identification, and impact on modern working practices. A gap in the research literature established that Q methodology had not been used before to elicit the views of RMEs. Furthermore, no published papers relating to RMEs and their viewpoints on the three theoretical concepts of role identity, remote working and job satisfaction were found. This significant finding led to Q methodology being pursued as it minimised the potential for researcher bias and maximised the opportunity for RMEs to give their personal account. The total RME sample was N = 50 and was

split into two distinct categories, N = 42 Area Engineers and N = 8 Regional Engineering Managers.

The results revealed four distinct factors (shared viewpoints) within the Area Engineers' category, Factor 1: 'Supported and Proud'; Factor 2: 'Remote and Distant'; Factor 3: 'Controlled and Concerned'; Factor 4: 'Work and Life Balance', and two distinct factors within the Regional Engineering Managers' category, Factor 1: 'Engaged and Focused'; Factor 2: 'Challenged Leaders'. These six factors were interpreted and the emergent social viewpoints discussed further in relation to existing literature and the three theoretical concepts. The research undertaken has learned from existing theoretical and professional perspectives and used them as a basis to gain a more extensive critical insight in to the subjective viewpoints of RMEs in relation to corporate commitment and wellbeing.

An RME conceptual framework is shown in Table 6.1 that identifies key recommendations and insight to improve the level of corporate commitment and wellbeing amongst RMEs.

Table 6.1: RME conceptual framework: Summary of recommendations for RME factor/opinion types

RME Factor	Characteristics	Recommendation
AE: Supported and Proud (Factor 1) TC3 - Job Satisfaction	<ul style="list-style-type: none"> • Do not feel isolated • Have a great sense of pride working for the Organisation • Feel that the Organisation really cares about them and that they are well supported • Have a good working relationship with their colleagues and 	<p><u>Improve</u></p> <ul style="list-style-type: none"> • the quality of relevant communication • IT support • their visibility to promote cultural alignment and best practice - peer mentoring for other RMEs

	manager	<u>Reduce</u> <ul style="list-style-type: none"> • risk of strategic drift by maintaining the current levels of support • the size of their allocated area to reduce travelling
<p>AE: Remote and Distant (Factor 2)</p> <p>TC2 - Remote Working</p>	<ul style="list-style-type: none"> • Enjoy the flexibility and the variety of the role • Take ownership of their area and manage it • Find no difficulty in balancing being an auditor and still remaining customer focussed • Find it very easy to spend a considerable amount of their own time working • Have an estranged relationship with Head Office and believe that they should have more say regarding RME issues 	<u>Improve</u> <ul style="list-style-type: none"> • the quality of relevant communication • IT support • the level of social interaction with Head Office, management and RMEs • personal growth and work/life balance <u>Reduce</u> <ul style="list-style-type: none"> • the amount of their own time working • the size of their allocated area to reduce travelling

<p>AE: Controlled and Concerned (Factor 3) TC1 - Role Identity</p>	<ul style="list-style-type: none"> • Take ownership of their area and manage it • Feel that they have lost a certain degree of control of their area and would like more autonomy • Do not feel isolated • Would like to change the Head Office structure and go back to integrated teams • Believe that the Organisation has drifted away from their core technical values 	<p><u>Improve</u></p> <ul style="list-style-type: none"> • the level of control for their areas and autonomy • the level of dedicated team support • the levels of input and dissemination for strategic awareness • the quality of relevant communication • personal growth and work/life balance <p><u>Reduce</u></p> <ul style="list-style-type: none"> • levels of ambiguity regarding purpose and requirements of the role • the delay in putting plans into action • the size of their allocated area to reduce travelling
<p>AE: Work and Life Balance (Factor 4) TC2 - Remote Working</p>	<ul style="list-style-type: none"> • Take ownership of their area and manage it • Find it very easy to spend a considerable amount of their own time working • Struggle with managing their 	<p><u>Improve</u></p> <ul style="list-style-type: none"> • IT support • personal growth and work/life balance • the level of social interactions and face-to-face contact with RMEs

	<p>work/life balance as a remote worker</p> <ul style="list-style-type: none"> • Believe that IT is an issue for a remote worker • Have a good working relationship with Head Office and feel part of something • Poor relationships with other RMEs 	<p><u>Reduce</u></p> <ul style="list-style-type: none"> • the amount of their own time working • the size of their allocated area to reduce travelling
<p>REM: Engaged and Focussed (Factor 1) TC3 - Job Satisfaction</p>	<ul style="list-style-type: none"> • Enjoy the flexibility and the variety of the role • Have a great sense of pride working for the Organisation • Do not feel isolated • Have a good relationship with Head Office and feel part of something • Feel that they are well supported • Have a good working relationship with their colleagues and manager 	<p><u>Improve</u></p> <ul style="list-style-type: none"> • their relationships with their AEs • the quality of relevant communication • their visibility to promote cultural alignment and best practice - peer mentoring for other RMEs <p><u>Reduce</u></p> <ul style="list-style-type: none"> • the level of office politics being felt • the level of administration being undertaken • risk of strategic drift by maintaining the current levels of support

<p>REM: Challenged Leaders (Factor 2) TC1 - Role Identity</p>	<ul style="list-style-type: none"> • Find it very easy to spend a considerable amount of their own time working • Find challenge in being able to complete everything that they need to do • Would like to change the Head Office structure and go back to integrated teams • Are able to speak to their manager about any problems that they may have • Have a great sense of pride working for the Organisation • Believe that the role has changed considerably and is no longer a pinnacle position within the industry 	<p><u>Improve</u></p> <ul style="list-style-type: none"> • their relationships with their AEs • their technical involvement at an operational and strategic level • the quality and impact of their role • the level of control for their areas and autonomy • the level of dedicated team support <p><u>Reduce</u></p> <ul style="list-style-type: none"> • the amount of their own time working • the level of administration and logistics being undertaken • the level of office politics being felt
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6.2 Contribution to theoretical and methodological knowledge

The identified gap in the research literature (that is, the vast majority of existing studies in this domain focused largely on remote workers based exclusively at home or commuting to the head office on a regular basis) provided an opportunity to consider a different type of remote worker. Thus, a remote and mobile employee (RME) based at home, but traveling around in a geographically defined area for majority of their working week and not attending head office on a regular basis. A contribution has been made to theoretical knowledge from the identification and insight gained within this research to support the view that RMEs are a classification of remote workers that need to be recognised and understood. The creation of an RME conceptual framework that identifies six RME Factor/Opinion types and their associated theoretical characteristics provides new insight that can now be linked to existing theoretical HR models and frameworks for employees and managers.

A contribution to methodological knowledge has been made from Q methodology being developed and operationalized within a business orientated context to gain the subjective viewpoints of RMEs on corporate commitment and wellbeing. This is an original contribution and will allow future business orientated research to benefit from this mixed methods approach.

In summary, the RME conceptual framework is based on the six factors (viewpoints) identified within the research study and links directly to the two research questions. The findings, analysis and RME conceptual framework within the study represent new insight to move existing knowledge and professional practice forward. Thus, the aims and objectives of the study have hopefully been met by providing an original contribution to the domains of theoretical, methodological and professional practice knowledge.

6.3 Limitations of this research

It is accepted that one study cannot provide conclusive evidence that organisations of all sizes and in all business sectors should take their activities with regard to their remote and mobile employees (RMEs) more seriously. There were three limitations to this study that affected its generalisability:

- i. The use of Q methodology and its qualitative underpinnings limited the use of more advanced statistical techniques to predict the actual levels of corporate commitment and wellbeing for the RMEs.*
- ii. The number of qualitative interviews was limited to ten owing to time constraints imposed by the Organisation and the boundaries of the research study. Increasing the number of interviews would have allowed additional information to be collected and to provide further clarity and understanding on salient points.*
- iii. The study used a small set of participants all of whom were either Area Engineers or Regional Engineering Managers. It was limited to the UK and did not exclusively rely on random sampling procedures.*

The study was conducted within a single organisation. The initial framework may be considered representative of RMEs in this organisation; though generalisation of the results to other settings and sectors must proceed with caution. Despite these limitations, the research findings strongly support the contention that RMEs are an area of research that would benefit from further interest and study.

6.4 Recommendations for further research

Following the discussion and analysis of the research findings, and of the limitations of this study, further research could observe the dynamic change of RMEs attitudes towards corporate commitment and wellbeing, following the introduction of the RME conceptual model and its recommendations using cross-sectional or longitudinal studies. It has been identified that there is a dearth of research which examines remote and mobile employees' viewpoints (see, Chapter 2). As a result, it may be useful to carry out the Q sort within this study

(with the inclusion of the missing statements highlighted by participants in Appendices 25 and 33) with other types of RMEs in similar/different industries and countries to provide additional insight and new areas of interest to be further considered and pursued.

6.5 Final reflections

The stimulus for this research came from both a personal and professional desire to explore a research area that involved participants whose viewpoints appeared to be marginalised and silent. The research was undertaken from a social constructionist stance, which acknowledges that the researcher will influence the research process. Notwithstanding this, I feel that the research was undertaken in a systematic, rigorous and transparent manner. Thus, I was able to limit the influence that I had as a researcher on the research process. Q methodology permitted a macroscopic people-oriented research design to be operationalized to identify and categorise remote and mobile employees (RMEs) opinions on role identity, remote working and job satisfaction.

The aim of the research was to give RMEs a voice to be heard and to create a conceptual framework to assist organisations to improve corporate commitment and wellbeing. I believe that the use of Q methodology in this study has helped to bring structure and clarity to a complex and multi-faceted subject. It has also given the RMEs an opportunity to use an innovative and interactive process (Q sorting) to register their viewpoints in a holistic and comprehensive manner. I also believe that the way in which this study was designed and conducted helped to reduce the power dynamic between myself as the researcher and the participants, and in so doing has hopefully given the RMEs a feeling that their viewpoints were sought, valued and important.

Glossary

Q Methodology Term	Definition
Concourse	A collection of items about a topic, gathered from a variety of sources.
Condition of instruction	The instructions given to each participant (for consistency) prior to starting the Q sort.
Correlation (inter-correlation)	The statistical comparison of one person's Q sort with another person's Q sort to determine the level of similarity or difference.
Crib sheet	A set of questions used to help the process of the interpretation of factors.
Distribution grid	The grid produces a shape of quasi-normal distribution (bell shaped curve) into which the participants sort the statements.
Factor	A viewpoint that can be considered to be part of the same 'family resemblance' represented by participants whose Q sorts are similar.
Factor array	The viewpoint of the participants loading onto a factor in relation to the position of all items placed on the grid.
Fixed grid/fixed distribution	Where the participants have a forced choice in terms of the position of the statements within the grid.
Kurtosis	The shape of the distribution grid in terms of how flat or steep the curve is.
Operant	Behaviours which can be seen to interact, and have a relationship with the environment.
P set	The participants in the study.
Q set	The list of statements in the Q sort activity.
Q sort	Data which is gathered when participants sort the statements into the distribution.
Variance	The degree to which a Q sort, factor or study can be said to hold something in common.

Source: Plummer (2012)

Appendix 1: Ethical and registration approval

Ethics Application - Mr Justin Maltby-Smith: Ethics committee decision

Ethics committee decision

Action required

No action required

Decision

Approved

Notes

The Committee noted the amendments that have been made to the proposal and gave full approval.

The researcher had taken trouble to recognise the issues of bias and power inherent in insider research and had dealt with them well.

Application to Register - Mr Justin Maltby-Smith: RDC decision

RDC decision

Decision

Approved

Requirements which must be completed by the candidate to progress

None.

Recommendations and advice

None.

Appendix 2: Participant information sheet and introductory letter

Full title of the research project

Diagnosing the Distance: An Exploration into Remote and Mobile Employee Viewpoints on Corporate Commitment and Wellbeing using Q Methodology

The purpose of the research

The Organisation has an excellent technical heritage and is very proud of its employees who provide outstanding customer service. Modern working practices are now allowing an increasing number of employees to use their own homes as work places. However, amongst the perceived positive benefits of these arrangements lies a plethora of potentially unconsidered consequences. Corporate commitment and wellbeing are becoming key considerations for all organisations, regardless of size, as employee engagement heavily relies upon these two key factors. The overarching aim of this research is to explore the methods available for the Organisation to improve strategically the corporate commitment and wellbeing levels of its remote and mobile employees (RMEs).

Who is the researcher?

The researcher is Justin Maltby-Smith, who is Head of Schemes and Operations. He has worked for the Organisation for over 9 years and has worked within the Operations department for nearly 2 years. He previously held the position of Principal Engineering Manager within the Technical department. He lives in [REDACTED] He is passionate about being able to support and improve the levels of corporate commitment and wellbeing of the field based technical engineers and assessors.

Email: [REDACTED]

Phone: [REDACTED]

What this study involves

This study involves the researcher spending time with remote and mobile employees (RMEs) within their local offices to discuss their viewpoints on corporate commitment and wellbeing. This will involve semi-structured interviews and a couple of activities that consist of creating subjective statements and then subsequently ranking them on a scale that ranges from disagree strongly to agree strongly.

What will happen to me if I take part?

You will be asked for your opinion as a remote and mobile employee (RME) on key areas surrounding corporate commitment and wellbeing. This will be initially conducted within a 1:1 interview and subsequently during a statement ranking process.

Anything that you say will be completely anonymous and will be kept completely confidential. The final thesis will not have your name in it and no one will be able to tell that you were involved. You will be invited to see the final stage of the research findings and these will not be used without your full consent being given.

What are the risks?

There are no identifiable risks in you taking part within this study. You only take part if you want to and if you change your mind part way through you can stop being involved and nothing you have said or done already will be used. When you are talking to the researcher, you are not talking to them as a senior manager within the Organisation but as a researcher, so what you say will not be shared or acted upon. If though, you say something that makes them think you are not safe or in trouble, then they have a duty to look after you and report this or deal with it. This is also true if they find out about something that is illegal.

What happens if I have a problem or issue by being part of the research?

If this happens, you can directly contact the researcher and you will be provided with their contact details to allow this.

What will happen to the information?

All the information given by you will be securely stored within the University of Northampton. Everyone that takes part will be kept anonymous, so when you are written about you will be given an alphanumeric code rather than using your name. This information is for the research only and will not be used for anything else.

Do I have to take part in the research?

You do not have to take part in the research and if you decide to take part, but then later change your mind, just inform the researcher and your involvement will stop. A deadline will be given to all participants for any collected data to be withdrawn from the research analysis and findings.

Do you want to be involved?

If so, please complete the forms attached and send them to the researcher in the provided envelope. If you need any further information or assistance with the form please contact, the researcher directly using the provided email address or phone contact details.

Appendix 3: Participant consent form

Full title of the research project: Diagnosing the Distance: An Exploration into Remote and Mobile Employee Viewpoints on Corporate Commitment and Wellbeing using Q Methodology

Name, position, and contact address of the researcher:

Name [REDACTED]
 Email: [REDACTED]
 Address: [REDACTED]
 [REDACTED]
 Telephone: [REDACTED]

1 I confirm that I have read and understand the information sheet for the above study and have had the opportunity to ask questions.	Yes	No
	<input type="checkbox"/>	<input type="checkbox"/>
2 I understand that my participation is voluntary and that I am free to withdraw at any time, without giving reason.	Yes	No
	<input type="checkbox"/>	<input type="checkbox"/>
3 I agree to take part in the above study.	Yes	No
	<input type="checkbox"/>	<input type="checkbox"/>
4 I agree to the interview/group discussions being recorded.	Yes	No
	<input type="checkbox"/>	<input type="checkbox"/>
5 I agree to the use of anonymised (your name will not be used) quotes in publications.	Yes	No
	<input type="checkbox"/>	<input type="checkbox"/>

 Name of Participant

 Date

 Signature

 Name of Researcher

 Date

 Signature

Appendix 4: Participant reference numbers and sample size

Reference numbers for RMEs and sample size

Code	Meaning	Number
RME/01-42	Area Engineers (AEs) (followed by a randomly assigned number)	42
RME/91-98	Regional Engineering Managers (REMs) (followed by a randomly assigned number)	8
RME/99	Researcher	1
	Total participants	51

Sample size overview

ID	Available RMEs	P set	Total RME Sample Percentage
AEs	75	42	56
REMs	8	8	100
Researcher	1	1	100
Total	84	51	60.71

Full details for the Area Engineers

Ref.No.	Years in Role	First name	Last name
RME/01			
RME/02			
RME/03			
RME/04			
RME/05			
RME/06			
RME/07			
RME/08			
RME/09			
RME/10			
RME/11			
RME/12			
RME/13			
RME/14			
RME/15			
RME/16			
RME/17			
RME/18			

RME/19			
RME/20			
RME/21			
RME/22			
RME/23			
RME/24			
RME/25			
RME/26			
RME/27			
RME/28			
RME/29			
RME/30			
RME/31			
RME/32			
RME/33			
RME/34			
RME/35			
RME/36			
RME/37			
RME/38			
RME/39			
RME/40			
RME/41			
RME/42			

Full details for the Regional Engineering Managers and Researcher *

Ref.No.	Years in Role	First name	Last name
RME/91			
RME/92			
RME/93			
RME/94			
RME/95			
RME/96			
RME/97			
RME/98			
RME/99 *	10	Justin	Maltby-Smith

Appendix 5: RME interview questions and theoretical concepts

Introduction		
<ul style="list-style-type: none"> • Explain to the RME, who is present and why: Justin Maltby-Smith (Doctoral Researcher) and Prof. Peter Lawrence (Doctoral Supervisor). • Explain that the interview will take approximately 45-60 minutes and will be recorded and transcribed. • Explain that the interview will consist of several questions being asked around the three main research areas: (Role Identity, Remote Working, and Job Satisfaction). 		
No	Interview questions	Icebreakers
1	Did you always want to be an Engineer?	Icebreaker (I1)
2	Tell me what you did before you joined the Organisation?	Icebreaker (I2)
3	Why did you join the Organisation?	Icebreaker (I3)
No	Interview questions	Theoretical Concepts
1	What is a typical day like working in your role for the Organisation?	Role Identity (T1)
2	What has been the greatest challenge whilst working in your role for the Organisation?	Role Identity (T1)
3	At a social occasion, how would you describe your role to someone?	Role Identity (T1)
4	How do you see the role that you do?	Role Identity (T1)
5	Has your role changed at all since joining the Organisation?	Role Identity (T1)
No	Interview questions	Theoretical Concepts
1	What does it feel like to be a remote and mobile employee (RME)?	Remote Working (T2)
2	What does the relationship between office based employees and you feel like?	Remote Working (T2)
3	What does the relationship between other RMEs and you feel like?	Remote Working (T2)

No	Interview questions	Theoretical Concepts
1	What are the best things about working for the Organisation?	Job Satisfaction (T3)
2	What are the worst things about working for the Organisation?	Job Satisfaction (T3)
3	If you had a magic wand, what would you change about the Organisation?	Job Satisfaction (T3)
Conclusion		
Thank you for your time and honest responses; they will assist the research to achieve its aims and objectives.		

Appendix 6: Q sort statements

A list of 50 statements that were developed from the ten RME interviews and were used for the Q set with their associated theoretical concepts (TC) listed.

Category key:

- RI = statements relating to Role Identity (TC1)
- RW= statements relating to Remote Working (TC2)
- JS = statements relating to Job Satisfaction (TC3)

St. No	Statement	TC Category
1	The greatest challenge for me is trying to complete everything that I need to do	RI
2	A lot of what I do is reactive	RI
3	It is a consumer safety role – it is making sure these people carry out work that doesn't put themselves or other people in danger	RI
4	I see my role as a pinnacle position within the industry	RI
5	I enjoy the flexibility of my role and the variety of what I do	RI
6	You need to be prepared to grow with the role and constantly adapt	RI
7	The role has changed considerably since I started	RI
8	The role has not changed much in that you are going out and assessing contractors for compliance	RI
9	The contractor's perception of us has changed, they can see behind the scenes that we have now become a business	RI
10	I feel that I have lost a certain degree of control of my area	RI
11	Most of my family and friends still have no understanding of what my role involves and who I work for	RI
12	I have always taken ownership of my area and managed it	RI
13	It is an important role, not to be taken lightly, it is more than just an audit, there's a lot of responsibility	RI
14	It is a difficult balance between doing the job as an auditor and still being customer focussed	RI

15	I would not have got this role without an apprenticeship and the training and education to become an electrician	RI
16	I feel isolated	RW
17	IT has always been an issue for a remote worker	RW
18	I feel managing your work/life balance is the most difficult thing as a remote worker	RW
19	It is very easy to spend a considerable amount of your own time working	RW
20	I am a remote worker, but fundamentally I am my own boss	RW
21	Because you are a remote worker you are not involved in any office politics	RW
22	There are too many emails sent and this means that important ones might get missed	RW
23	Being a remote worker does not feel lonely, I know that colleagues are a phone call away and I am in contact with customers daily	RW
24	Being a remote worker requires a lot of self-discipline to switch off from work	RW
25	You can literally hear nothing from anybody other than the people you meet	RW
26	I have a good working relationship with other RMEs	RW
27	I can speak to my manager about any problems that I have	RW
28	We do not see an awful lot of each other, it is only at Regional meetings	RW
29	The communication I have with my colleagues is limited, I have got one or two close colleagues	RW
30	I feel that everyone in Head Office is going to find out things before me	RW
31	I feel like a new starter every time I go to Head Office because things have changed round and I feel that I'm out of my comfort zone	RW
32	The relationship with Head Office has drastically changed and I feel no longer part of something	RW
33	When I ring Head Office up, and they ask who I work for, that does not make me feel positive, motivated and valued	RW

34	Because there are no longer teams, there is no connections, small talk or responsibility	RW
35	I think that I have got a good working relationship with Head office	RW
36	I have a great sense of pride working for the company	JS
37	I feel that I am well supported	JS
38	The focus should be on the working together as opposed to the performance of the individual departments	JS
39	I feel that I am just out there doing units and nobody really cares about me	JS
40	The AEs, REMs and the management team, are the basis of what makes us all tick really	JS
41	We have drifted away from our core technical values	JS
42	We should get back to our core values and not focus all the time on just making money which can be detrimental to our core commodity, which is selling electrical safety	JS
43	I have got a good working relationship with my colleagues and my manager	JS
44	Being home-based allows me to manage my personal life around work more effectively	JS
45	I would change the structure of the relationship with Head Office, I would go back to teams	JS
46	I would like more social interactions and face-to-face contact with colleagues	JS
47	We do move very slowly and that sometimes that can be frustrating	JS
48	We tend to go to a new technology which has got a lot more facilities but sometimes we lose some of the key facilities that we had previously	JS
49	I think that poor communication causes frustration and some of it is a simple lack of professional courtesy	JS
50	We need to listen more to the field staff regarding what the issues are and not assume things	JS

Appendix 7: Q sort instructions for the remote and mobile employees (RMEs)

Thank you for agreeing to take part in this research study. I would like you to carefully read each of the 50 statements and then think about which of them you most agree with and which of them that you least agree with. There are no right or wrong answers and the statements are likely to mean different things to different people. Overall, the activity should take around 50-60 minutes. The number on each of the statement cards will be used once you have completed the Q sort activity to record which statement you have placed where on the Q sort grid.

Instructions

1. Look at the Q sort grid it has numbers at the top of each of the columns. These numbers represent the level of agreement for each statement, 'Least agree' on the far left **(1)** AND 'Most agree' on the far right **(9)**. The number of statements required in each column is shown at the bottom. An example of a participant completing a Q sort (Stainton-Rogers, 2003) is shown in Figure 1 below:

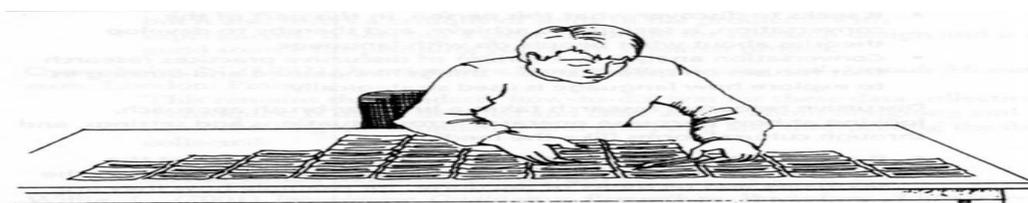


Figure 1: Example of a Participant Completing a Q sort

2. Carefully read through each of the 50 statements and sort them into three piles:
 - a. On the right – those which you most agree with.
 - b. On the left – those you least agree with or agree with much less.
 - c. In the middle – those you have no strong feelings about.
3. From the pile on the right, please select two statements that are most like your view and put them in the far right column **(9)** (it does not matter where the statements are placed in the column).
4. From the pile on the left, please select two statements that are least like your view and put them in the far left column **(1)**.

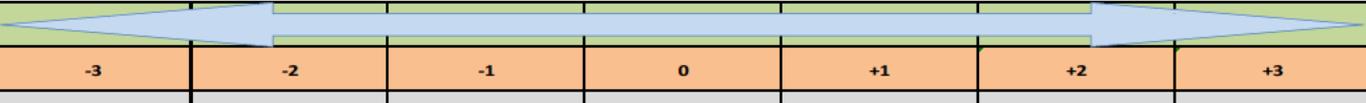
5. Now back to the pile on your right; please select four statements which are more like your view than the others left in the pile but not as much your view as the two you have already selected. Put them in the second column from the right **(8)**. Please move the statements around if you change your mind.
6. Now from the pile on the left please select four statements to place in the second column from the left **(2)**.
7. You will need to keep doing this to work your way towards the middle with the statements you have left over.
8. Please check that you are happy with your final arrangement of statements and do make any changes needed to make sure that the Q sort fits your viewpoint.
9. Once you are happy with the position of all the statements please make a note of the number on the statement and write this number on the relevant square on the Q sort grid. Please do this very carefully and only one statement at a time. It is vitally important that all the numbers from the statements are accurately recorded on the Q sort grid and that they only appear once.
10. After you have completed the Q sort grid, please draw a vertical line on the distribution grid to demarcate between the statements that you agree with and those that you disagree with.
11. Finally, once you have completed the Q sort grid, please complete the 'Post Q sort questionnaire'.

Thank you very much for taking part in the research.

Kind regards

Justin Maltby-Smith

Appendix 8: Quasi-normal distribution Q sort grid and horizontal strip used in the Q sort activity

Least Agree								Most Agree
1	2	3	4	5	6	7	8	9
2 Statements in Column	4 Statements in Column	6 Statements in Column	8 Statements in Column	10 Statements in Column	8 Statements in Column	6 Statements in Column	4 Statements in Column	2 Statements in Column
Most Disagree								Most Agree
-4	-3	-2	-1	0	+1	+2	+3	+4
2 Statements in Column								2 Statements in Column
	4 Statements in Column						4 Statements in Column	
		6 Statements in Column				6 Statements in Column		
			8 Statements in Column		8 Statements in Column			
				10 Statements in Column				
								RME Q Sort 2017
								Reference: RME/
								Time in role: years / months

Appendix 9: Post Q sort questionnaire

Time in role: years / months

Research reference: RME/

Top two statements numbers and

Why did you place these as 'most agree?'

Bottom two statements numbers and

Why did you place these as 'least agree?'

Are there any statements that you would have added to the Q sort?

Have you any thoughts on the experience of the Q sort activity?

Appendix 10: Consensus statements for the Area Engineers

This table highlights all of the consensus statements for the area engineers (statements that do not distinguish between any pair of factors). All of the listed statements are non-significant at $p > 0.01$, and those flagged with an * and denoted in **red** are non-significant at $p > 0.05$.

No.	Statement	F1	F2	F3	F4
2*	A lot of what I do is reactive	-3	-3	-3	-3
21	Because you are a remote worker you are not involved in any office politics	+1	0	+1	0

Appendix 11: Distinguishing statements for the Area Engineers' factor 1

This table highlights all of the distinguishing statements for factor 1 (area engineers). All of the listed statements are significant at $p < 0.05$, and those flagged with an * and denoted in **red** are significant at $p < 0.01$.

No.	Statement	F1
4	I see my role as a pinnacle position within the industry	+2
12*	I have always taken ownership of my area and managed it	+1
18	I feel managing your work/life balance is the most difficult thing as a remote worker	-3
20*	I am a remote worker, but fundamentally I am my own boss	+1
22	There are too many emails sent and this means that important ones might get missed	-1
23	Being a remote worker does not feel lonely, I know that colleagues are a phone call away and I'm in contact with customers daily	+2
24*	Being a remote worker requires a lot of self-discipline to switch off from work	0
26*	I have a good working relationship with other RMEs	+1
31*	I feel like a new starter every time I go to Head Office because things have changed round and I feel that I am out of my comfort zone	-3
33*	When I ring Head Office up, and they ask who I work for, that does not make me feel positive, motivated and valued	-2
36	I have a great sense of pride working for the company	+4
39*	I feel that I am just out there doing units and nobody really cares about me	-4
49*	I think that poor communication causes frustration and some of it is a simple lack of professional courtesy	-1

Appendix 12: Distinguishing statements for the Area Engineers' factor 2

This table highlights all of the distinguishing statements for factor 2 (area engineers). All of the listed statements are significant at $p < 0.05$, and those flagged with an * and denoted in **red** are significant at $p < 0.01$.

No.	Statement	F2
3	It is a consumer safety role – it is making sure these people carry out work that does not put themselves or other people in danger	+3
4	I see my role as a pinnacle position within the industry	+2
14*	It is a difficult balance between doing the job as an auditor and still being customer focussed	-4
16*	I feel isolated	-2
19*	It is very easy to spend a considerable amount of your own time working	+2
20*	I am a remote worker, but fundamentally I am my own boss	+2
24	Being a remote worker requires a lot of self-discipline to switch off from work	-1
27*	I can speak to my manager about any problems that I have	0
35*	I think that I have got a good working relationship with Head office	-3
37*	I feel that I am well supported	-1
48	We tend to go to a new technology which has got a lot more facilities but sometimes we lose some of the key facilities that we had previously	-3
50	We need to listen more to the field staff regarding what the issues are and not assume things	+3

Appendix 13: Distinguishing statements for the Area Engineers' factor 3

This table highlights all of the distinguishing statements for factor 3 (area engineers). All of the listed statements are significant at $p < 0.05$, and those flagged with an * and denoted in **red** are significant at $p < 0.01$.

No.	Statement	F3
3	It is a consumer safety role – it is making sure these people carry out work that does not put themselves or other people in danger	0
5	I enjoy the flexibility of my role and the variety of what I do	-2
10	I feel that I have lost a certain degree of control of my area	+4
13	It is an important role, not to be taken lightly, it is more than just an audit, there is a lot of responsibility	-1
20	I am a remote worker, but fundamentally I am my own boss	-4
23*	Being a remote worker does not feel lonely, I know that colleagues are a phone call away and I'm in contact with customers daily	+3
24*	Being a remote worker requires a lot of self-discipline to switch off from work	-3
32*	The relationship with Head Office has drastically changed and I feel no longer part of something	0
35*	I think that I've got a good working relationship with Head office	-1
36	I have a great sense of pride working for the company	+1
45	I would change the structure of the relationship with Head Office, I would go back to teams	+1
47	We do move very slowly and that sometimes that can be frustrating	+2
50*	We need to listen more to the field staff regarding what the issues are and not assume things	+2

Appendix 14: Distinguishing statements for the Area Engineers' factor 4

This table highlights all of the distinguishing statements for factor 4 (area engineers). All of the listed statements are significant at $p < 0.05$, and those flagged with an * and denoted in **red** are significant at $p < 0.01$.

No.	Statement	F4
5	I enjoy the flexibility of my role and the variety of what I do	+1
7	The role has changed considerably since I started	+2
16	I feel isolated	0
17	IT has always been an issue for a remote worker	+2
18	I feel managing your work/life balance is the most difficult thing as a remote worker	+1
19	It is very easy to spend a considerable amount of your own time working	+4
20	I am a remote worker, but fundamentally I am my own boss	-1
22*	There are too many emails sent and this means that important ones might get missed	-2
24	Being a remote worker requires a lot of self-discipline to switch off from work	+3
31	I feel like a new starter every time I go to Head Office because things have changed round and I feel that I'm out of my comfort zone	-3
32	The relationship with Head Office has drastically changed and I feel no longer part of something	-4
37	I feel that I am well supported	0
39	I feel that I am just out there doing units and nobody really cares about me	-3
44	Being home-based allows me to manage my personal life around work more effectively	-2
45	I would change the structure of the relationship with Head Office, I would go back to teams	-4

Appendix 15: Interpretation crib sheet for the Area Engineers' factor 1:

'Supported and Proud'

Top two statements (most agree)

27. I can speak to my manager about any problems that I have (+4)

36. I have a great sense of pride working for the company (+4)

Statements sorted higher than other AE factors

37. I feel that I am well supported (+3)

43. I have a good working relationship with my colleagues and my manager (+3)

Statements sorted lower than other AE factors

12. I have always taken ownership of my area and managed it (+1)

19. It is very easy to spend a considerable amount of your own time working (-1)

33. When I ring Head Office up, and they ask me who I work for, that does not make me feel positive, motivated and valued (-2)

41. We have drifted away from our core technical values (-2)

49. I think that poor communication causes frustration and some of it is a simple lack of professional courtesy (-1)

Bottom two statements (most disagree)

16. I feel isolated (-4)

39. I feel that I am just out there doing units and nobody really cares about me (-4)

Appendix 16: Interpretation crib sheet for the Area Engineers' factor 2:

'Remote and Distant'

Top two statements (most agree)

- 5. I enjoy the flexibility of my role and the variety of what I do (+4)
- 12. I have always taken ownership of my area and managed it (+4)

Statements sorted higher than other AE factors

- 3. It is a consumer safety role – it is making sure these people carry out work that does not put themselves or other people in danger (+3)
- 9. The contractor's perception of us has changed; they can see behind the scenes that we have now become a business (+1)
- 20. I am a remote worker, but fundamentally, I am my own boss (+2)
- 22. There are too many emails sent and this means that important ones might be missed (+1)
- 25. I hear nothing from anybody other than the people I meet (0)
- 30. I feel that everyone in Head Office is going to find out things before me (+1)
- 42. We should get back to our core values and not focus all the time on just making money that can be detrimental to our core commodity, which is selling electrical safety (+1)
- 50. We need to listen more to the field staff regarding what the issues are and not assume things (+3)

Statements sorted lower than other AE factors

- 7. The role has changed considerably since I started (-3)
- 27. I can speak to my manager about any problems that I have (0)
- 35. I have a good working relationship with Head Office (-3)
- 37. I feel that I am well supported (-1)
- 43. I have a good working relationship with my colleagues and my manager (0)
- 49. I think that poor communication causes frustration and some of it is a simple lack of professional courtesy (-3)

Bottom two statements (most disagree)

14. It is a difficult balance between doing the job as an auditor and still being customer focussed (-4)

18. I feel managing your work/life balance is the most difficult thing as a remote worker (-4)

Appendix 17: Interpretation crib sheet for the Area Engineers' factor 3:

'Controlled and Concerned'

Top two statements (most agree)

10. I feel that I have lost a certain degree of control of my area (+4)

12. I have always taken ownership of my area and managed it (+4)

Statements sorted higher than other AE factors

23. Being a remote worker does not feel lonely, I know that colleagues are a phone call away and I am in contact with customers daily (+3)

31. I feel like a new starter every time I go to Head Office because things have changed round and I feel that I am out of my comfort zone (+1)

32. My relationship with Head Office has drastically changed and I feel no longer part of something (0)

33. When I ring Head Office up, and they ask me whom I work for, that does not make me feel positive, motivated and valued (+1)

34. Because there are no longer teams, we have lost the connections, small talk and responsibility (+1)

41. We have drifted away from our core technical values (+1)

45. I would change the structure at Head Office; I would go back to teams (+1)

47. We do move very slowly and that sometimes that can be frustrating (+2)

Statements sorted lower than other AE factors

1. The greatest challenge for me is trying to complete everything that I need to do (-3)

3. It is a consumer safety role – it is making sure these people carry out work that does not put themselves or other people in danger (0)

5. I enjoy the flexibility of my role and the variety of what I do (-2)

13. It is an important role, not to be taken lightly, it is more than just an audit, there is a lot of responsibility (-1)

15. I would not have got this role without an apprenticeship and the training and education to become an electrician (-2)

24. Being a remote worker requires a lot of self-discipline to switch off from work (-3)

29. The communication I have with my colleagues is limited, I have got one or two close colleagues (-2)

46. I would like more social interactions and face-to-face contact with colleagues (-2)

Bottom two statements (most disagree)

16. I feel isolated (-4)

20. I am a remote worker, but fundamentally I am my own boss (-4)

Appendix 18: Interpretation crib sheet for the Area Engineers' factor 4:

'Work and Life Balance'

Top two statements (most agree)

12. I have always taken ownership of my area and managed it (+4)

19. It is very easy to spend a considerable amount of your own time working (+4)

Statements sorted higher than other AE factors

7. The role has changed considerably since I started (+2)

14. It is a difficult balance between doing the job as an auditor and still being customer focussed (0)

16. I feel isolated (0)

17. IT has always been an issue for a remote worker (+2)

18. I feel managing your work/life balance is the most difficult thing as a remote worker (+1)

24. Being a remote worker requires a lot of self-discipline to switch off from work (+3)

46. I would like more social interactions and face-to-face contact with colleagues (+2)

Statements sorted lower than other AE factors

22. There are too many emails sent and this means that important ones might get missed (-2)

23. Being a remote worker does not feel lonely, I know that colleagues are a phone call away and I am in contact with customers daily (-2)

26. I have a good working relationship with other RMEs (-2)

34. Because there are no longer teams, we have lost the connections, small talk and responsibility (-2)

42. We should get back to our core values and not focus all the time on just making money which can be detrimental to our core commodity, which is selling electrical safety (-1)

44. Being home-based allows me to manage my personal life around work more effectively (-2)

Bottom two statements (most disagree)

32. My relationship with Head Office has drastically changed and I feel no longer part of something (-4)

45. I would change the structure at Head Office, I would go back to teams (-4)

Appendix 19: Confounding Q sorts for the Area Engineers

There were three confounded Q sorts, meaning that they loaded significantly (≥ 0.43) onto two factors. Namely, participants RME/24, RME/30 and RME/31 were confounded. Two out of the three confounded Q sorts had their highest calculated value loading on factor 4: RME/24 (**0.48***), RME/30 (0.56) and RME/31 (**0.61***).

Participant	Factor 1	Factor 2	Factor 3	Factor 4
RME/24	-0.13	-0.02	-0.43	0.48*
RME/30	0.56	0.02	0.19	0.56
RME/31	0.45	0.19	-0.18	0.61*

RME/24

Top two statements (most agree)

19. It is very easy to spend a considerable amount of your own time working (+4)

16. I feel isolated (+4)

Bottom two statements (most disagree)

44. Being home-based allows me to manage my personal life around work more effectively (-4)

23. Being a remote worker does not feel lonely, I know that colleagues are a phone call away and I am in contact with customers daily (-4)

RME/30

Top two statements (most agree)

15. I would not have got this role without an apprenticeship and the training and education to become an electrician (+4)

36. I have a great sense of pride working for the company (+4)

Bottom two statements (most disagree)

32. My relationship with Head Office has drastically changed and I feel no longer part of something (-4)

39. I feel that I am just out there doing units and nobody really cares about me (-4)

RME/31

Top two statements (most agree)

19. It is very easy to spend a considerable amount of your own time working (+4)

05. I enjoy the flexibility of my role and the variety of what I do (+4)

Bottom two statements (most disagree)

31. I feel like a new starter every time I go to Head Office because things have changed round and I feel that I am out of my comfort zone (-4)

32. My relationship with Head Office has drastically changed and I feel no longer part of something (-4)

Appendix 20: Demographic information for the twenty-four Area Engineers who significantly loaded onto factor 1

Participant	Years in role
RME/03	██████████
RME/04	██████████
RME/09	██████████
RME/11	██████████
RME/12	██████████
RME/13*	██████████
RME/14	██████████
RME/15	██████████
RME/21	██████████
RME/22	██████████
RME/23	██████████
RME/27	██████████
RME/28	██████████
RME/29	██████████
RME/32**	██████████
RME/33	██████████
RME/34	██████████
RME/35	██████████
RME/37	██████████
RME/38	██████████
RME/39	██████████
RME/40	██████████
RME/41	██████████
RME/42	██████████
Average years in role	9.79

Key:

Green and ** = Highest loading participant.

Blue and * = Second highest loading participant.

Appendix 21: Demographic information for the seven Area Engineers who significantly loaded onto factor 2

Participant	Years in role
RME/02	██████████
RME/06*	██████████
RME/07	██████████
RME/17*	██████████
RME/18	██████████
RME/25**	██████████
RME/26	██████████
Average years in role	11.86

Key:

*Green and ** = Highest loading participant.*
*Blue and * = Second highest loading participants.*

Appendix 22: Demographic information for the three Area Engineers who significantly loaded onto factor 3

Participant	Years in role
RME/01	██████████
RME/10*	██████████
RME/19**	██████████
Average years in role	10.00

Key:

Green and ** = Highest loading participant.

Blue and * = Second highest loading participant.

Appendix 23: Demographic information for the five Area Engineers who significantly loaded onto factor 4

Participant	Years in role
RME/05*	[REDACTED]
RME/08**	[REDACTED]
RME/16	[REDACTED]
RME/20	[REDACTED]
RME/36	[REDACTED]
Average years in role	18.00

Key:

Green and ** = Highest loading participant.
 Blue and * = Second highest loading participant.

Appendix 24: Calculations to determine whether the distribution of statements around the middle column (0) are positively or negatively biased (agree or disagree) for the Area Engineers

Participant number	Column selected by the participant to separate statements which they agree with and those that they disagree with	Participant number	Column selected by the participant to separate statements which they agree with and those that they disagree with
RME/01	No response	RME/22	-1
RME/02	No response	RME/23	No response
RME/03	No response	RME/24	No response
RME/04	-2	RME/25	0
RME/05	-2	RME/26	No response
RME/06	No response	RME/27	-1
RME/07	-3	RME/28	No response
RME/08	No response	RME/29	No response
RME/09	-1	RME/30	No response
RME/10	-2	RME/31	-2
RME/11	No response	RME/32	No response
RME/12	-1	RME/33	-3
RME/13	-3	RME/34	No response
RME/14	No response	RME/35	No response
RME/15	No response	RME/36	No response
RME/16	-1	RME/37	No response
RME/17	-2	RME/38	-2
RME/18	No response	RME/39	-2
RME/19	No response	RME/40	No response
RME/20	No response	RME/41	No response
RME/21	No response	RME/42	-2
Total	-17 (9 responses)	Total	-13 (8 responses)

Total mean for the Area Engineers

Total number of responses divided by the total number of participants who responded equals the mean response given by the Area Engineers.

$$-30 \div 17 = -\underline{1.76}$$

Factor 1 mean for the Area Engineers (Participants: 03, 04, 09, 11, 12, 13, 14, 15, 21, 22, 23, 27, 28, 29, 32, 33, 34, 35, 37, 38, 39, 40, 41 and 42)

$$-18 \div 10 = \underline{-1.80}$$

Factor 2 mean for the Area Engineers (Participants: 02, 06, 07, 17, 18, 25 and 26)

$$-5 \div 3 = \underline{-1.67}$$

Factor 3 mean for the Area Engineers (Participants: 01, 10 and 19)

$$-2 \div 1 = \underline{-2.00}$$

Factor 4 mean for the Area Engineers (Participants: 05, 08, 16, 20 and 36)

$$-3 \div 2 = \underline{-1.50}$$

Appendix 25: Post Q sort questionnaire data for the Area Engineers

Note: Additional wording in **red** added by the researcher to aid clarity and understanding for the reader.

Area Engineers			
Participant and factor	What makes the statements at the extremes (+4 and -4) important to you?	Are there any missing statements?	Any thoughts on the experience of the Q sort activity?
RME/01 Factor 3	(+4: 10, 12) As it is true and it causes problems for both customers and the Organisation.	None.	None.
	(-4: 16, 11) Personally, they do not apply to me.		
RME/02 Factor 2	(+4: 20, 22) Most of the time sorting own problems, little contact with REM [Manager] or H/O [Head Office] left alone to get on with the job. Emails intended for me i.e. 'it is my birthday and cakes on my desk' global emails pointless.	No response.	No response.
	(-4: 23, 9) Can feel very isolated and not having fact-to-face contact with colleagues. Although seeing different people every day there is no continuity.		
RME/03 Factor 1	(+4: 36, 4) AE [Area Engineer], it is a great job and important to me.	No response.	Yes, (A lot).
	(-4: 39, 31) Because I do feel valued and not just a new starter.		
RME/04 Factor 1	(+4: 12, 36) Managing my area was always seen as an important part of the role – my employment contract mentioned it I believe. Always aspired to the role	I feel secure in the role and positive for the future.	Thought provoking! Harder to do than might be expected.

	and remain proud to be part of the Organisation.		
	(-4: 2, 32) Just do not recognise these two statements as relevant.		
RME/05 Factor 4	(+4: 13, 12) (13) Because I consider the role very important to consumer safety and can contribute to reduction of fires and electrocutions. (12) I have always considered part of the role to include an element of managing the area and building relationships.	No.	No.
	(-4: 1, 39) (1) I manage my time effectively and do not worry too much about issues outside my influence. (39) I think the company do care about my wellbeing but the nature of the job is a remote one. Personally, the job is what it is.		
RME/06 Factor 2	(+4: 4, 36) I take great pride in what I do and truly feel I improve the industry and that the Organisation's reputation is important.	No response.	Quite thought provoking where the answers are not obvious.
	(-4: 24, 18) Working from home seems to suit me personally and enables me to focus on what I do without the politics at a large company.		
RME/07 Factor 2	(+4: 45, 22) Seemed most appropriate at the time.	Yes.	This could be used as/for a remote survey via e-mail to all remote workers.
	(-4: 40, 1) Seemed most appropriate at the time.		
RME/08 Factor 4	(+4: 7, 46) (7) Company approach, management systems have changed out of all recognition since	I would have divided number 5 into two questions	Am unclear as to the intent of this survey, so cannot properly

	<p>November 1999. (46) Nature of the job, geographical spread of my colleagues makes personal contact difficult.</p> <p>(-4: 34, 45) (34) I believe we already work in teams, so feel this statement as irrelevant. (45) As 34 above.</p>	<p>as I enjoy the variety of what I do but at the same time, do not feel there is much flexibility.</p>	<p>comment. It did give food for thought, however – it was interesting.</p>
<p>RME/09</p> <p>Factor 1</p>	<p>(+4: 36, 7) It is simply because they are true and my first thoughts were that I strongly agree.</p> <p>(-4: 16, 18) Although I work from home I am definitely not isolated, phone/email support is readily available. This job allows me to balance work/life much better than most jobs. Has got easier to balance after time in role.</p>	<p>No response.</p>	<p>Quite enjoyable.</p>
<p>RME/10</p> <p>Factor 3</p>	<p>(+4: 43, 12) Very difficult to prioritise but initially these were the two most agreed with.</p> <p>(-4: 20, 16) Not true to the role I play.</p>	<p>No response.</p>	<p>Outcome would change if done 5 years previously and possibly if done in another 5 years.</p>
<p>RME/11</p> <p>Factor 1</p>	<p>(+4: 44, 13) I think we fulfil a vital role and being home based means no commuting.</p> <p>(-4: 39, 12) I have never had a specific area I am not just doing units I am auditing.</p>	<p>Do you feel valued?</p>	<p>Whilst the research is interesting, I am not sure how the information could be used to change the nature of what we do.</p>
<p>RME/12</p> <p>Factor 1</p>	<p>(+4: 5, 38) (5) I enjoy the job because of the variety – no day is the same and always a challenge.</p> <p>(38) I am a great believer in team working and sharing knowledge and resources. More shadowing and cross-pollination of ideas would be</p>	<p>Do you think there are adequate opportunities for CPD and Training?</p>	<p>I thought this was a good exercise to gain an overview of my general perceptions.</p>

	<p>good – set a benchmark for area engineers’ role would be good.</p> <p>(-4: 16, 31) (16) I do not in the least feel isolated as wherever my visit is I see as my workplace interacting with ACs [Clients]. (31) Because of my history with the Organisation since 1995 I have worked in H.O. as a trainer and visited many times so most office colleagues know me.</p>		
<p>RME/13</p> <p>Factor 1</p>	<p>(+4: 13, 4) They went together for me, (4) being my feeling about getting the role and (13) because what the role is.</p> <p>(-4: 1, 39) There is no challenge to complete everything as we are given all the time we need. Also, it is not just a number game to me as there is so much more to the role.</p>	<p>Do you feel you could progress further than you are in the Organisation (or along those lines)?</p>	<p>The only thought would be if I see the final results.</p>
<p>RME/14</p> <p>Factor 1</p>	<p>(+4: 36, 40) (36) I am very proud to work for the company. (40) The leadership, vision and mission of the company help us work collectively to these goals.</p> <p>(-4: 39, 16) (39) Although I understand units are an essential part of an AE’s role, my REM [Manager] and mentors have spent a lot of time preparing me as an individual for the role. (16) The support I still receive does not make me feel isolated.</p>	<p>No.</p>	<p>I found some of the statements challenging with being relatively new to the company.</p>

RME/15 Factor 1	(+4: 3, 43) Feel our main role is electrical safety and its promotion and it is a team/company effort not a solo role.	No.	It makes you think but you could sort the cards for hours so need a time limit.
	(-4: 30, 39) Communication has improved and the appreciation of our role in the company.		
RME/16 Factor 4	(+4: 7, 24) (7) Due to the length of time in the job. (24) The office is within my home.	Region of the country?	Good interesting exercise. Makes you think more about the job.
	(-4: 1, 2) I try to prepare well for all situations and so avoid having to be reactive. I like to manage my time efficiently.		
RME/17 Factor 2	(+4: 12, 20) They describe my opinion fully.	No.	It made me think really hard!
	(-4: 2, 10) My work life is planned and aspects of my life are down to me.		
RME/18 Factor 2	(+4: 3, 13) The purpose or objective of the AE [Area Engineer's] role – electrical safety.	No – good range of considerations given.	Additional time would offer greater experience.
	(-4: 17, 16) Remote working has not always been an issue; just new circumstances due to the types and amounts of new communication media, in particular the likelihood of misunderstanding.		
RME/19 Factor 3	(+4: 18, 44) I think this important to the role.	No, I think all the statements are all good.	Very interesting.
	(-4: 4, 10) I would like more control.		
RME/20 Factor 4	(+4: 12, 49) I take pride in being 'there' for my ACs [Clients], ensuring standards and dare I say it – having few	I am prepared to take responsibility for my area –	Thought provoking.

	'complaints'. Actions by others without me knowing it causes issues.	good or bad.	
	(-4: 10, 46) I feel control is still mine and prefer just to get on with it.		
RME/21 Factor 1	(+4: 12, 20) I like the freedom to run things my way. I feel ownership gets/makes for better outcomes e.g. unit targets etc.	None.	A good exercise.
	(-4: 7, 9) A lot of contractors feel that the Organisation has become money focussed. My role has not changed much from when I started!		
RME/22 Factor 1	(+4: 50, 49) Most relevant as changes in operations and standards are not relayed before implementation.	I am happy with my remuneration. I feel I'm listened to.	Reminds me of my Cert Ed, psychology, akin to learner types, which is very useful.
	(-4: 45, 26) (45) the Organisation has improved (26) Don't know them, no changes for meeting except A.G [Manager].		
RME/23 Factor 1	(+4: 15, 27) (27) My REM [Manager] has supported me since my start. Very understanding. (15) Key skills, which will enable me to fulfil my role effectively.	No response.	No response.
	(-4: 33, 39) (33) Large organisations, easy to forget names and responsibilities. (39) The Organisation actively shows their appreciation and is prepared to accept any feedback – positive and negative.		
RME/24 Confounded	(+4: 19, 16) Instinctive emotional response.	No response.	Thought provoking.
	(-4: 44, 23) As above.		

RME/25 Factor 2	(+4: 49, 20) (49) I send emails but often receive no replies. (20) I manage my own scheduling and very rarely communicate with my REM [Manager].	I enjoy my role and would like the opportunity to progress further.	A very thought provoking exercise.
	(-4: 1, 14) (1) I have no difficulty completing my schedule of work as I plan it all myself and have very good systems. (14) I have very good technical and people skills and combine both easily.		
RME/26 Factor 2	(+4: 27, 5) They are the two most consistent statements during my time in position.	I know who to call when a problem arises.	Interesting.
	(-4: 35, 48) One reflects the 'isolation' of the role and the second I do not believe is correct during this time when significant changes have taken place.		
RME/27 Factor 1	(+4: 7, 15) As they are appropriate (15) Qualifications and experience are paramount. (7) Degree of assessment has changed a lot – now a watered down system.	Teleconferencing /FaceTime applications.	No.
	(-4: 33, 39) (39) Believe business does care. (33) I always state who I am and whom I work for when I call and I am generally known.		
RME/28 Factor 1	(+4: 15, 37) The statements perhaps answer the question themselves, support is all-great.	No response.	Enjoyable and interesting.
	(-4: 1, 16) I do not feel isolated, support etc. is always available.		

RME/29 Factor 1	(+4: 5, 12) They appear to me as the most important factors in terms of job satisfaction and how I have achieved it.	A statement about benefits e.g. BUPA, car.	Interesting – provoked a few thoughts and reflection on my role and responsibilities and support in achieving objectives.
	(-4: 16, 39) I never feel isolated, I have daily contact with customers, and I have support from my RME [Manager] and team colleagues if I need it.	A statement regarding travel and time.	
RME/30 Confounded	(+4: 36, 15) (36) I still have pride working for the company, it gives me a high level of job satisfaction, also feel we provide value and support to the contractors. (15) A good technical background is essential to provide meaningful assessments.	No response.	Thought provoking – probably needed a little more time to ponder my answers and rearrange slightly.
	(-4: 32, 39) (32) I feel a valued member of the whole team; the company has always been very supportive when needed. (39) I do feel we are kept informed with new developments.		
RME/31 Confounded	(+4: 19, 5) (19) It is very easy to eat into your family time in this role. (5) I love the job.	The company is moving in the right direction.	A very thought provoking exercise.
	(-4: 31, 32) (31) I feel involved with the company despite structural changes. (32) As above [comment].	I feel I am treated equally in relation to my colleagues.	
RME/32 Factor 1	(+4: 36, 27) Pride and integrity in what you do is self-motivating and knowing support is always available from REM [Manager] means, you know you are valued.	No response.	Thought provoking.

	(-4: 16, 39) Going through the motions not an option. Isolation not possible with all my colleagues at end of the phone (FaceTime) or email.		
RME/33 Factor 1	(+4: 5, 12) Both statements are relevant and were the 2 I agreed with most, out of all the statements.	Is the home office still needed?	Questions make you think it is a good way of seeing what you agree with most, least and are neutrally concerned about.
	(-4: 7, 16) 2 statements which I did not feel I agreed with the least out of all the statements.		
RME/34 Factor 1	(+4: 36, 1) Because it's [they are] the statement[s] that [I feel] most strongly about.	How could we improve as a company?	No response.
	(-4: 2, 30) The two statements I feel least strongly about.		
RME/35 Factor 1	(+4: 44, 15) No response.	No response.	Sometimes questions with negative answers can be read as completely opposite so very careful well thought out statements are needed.
	(-4: 18, 16) Because the others I more agreed [still agreed with these statements at -4] with these and I do have difficulty in switching off (there is always something to do).		
RME/36 Factor 4	(+4: 17, 36) Unfortunately, I have recently had a great deal of issues with IT, which had taken a number of months to resolve. I have a great deal of belief in the values of the business and the partner approach instead of inspecting.	Effects of job on health. Dealing with customer issues that are not part of the assessment (i.e.) social issues such as death, health (Cancer) etc.	Interesting concept.
	(-4: 31, 30) having worked at HQ [Head Office], I understand that they work as hard as we work and have many problems they are trying to sort out at the same time as my queries. We work		

	well as a team, without them, I could not complete my duties.		
RME/37 Factor 1	(+4: 13, 27) I feel the job is well described in (13) and (27) explains why I can enjoy my job.	No.	It helps to see visually what is important to me and my work/life balance confirmed.
	(-4: 16, 41) I simply do not feel isolated I have the correct amount of contact with my REM [Manager] and colleagues. Our core values and technical values are still very evident.		
RME/38 Factor 1	(+4: 12, 13) Because they reflect the role and responsibilities given as my responsibility by the business when out conducting the criteria we employed to do.	No all aspects have been covered.	Very effective and made me think about how what and how I do for the business.
	(-4: 47, 16) Because I engage in the business, as an individual there no barrier to still being part of a big team which is our business.		
RME/39 Factor 1	(+4: 12, 13) I take the role seriously and feel it is important to take ownership of what I do.	No.	Thought provoking.
	(-4: 2, 41) I believe that the role is essentially clear and has fundamentally remained unchanged in its ethos over the years.		
RME/40 Factor 1	(+4: 36, 27) (36) The company provides quality to the industry. (27) He [Manager] listens and understands and values work and personal life.	No response.	No response.

	(-4: 44, 17) (44) My personal life is affected by my work due to many hours, driving and staying away which causes issues within my family support. (17) IT support is a nightmare.		
RME/41 Factor 1	(+4: 37, 26) These feel most appropriate. Good support from REM [Manager], some colleagues.	Do you feel [the] new grading [system] is fair considering [it's] based on units, volume of contractors in certain areas?	Very interesting, once you get started.
	(-4: 39, 12) Least appropriate, never had specific area, specific contractors to look after. Good support from management.		
RME/42 Factor 1	(+4: 6, 43) True statements.	No.	No.
	(-4: 16, 30) Not reflective of my work environment.		

Appendix 26: Consensus statements for the Regional Engineering Managers

This table highlights all of the consensus statements for the regional engineering managers (statements that do not distinguish between any pair of factors). All of the listed statements are non-significant at $p > 0.01$, and those flagged with an * and denoted in **red** are non-significant at $p > 0.05$.

No.	Statement	F1	F2
1	The greatest challenge for me is trying to complete everything that I need to do	-1	+1
2	A lot of what I do is reactive	-1	-2
4	I see my role as a pinnacle position within the industry	+2	0
6*	You need to be prepared to grow with the role and constantly adapt	+2	+2
7*	The role has changed considerably since I started	0	+2
8*	The role has not changed much in that you are going out and assessing contractors for compliance	+1	+2
9*	The contractor's perception of us has changed, they can see behind the scenes that we have now become a business	0	0
11*	Most of my family and friends still have no understanding of what my role involves and who I work for	0	-2
12*	I have always taken ownership of my area and managed it	+1	+1
13*	It is an important role, not to be taken lightly, it is more than just an audit, there is a lot of responsibility	+2	+1
14	It is a difficult balance between doing the job as an auditor and still being customer focussed	0	-2
16*	I feel isolated	-4	-3
17	IT has always been an issue for a remote worker	-2	0
22*	There are too many emails sent and this means that important ones might get missed	0	0
23*	Being a remote worker does not feel lonely, I know that colleagues are a phone call away and I'm in contact with customers daily	+1	0
24*	Being a remote worker requires a lot of self-discipline to switch off from work	+1	+1
26*	I have a good working relationship with other RMEs	+2	+1

27*	I can speak to my manager about any problems that I have	+3	+4
28*	We do not see an awful lot of each other, it is only at Regional meetings	-1	0
30	I feel that everyone in Head Office is going to find out things before me	-2	-1
31*	I feel like a new starter every time I go to Head Office because things have changed round and I feel that I am out of my comfort zone	-3	-3
33*	When I ring Head Office up, and they ask who I work for, that does not make me feel positive, motivated and valued	-2	-1
36*	I have a great sense of pride working for the company	+4	+4
37*	I feel that I am well supported	+3	+2
38*	The focus should be on the working together as opposed to the performance of the individual departments	+1	+1
39*	I feel that I am just out there doing units and nobody really cares about me	-3	-3
41*	We have drifted away from our core technical values	-2	-2
42*	We should get back to our core values and not focus all the time on just making money which can be detrimental to our core commodity, which is selling electrical safety	-1	-2
43*	I have got a good working relationship with my colleagues and my manager	+3	+3
46*	I would like more social interactions and face-to-face contact with colleagues	0	0
47*	We do move very slowly and that sometimes that can be frustrating	-1	0
48*	We tend to go to a new technology which has got a lot more facilities but sometimes we lose some of the key facilities that we had previously	-1	0
49*	I think that poor communication causes frustration and some of it is a simple lack of professional courtesy	+1	+2
50*	We need to listen more to the field staff regarding what the issues are and not assume things	0	0

Appendix 27: Distinguishing statements for the Regional Engineering Managers

This table highlights all of the distinguishing statements for factor 1 (regional engineering managers). All of the listed statements are significant at $p < 0.05$, and those flagged with an * and denoted in **red** are significant at $p < 0.01$.

Note: There were no distinguishing statements calculated for factor 2 (Regional Engineering Managers).

No.	Statement	F1
1	The greatest challenge for me is trying to complete everything that I need to do	-1
2*	A lot of what I do is reactive	-1
3*	It is a consumer safety role – it is making sure these people carry out work that doesn't put themselves or other people in danger	+2
4	I see my role as a pinnacle position within the industry	+2
5*	I enjoy the flexibility of my role and the variety of what I do	+4
10*	I feel that I have lost a certain degree of control of my area	-2
14	It is a difficult balance between doing the job as an auditor and still being customer focussed	0
15*	I would not have got this role without an apprenticeship and the training and education to become an electrician	0
17	IT has always been an issue for a remote worker	-2
18*	I feel managing your work/life balance is the most difficult thing as a remote worker	-1
19*	It is very easy to spend a considerable amount of your own time working	0
20*	I am a remote worker, but fundamentally I am my own boss	+1
21*	Because you are a remote worker you are not involved in any office politics	0
25*	You can literally hear nothing from anybody other than the people you meet	-3
29*	The communication I have with my colleagues is limited, I have got one or two close colleagues	-1

30	I feel that everyone in Head Office is going to find out things before me	-2
32*	The relationship with Head Office has drastically changed and I feel no longer part of something	-4
34*	Because there are no longer teams, there is no connections, small talk or responsibility	-3
35*	I think that I have got a good working relationship with Head office	+3
40*	The AEs, REMs and the management team, are the basis of what makes us all tick really	+1
44*	Being home-based allows me to manage my personal life around work more effectively	+2
45*	I would change the structure of the relationship with Head Office, I would go back to teams	-2

Appendix 28: Interpretation crib sheet for the Regional Engineering Managers' factor 1: **'Engaged and Focused'**

Top two statements (most agree)

5. I enjoy the flexibility of my role and the variety of what I do (+4)

36. I have a great sense of pride working for the company (+4)

Statements sorted higher than other REM factor

2. A lot of what I do is reactive (-1)

3. It is a consumer safety role – it is making sure these people carry out work that does not put themselves or other people in danger (+2)

4. I see my role as a pinnacle position within the industry (+2)

10 I feel that I have lost a certain degree of control of my area (-2)

11. Most of my family and friends still have no understanding of what my role involves and whom I work for (0)

13. It is an important role, not to be taken lightly, it is more than just an audit, and there is a lot of responsibility (+ 2)

14. It is a difficult balance between doing the job as an auditor and still being customer focussed (0)

20 I am a remote worker, but fundamentally, I am my own boss (+1)

21. Because you are a remote worker you are not involved in any office politics (0)

23. Being a remote worker does not feel lonely, I know that colleagues are a phone call away and I am in contact with customers daily (+1)

26. I have a good working relationship with other RMEs (+2)

29. The communication I have with my colleagues is limited, I have got one or two close colleagues (-1)

35. I have a good working relationship with Head Office (+3)

37. I feel that I am well supported (+3)

42. We should get back to our core values and not focus all the time on just making money which can be detrimental to our core commodity, which is selling electrical safety (-1)

44. Being home-based allows me to manage my personal life around work more effectively (+2)

Statements sorted lower than other REM factor

1. The greatest challenge for me is trying to complete everything that I need to do (-1)
7. The role has changed considerably since I started (0)
8. The role has not changed much in that you are going out and assessing contractors for compliance (+1)
15. I would not have got this role without an apprenticeship and the training and education to become an electrician (0)
17. IT has always been an issue for a remote worker (-2)
18. I feel managing your work/life balance is the most difficult thing as a remote worker (-1)
19. It is very easy to spend a considerable amount of your own time working (0)
25. I hear nothing from anybody other than the people I meet (-3)
27. I can speak to my manager about any problems that I have (+3)
28. We do not see an awful lot of each other, it is only at Regional meetings (-1)
30. I feel that everyone in Head Office is going to find out things before me (-2)
33. When I ring Head Office up, and they ask me who I work for, that does not make me feel positive, motivated and valued (-2)
34. Because there are no longer teams, we have lost the connections, small talk and responsibility (-3)
40. The AEs, REMs and the management team, are the basis of what makes us all tick really (+1)
45. I would change the structure at Head Office; I would go back to teams (-2)
47. We do move very slowly and that sometimes that can be frustrating (-1)
48. We tend to go to a new technology which has got a lot more facilities but sometimes we lose some of the key facilities that we had previously (-1)
49. I think that poor communication causes frustration and some of it is a simple lack of professional courtesy (+1)

Bottom two statements (most disagree)

16. I feel isolated (-4)
32. My relationship with Head Office has drastically changed and I feel no longer part of something (-4)

Appendix 29: Interpretation crib sheet for the Regional Engineering Managers' factor 2: **'Challenged Leaders'**

Top two statements (most agree)

27. I can speak to my manager about any problems that I have (+4)

36. I have a great sense of pride working for the company (+4)

Statements sorted higher than other REM factor

1. The greatest challenge for me is trying to complete everything that I need to do (+1)

7. The role has changed considerably since I started (+2)

8. The role has not changed much in that you are going out and assessing contractors for compliance (+2)

15. I would not have got this role without an apprenticeship and the training and education to become an electrician (+3)

16. I feel isolated (-3)

17. IT has always been an issue for a remote worker (0)

18. I feel managing your work/life balance is the most difficult thing as a remote worker (+1)

19. It is very easy to spend a considerable amount of your own time working (+3)

25. I hear nothing from anybody other than the people I meet (-1)

28. We do not see an awful lot of each other, it is only at Regional meetings (0)

30. I feel that everyone in Head Office is going to find out things before me (-1)

32. My relationship with Head Office has drastically changed and I feel no longer part of something (-1)

33. When I ring Head Office up, and they ask me who I work for, that does not make me feel positive, motivated and valued (-1)

34. Because there are no longer teams, we have lost the connections, small talk and responsibility (+1)

40 The AEs, REMs and the management team, are the basis of what makes us all tick really (+2)

45. I would change the structure at Head Office; I would go back to teams (+3)

47. We do move very slowly and that sometimes that can be frustrating (0)

48. We tend to go to a new technology which has got a lot more facilities but sometimes we lose some of the key facilities that we had previously (0)

49. I think that poor communication causes frustration and some of it is a simple lack of professional courtesy (+2)

Statements sorted lower than other REM factor

2. A lot of what I do is reactive (-2)

3. It is a consumer safety role – it's making sure these people carry out work that doesn't put themselves or other people in danger (-1)

4. I see my role as a pinnacle position within the industry (0)

5. I enjoy the flexibility of my role and the variety of what I do (-1)

11. Most of my family and friends still have no understanding of what my role involves and whom I work for (-2)

13. It is an important role, not to be taken lightly, it is more than just an audit, there is a lot of responsibility (+1)

14. It is a difficult balance between doing the job as an auditor and still being customer focussed (-2)

20. I am a remote worker, but fundamentally I am my own boss (-3)

21. Because you are a remote worker you are not involved in any office politics (-2)

23. Being a remote worker does not feel lonely, I know that colleagues are a phone call away and I am in contact with customers daily (0)

26. I have a good working relationship with other RMEs (+1)

35. I have a good working relationship with Head Office (-1)

37. I feel that I am well supported (+2)

42. We should get back to our core values and not focus all the time on just making money which can be detrimental to our core commodity, which is selling electrical safety (-2)

44. Being home-based allows me to manage my personal life around work more effectively (-1)

Bottom two statements (most disagree)

10. I feel that I have lost a certain degree of control of my area (-4)

29. The communication I have with my colleagues is limited, I've got one or two close colleagues (-4)

Appendix 30: Demographic information for the four Regional Engineering Managers who significantly loaded onto factor 1

Participant	Years in role
RME/92*	[Redacted]
RME/93	[Redacted]
RME/96	[Redacted]
RME/97**	[Redacted]
Average years in role	10.50

Key:

*Green and ** = Highest loading participant.*

*Blue and * = Second highest loading participant.*

Appendix 31: Demographic information for the four Regional Engineering Managers who significantly loaded onto factor 2

Participant	Years in role
RME/91*	[REDACTED]
RME/94	[REDACTED]
RME/95	[REDACTED]
RME/98**	[REDACTED]
Average years in role	13.50

Key:

*Green and ** = Highest loading participant.*

*Blue and * = Second highest loading participant.*

Appendix 32: Calculations to determine whether the distribution of statements around the middle column (0) are positively or negatively biased (agree or disagree) for the Regional Engineering Managers

Participant number	Column selected by the participant to separate statements which they agree with and those that they disagree with
RME/91	-3
RME/92	0
RME/93	0
RME/94	-4
RME/95	-1
RME/96	-2
RME/97	-2
RME/98	-2
Total	-14 (8 responses)

Total mean for the Regional Engineering Managers

Total number of responses divided by the total number of participants who responded equals the mean response given by the Regional Engineering Managers.

$$-14 \div 8 = \underline{-1.75}$$

Factor 1 mean for the Regional Engineering Managers (Participants: 92, 93, 96 and 97)

$$-4 \div 4 = \underline{-1.00}$$

Factor 2 mean for the Regional Engineering Managers (Participants: 91, 94, 95 and 98)

$$-10 \div 4 = \underline{-2.50}$$

Appendix 33: Post Q sort questionnaire data for the Regional Engineering Managers

*Note: Additional wording in **red** added by the researcher to aid clarity and understanding for the reader.*

Regional Engineering Managers			
Participant and factor	What makes the statements at the extremes (+4 and -4) important to you?	Are there any missing statements?	Any thoughts on the experience of the Q Sort activity?
RME/91 Factor 2	(+4: 40, 36) I have been in the Organisation for many years and the REM/AE [Manager/Area Engineer] role is fundamental to the existence and continuity.	I would have added a statement about, responsibility and ownership of decisions and actions.	Very thought provoking.
	(-4: 10, 39) The Organisation does care about the wellbeing of its employees.		
RME/92 Factor 1	(+4: 4, 5) Because I enjoy my job and am proud of the position in the industry.	No.	Helped me focus on how good it is to work doing my job for the company.
	(-4: 31, 41) I rarely ever feel out of my comfort zone and office staff are helpful and friendly. We have not distilled from technical values as these are in enforced daily.		
RME/93 Factor 1	(+4: 36, 49) I enjoy working for the company. I do not like being cc'd into meaningless emails.	I am supported by the company management and colleagues.	Thought provoking.
	(-4: 16, 32) Because I have a good working relationship with the majority of the company.		

RME/94 Factor 2	(+4: 4, 1) Enjoy the job and being involved in various items especially technical. Switching off is difficult, as the job can be 24/7 if you let it.	No response.	No response.
	(-4: 16, 25) I do not feel isolated as I chat to others daily.		
RME/95 Factor 2	(+4: 1, 19) I find these two statement numbers are most prevalent to the REM [Manager] role.	Non to add.	Thought provoking and difficult to accurately categorise statements.
	(-4: 30, 31) I did not find either of these two statements were correct.		
RME/96 Factor 1	(+4: 36, 5) These 2 statements reflect how I feel working for the Co [Company].	Yes – Would you leave the company?	A good method of making you reflect on your feelings.
	(-4: 39, 16) I feel that the company does genuinely care about us as an employee.		
RME/97 Factor 1	(+4: 5, 43) They are statements that are positive aspects that I feel within the role.	Yes – The newsletter makes me feel part of something.	I would say to go with your first thoughts and not analyse the results and start changing.
	(-4: 16, 32) I strongly do not agree.		
RME/98 Factor 2	(+4: 6, 45) I feel we have lost the team approach in resolving problems. The industry and the company are constantly changing and it is required to adapt.	No response.	I feel there is a need to go with your first reaction.
	(-4: 21, 10) I feel that even as a remote worker because I am an REM [Manager] I am involved in office politics. I feel I still have control of my area.		

Appendix 34: Factor array for the Researcher

No.	Statement	F1
1	The greatest challenge for me is trying to complete everything that I need to do	+1
2	A lot of what I do is reactive	+1
3	It is a consumer safety role – it is making sure these people carry out work that doesn't put themselves or other people in danger	0
4	I see my role as a pinnacle position within the industry	+2
5	I enjoy the flexibility of my role and the variety of what I do	+3
6	You need to be prepared to grow with the role and constantly adapt	+2
7	The role has changed considerably since I started	-2
8	The role has not changed much in that you're going out and assessing contractors for compliance	-2
9	The contractor's perception of us has changed, they can see behind the scenes that we have now become a business	0
10	I feel that I have lost a certain degree of control of my area	-4
11	Most of my family and friends still have no understanding of what my role involves and who I work for	+1
12	I have always taken ownership of my area and managed it	-4
13	It is an important role, not to be taken lightly, it is more than just an audit, there is a lot of responsibility	0
14	It is a difficult balance between doing the job as an auditor and still being customer focussed	-2
15	I would not have got this role without an apprenticeship and the training and education to become an electrician	+3
16	I feel isolated	-3
17	IT has always been an issue for a remote worker	-1
18	I feel managing your work/life balance is the most difficult thing as a remote worker	+1
19	It is very easy to spend a considerable amount of your own time working	+4
20	I am a remote worker, but fundamentally I'm my own boss	0

21	Because you are a remote worker you are not involved in any office politics	-2
22	There are too many emails sent and this means that important ones might get missed	+2
23	Being a remote worker does not feel lonely, I know that colleagues are a phone call away and I'm in contact with customers daily	-1
24	Being a remote worker requires a lot of self-discipline to switch off from work	+3
25	You can literally hear nothing from anybody other than the people you meet	-3
26	I have a good working relationship with other RMEs	+1
27	I can speak to my manager about any problems that I have	+1
28	We do not see an awful lot of each other, it is only at Regional meetings	-1
29	The communication I have with my colleagues is limited, I have got one or two close colleagues	-1
30	I feel that everyone in Head Office is going to find out things before me	-3
31	I feel like a new starter every time I go to Head Office because things have changed round and I feel that I am out of my comfort zone	-2
32	The relationship with Head Office has drastically changed and I feel no longer part of something	-2
33	When I ring Head Office up, and they ask who I work for, that does not make me feel positive, motivated and valued	0
34	Because there are no longer teams, there is no connections, small talk or responsibility	-1
35	I think that I have got a good working relationship with Head office	0
36	I have a great sense of pride working for the company	+4
37	I feel that I am well supported	+1
38	The focus should be on the working together as opposed to the performance of the individual departments	+1
39	I feel that I am just out there doing units and nobody really cares about me	-3
40	The AEs, REMs and the management team, are the basis of what makes us all tick really	+3
41	We have drifted away from our core technical values	-1

42	We should get back to our core values and not focus all the time on just making money which can be detrimental to our core commodity, which is selling electrical safety	0
43	I have got a good working relationship with my colleagues and my manager	+2
44	Being home-based allows me to manage my personal life around work more effectively	+2
45	I would change the structure of the relationship with Head Office, I would go back to teams	0
46	I would like more social interactions and face-to-face contact with colleagues	-1
47	We do move very slowly and that sometimes that can be frustrating	+2
48	We tend to go to a new technology which has got a lot more facilities but sometimes we lose some of the key facilities that we had previously	-1
49	I think that poor communication causes frustration and some of it is a simple lack of professional courtesy	0
50	We need to listen more to the field staff regarding what the issues are and not assume things	0

Key:

Green and bold = Highest statements in that factor.

Yellow and bold = Lowest statements in that factor.

Appendix 35: Interpretation crib sheet for the Researcher

Top two statements (most agree)

19. It is very easy to spend a considerable amount of your own time working (+4)

36. I have a great sense of pride working for the company (+4)

Statements sorted higher than other AE and REM factors

2. A lot of what I do is reactive (+1)

11. Most of my family and friends still have no understanding of what my role involves and whom I work for (+1)

22. There are too many emails sent and this means that important ones might be missed (+2)

40. The AEs, REMs and the management team, are the basis of what makes us all tick really (+3)

Statements sorted lower than other AE and REM factors

12. I have always taken ownership of my area and managed it (-4)

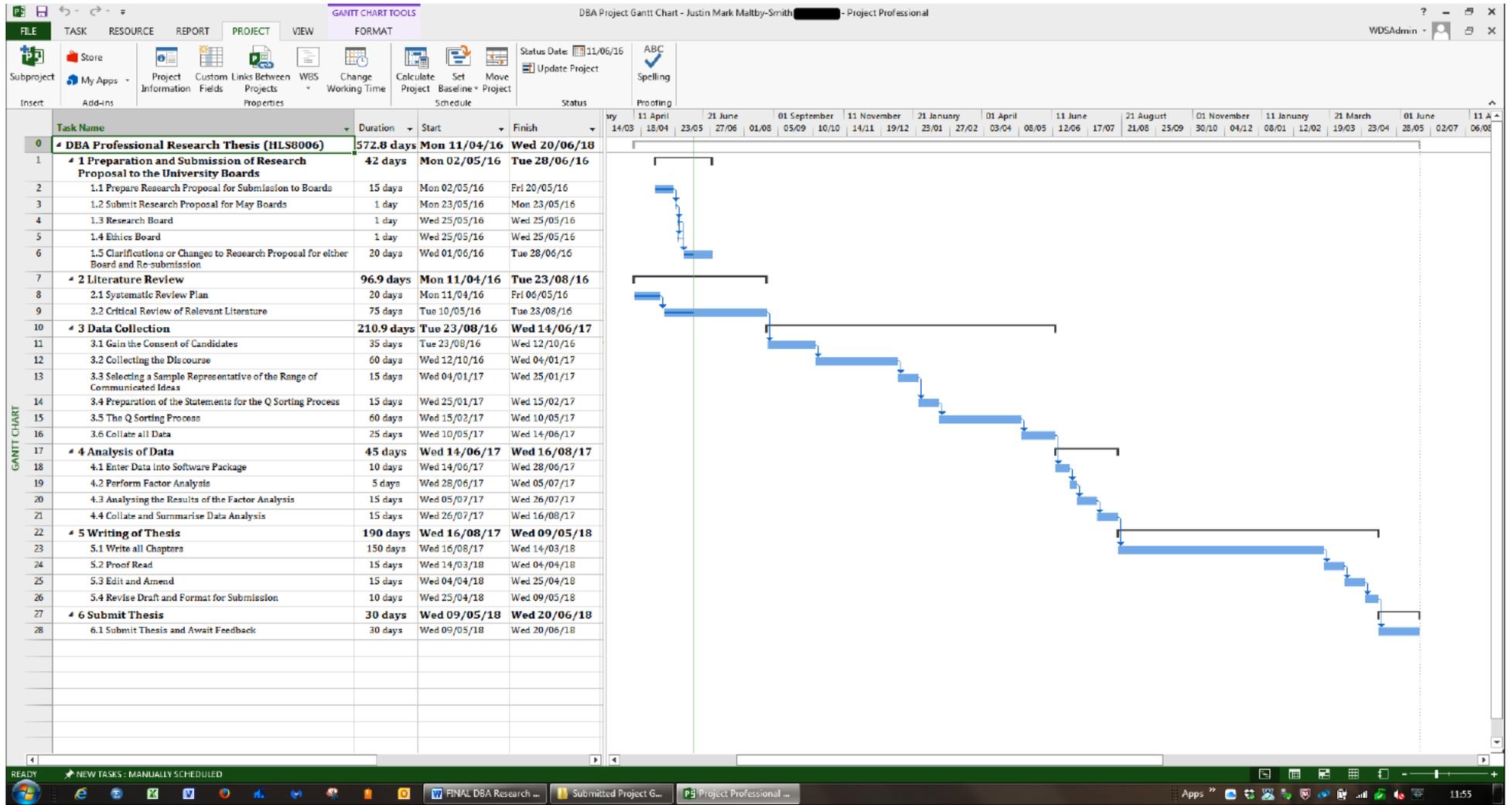
30. I feel that everyone in Head Office is going to find out things before me (-3)

Bottom two statements (most disagree)

10. I feel that I have lost a certain degree of control of my area (-4)

12. I have always taken ownership of my area and managed it (-4)

Appendix 36: Research project Gant chart



Appendix 37: Research project risk assessment

			
Activity:	DBA Research Project – Justin Mark Maltby-Smith [REDACTED] PROJECT TITLE Diagnosing the Distance: An Exploration into Remote and Mobile Employee Viewpoints on Corporate Commitment and Wellbeing using Q Methodology	Reference No:	
		Assessed By:	
Location:	[REDACTED]	Approved By:	
		Issue Date:	
		Revision Date:	

Hazard	Consequences	Persons affected	Existing Control Measures (Where appropriate)	Severity	Likelihood	Total Risk	Additional Measures (Where appropriate)	Severity	Likelihood	Total Risk
Stress to participants/employees	Stress to participants/employees	Employees	The research proposal and supporting documentation will be subject to review by University Ethics Board.	2	3	5	Detailed information sheets created for all participants. Professional support provided if needed for all the participants.	1	2	3
Breach of confidentiality during research project work.	Leaked confidential information	Participants and Organisation	The researcher is trained in all of the ethical components of research and evaluation. All work	2	1	3	The researcher will be the only person involved with data collecting activities.	1	1	2

Hazard	Consequences	Persons affected	Existing Control Measures (Where appropriate)	Severity	Likelihood	Total Risk	Additional Measures (Where appropriate)	Severity	Likelihood	Total Risk
			with comply with appropriate ethical codes of conduct and data protection.							
Researcher safety	Risk to researcher of being in compromising situations	Researcher	Participants of the research project are employees of the sponsoring Organisation.	2	2	4	<p>The research will only be conducted during working hours at registered offices. All employees should comply with HR policies that include: dignity at work and acceptable behaviour and conduct.</p> <p>The researcher's line manager will be aware of the data collection process and will be on-site and in regular contact with the researcher during data collection periods.</p>	1	1	2

RISK ASSESSMENT ACTIONS

Activity	DBA Research Project – Justin Mark Maltby-Smith [REDACTED]	Reference No.	
	PROJECT TITLE Diagnosing the Distance: An Exploration into Remote and Mobile Employee Viewpoints on Corporate Commitment and Wellbeing using Q Methodology		

Action Required	By Whom	Priority	Deadline for Completion	Date Completed	Signature

Name of Assessor		Signature of Assessor		Date actions passed to individuals for action:	
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RISK ASSESSMENT MATRIX

RISK						
Severity	5	5	10	15	20	25
	4	4	8	12	16	20
	3	3	6	9	12	15
	2	2	4	6	8	10
	1	1	2	3	4	5
	1	2	3	4	5	
	Likelihood					

SEVERITY	
5	Multiple fatality
4	Fatality
3	Major injury
2	Minor injury
1	Negligible impact

LIKELIHOOD	
5	Almost Certain
4	Probable
3	Possible
2	Remote
1	Improbable

The aim is to reduce the risk by prevention or control measures so far as is reasonably practicable.

Explanatory Note:

Risk		Likelihood	
16-25	Very high (Do not proceed without authorisation from the Directorate)	Almost certain	Self-explanatory
12-15	High	Probable	More likely than not to occur
6-10	Medium	Possible	Has the potential to occur
1-5	Low	Remote	Unlikely to occur
		Improbable	Occurrence is extremely unlikely

Severity

Multi fatality	Self explanatory
Fatality	Self explanatory
Major injury	Reportable incident under RIDDOR such as fracture of bones, dislocation, amputation, occupational diseases (e.g. asthma, dermatitis), loss of sight.
Minor injury	First aid administered. This would include minor, cuts, bruising, abrasions and strains or sprains of ligaments, tendons, muscles
Negligible impact	Self explanatory

All agreed actions must be given a low, medium, high or immediate priority.

Low 6 months to complete **High** 1 month to complete or to make satisfactory progress

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