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## **Uses and Risks of Microblogging in Small and Medium Enterprises**

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By

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## Abstract

Microblogging tools, such as Twitter and Yammer, are examples of social media that allow users to share messages about personal activities, share opinions and to receive quick notifications. They have become very popular, for both personal and professional pursuits, with millions of users worldwide. Some authors have claimed that social media can radically transform organisations. However, there is a lack of empirical research that evaluates that claim. Not much is known about internal organisational uses of microblogs, in comparison to their public uses, for example for marketing. Also, less research has been devoted to microblogging adoption and use in small and medium enterprises (SMEs), organisation with less than 250 employees. Yet, SMEs are recognised to be key to the economy. Accordingly, this thesis investigates the uses and perceptions of risks of microblogging in UK based SMEs.

The research adopts a qualitative, interpretive methodology because of the intention to explore how participants understand microblogging themselves. 21 semi-structured, face-to-face and phone interviews were conducted with managers, directors and employees in SMEs in IT/software, Sports and Consultancy organisations based in South Yorkshire, UK. A thematic approach was taken to analysing the interview data.

Most organisations in the study had adopted microblogs by a process of trial and error. Microblogging was mostly used by the manager or director. Smaller organisations did not make much use of the platforms for direct advertising i.e. selling products to others through the tools. The participants focused more on other types of uses, such as internal communication, knowledge and sharing data, as well as customer relations. Internally, microblogs such as Yammer was chiefly used by individuals to collaborate remotely with their co-workers and to ask or respond to questions. Externally, Twitter was mainly used to enable users to exchange information such as details about events, to communicate more with customers and potential customers and to build relationships with clients. A visual representation was developed to illustrate the uses of microblogging in SMEs. The participants in the study particularly valued microblogging for its limited functionality, its cost effectiveness and because it could be used via mobile phones.

Perceptions of risk emerged as a stronger theme in the analysis than expected. Most participants perceived microblogs to be highly risky i.e. to expose the organisation and employees to danger, though not too risky to use. The commonest type of risk was seen to be the danger of damaging the reputation of the business. Leaking confidential information to the public, negative media coverage, too much noise, misleading information, computer security, bullying, loss of personal privacy and losing valuable information were also identified as risks. Most organisations took specific action to manage and mitigate such perceived risks. The majority of participants talked about controlling what types of information should be shared on the tools. They had a policy on appropriate content. Other types of actions mentioned were controlling who should engage with microblogging, training, having review procedures and complaint procedures to deal with the consequences of mistakes such as providing people with incorrect information. To illustrate such feelings around risks, two visual representations were developed.

This research is the first in-depth study about the uses of microblogging in UK based SMEs. It was found that microblogging did not radically transform organisations. It was seen as a useful form of communication for SMEs, but no more than that. The limited financial resources and professional expertise that SMEs have, was key to how they adopted the technology. As regards practical implications, something could be done to address the trial and error approach to using microblogs found to be typical of smaller organisations. For example, managers could be given training courses and guidance on how to best adopt and use microblogging. To improve management of risks, more concrete expert advice could be developed and organisations would benefit from sharing of model policies.

## List of Presentations and Publications Arising from this Thesis

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‘In the Name of God’

به نام خدا

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## CHAPTER 1: Introduction

### 1.1. Context of the Study

Small and medium enterprises (SMEs), organisations with less than 250 employees (Harindranath et al., 2008; Ward & Rhodes, 2014), are recognised to have a key role in economic growth (Ale Ebrahim et al., 2010; Baregheh et al., 2012; Enright et al., 2001; Gray et al., 2003; Meske & Stieglitz, 2013; Ongori & Migiro, 2010). They play a vital role in the creation of jobs (Ale Ebrahim et al., 2010; Enright et al., 2001; Gray et al., 2003; Jones, 2002; Ongori & Migiro, 2010; Statistisches Bundesamt, 2013). SMEs also contribute to innovation in economies (D’Imperio, 2013; Scozzi et al., 2005). However, SMEs have many problems arising from their small scale (“Problems Faced by SMEs”, 2003; Scozzi et al., 2005). The adoption of communication technologies is a particular problem area for SMEs, because their limited financial resources (Carter, 2014; Gray et al. 2003) and professional expertise (Gray et al., 2003) prevents formal processes of evaluation and management of such systems. How organisations adopt communication technologies is of particular importance in the context of the strong claims that have been made around the application of ‘Web2.0’ in organisations, often linked to the term ‘Enterprise 2.0’.

The internet has changed and evolved towards a social platform with services that enable people to generate content and connect more with others (Bennett, 2013; Hauptmann & Gerlach, 2010). Such changes are often associated with the term Web2.0 (Yap & Robben, 2010). Web2.0 supersedes Web1.0 which according to some commentators was primarily about relatively passive viewing of information (Van De Belt et al., 2010). Web2.0 is “commonly associated with web applications that facilitate interactive information sharing, interoperability, user-centered design, and collaboration on the World Wide Web” (Click & Petit, 2010, p. 138). Web2.0 enables people to interact with one other (Ebner & Schiefner, 2008), as well as facilitating communications, conversations, collaborations (Willekens & Horst, 2010), editing or adding to website contents, sharing videos and links (which are major features of Web 2.0, especially at popular sites like YouTube and Flickr), in addition to commenting on other people’s photos (Click & Petit, 2010). The term ‘social media’ is often used interchangeably with Web2.0 (Stockdale et al., 2012). Kaplan and Haenlein (2010, p. 61) define social media as “a group of internet-based applications that builds on the ideological and technological foundations of Web2.0 and that allows the creation and

exchange of User Generated Content”. Research has shown the impact on collaboration (Meske & Stieglitz, 2013; Zeiller & Schauer, 2011) and the potential for knowledge management (Meske & Stieglitz, 2013). Websites and applications such as forums, blogs, microblogging for example Twitter and Yammer, instant messaging, social networking such as Facebook and LinkedIn, and wikis are all types of social media (Mangold & Faulds, 2009; Rouse, 2015; Stockdale et al., 2012; Zeiller & Schauer, 2011). These tools, while commonly grouped together, have very different qualities (Curran et al., 2011; Müller & Stocker, 2011; Ordioni, 2009).

Web2.0 and social media have also been seen as a vehicle for organisational change (Antunes & Isaias, 2014; Boughzala, 2011). Enterprise2.0 is a term coined by McAfee (2006) to describe how changes in the way people can communicate through Web2.0 technologies can lead to radical transformation of the whole organisation (McAfee, 2006; McAfee, 2009). It is suggested that Web2.0 technologies have changed the nature of collaboration and conversation inside organisations, enabling more individuals to contribute their perspective to a dialogue and to inform them by including multiple perspectives. Web2.0 technologies, it is said, will also allow individuals to communicate more easily with end users and customers (McAfee, 2009). According to Boughzala (2011), Web2.0 technologies have made possible Organization2.0- a social based organisation (Boughzala, 2011). Thus, a new form of collaboration practice can be developed (Boughzala, 2011; Cook, 2008; Soriano et al., 2007); collaboration which is unplanned, informal and public (Boughzala, 2011). It is said that Enterprise2.0 enables individuals to send messages one-to-many and to collaborate with those inside and outside of the organisations (Ali, 2009, p. 45), as well as to create, modify and share contents (Case & King, 2010; Werner, 2008).

Although it has been claimed that Web2.0 technologies can transform organisations not much research has been done to investigate whether that has happened, either through studies of social media in general, or by focusing on specific platforms, such as microblogging (Hauptmann & Gerlach, 2010; Yoo & Kim, 2013). Microblogs have become exceedingly popular, for personal and professional pursuits (Grace, 2010; Hauptmann & Gerlach, 2010; Jansen et al., 2009). According to Reinhardt (2009, p. 5), microblogging is “a small scale form of blogging, generally made up of short, succinct messages, used by both consumers and businesses to share news, post status updates and carry on conversations”. More specifically, Java et al., (2007, p. 56) define

microblogging as “a form of blogging that lets you write brief text updates (usually less than 200 characters) about your life on the go and send them to friends and interested observers via text messaging, instant messaging (IM), email or the web.” Microblogging allows individuals to share information about their own actions, points of view and status, as well as to receive quick notifications (Grace et al., 2010; Günther et al., 2009; Java et al., 2007; Zhang et al., 2010b).

The most familiar example of microblogging is Twitter (Barnes & Böhringer, 2009; Jansen et al., 2009; Pak & Paroubek, 2010; Riemer & Richter, 2010; Riemer et al., 2010b; Sakaki et al., 2010). Reports suggest that in July of 2012, Twitter had more than 500 million users (Lunden, 2012) and by 2015 it had 302 million monthly active users (Smith, 2015). This platform has rapidly grown since its launch in 2006 and more so since 2012, 2013 (Honeycutt & Herring, 2009; Jansen et al., 2009; Java et al., 2007; Smith, 2015; Sullivan et al., 2012). On Twitter individuals can post messages restricted to 140 characters (Bollen et al., 2011; Giles, 2010; Java et al., 2007). Users can publicly share direct and indirect messages (Huberman et al., 2008), broadcasting information about themselves (Greenwald, 2010; Humphreys et al., 2010), their activities, feelings, opinions and interests (Müller & Stocker, 2011).

Yammer is another example of a microblogging platform, but one designed solely for internal use in organisations (Müller & Stocker, 2011). It provides a private and secure network for colleagues to operate in, further enhancing security (Curran et al., 2011). Like Twitter, Yammer has been very successful. Yammer was launched in 2008 and in 2012 it was sold to Microsoft for 1.2 billion US dollars (Singh, 2014, p. 606). Microblogging platforms such as this have been applied to many organisations. For example, by 2013, Yammer was being used by more than seven million people and 70,000 organisations internationally (Lunden, 2013). Yammer is used in organisations of all kind of sizes and fields (A´Ivaro et al., 2010).

Although a few researchers have sought to discover the effects of microblogging on organisations and what its benefits are for business purposes, a number of significant gaps exist in the literature. Firstly, research on microblogging to date has been typically the result of trials of the tools within large organisations (Riemer et al., 2011c; Zhang et al., 2010a). Most research to date about microblogging in organisations has been published about organisations in the USA and Europe and less is known about its use in organisations in the UK. Further, less is known about internal organisational uses of the

platforms, in comparison to its public uses, for example for marketing (Curran et al., 2011). Issues to do with how microblogs are selected in the first place and who decides within the organisation to adopt the tools require further exploration. Also, there is a need to investigate how microblogs are adopted and who has access to them.

Although the literature identified potential risks of microblogs in the context of SMEs, most researchers have taken the stance of trying to encourage better uses of the tools. In doing so, they have neglected to give full weight to risk, which can be too costly to overcome. In this thesis risk has been defined as situations which involve exposing the organisation and staff members to danger. While not totally neglected, there has been a distinct lack of studies about the particular types of ways that SMEs manage risk. Therefore, further research needs to be undertaken within smaller organisations to gain a deeper understanding of the uses and perceptions of risks of microblogs and how to manage and mitigate risk.

Most researchers have tended to take a quantitative approach to investigate microblogging in organisations. This has meant they have focussed on using methods such as surveys to collect background information and feedback from participants, in addition to details about perceptions of microblogging, such as values and reading behaviours. A small number of researchers used qualitative methods such as interviews and observations. Thus, there is a need for more qualitative, interpretive studies, which would allow for issues to be explored in depth, about how people perceive uses and risks of microblogging in organisations.

## **1.2. Research aim, objectives and questions**

The overall aim of the thesis is to explore the perceived uses and risks of microblogging in small and medium enterprises (SMEs) in the UK. To achieve this aim, five research questions were proposed that need to be answered:

1. What was the process through which SMEs adopted microblogging?
2. How was microblogging used?
3. What risks were perceived with the use of microblogging?
4. What actions were taken to manage the perceived risks?
5. How does the nature of SMEs as organisations help explain the adoption of microblogging?

To answer the research questions, six objectives were established. These were:

- To conduct a literature review of Web2.0 and social media, their use in organisations especially in SMEs, with particular emphasis on microblogging, and their use in SMEs and larger organisations, in order to understand what is already known about their adoption and use in the organisational context.
- To review possible methodologies in order to define the research methodology and develop appropriate methods to collect and analyse data.
- To design an interview plan to enable appropriate data to be collected to answer research questions.
- To conduct pilot interviews in order to develop initial insights on potential questions and areas for further exploration during the data collection.
- To select the research participants and collect interview data and analyse it with the view to understanding how microblogging is adopted in the context of SMEs and what uses and risks are associated with it.
- To reflect on the analysis to provide contributions to knowledge and develop recommendations for practice.

Using a naturalistic approach and thematic analysis, the focus was on investigating SMEs in the area of South Yorkshire, UK. IT companies were selected as the main sector for data collection, as they are early adopters of technology (Gefen, 2011). They help receive early ideas of how other organisations might use technology. In addition, at the time of collecting data they were found to be the main users, so inevitably the sample was expected to include many IT companies. It is however accepted that organisations in the field of IT may not be representative because SMEs from other fields could use microblogs differently. As a result, organisations from other sectors were included in the data collection, businesses from Sports and Consultancy. This was to ensure that the experience of other sectors was represented.

### **1.3. Scope of the study**

Having identified that less research has been devoted to microblogging adoption and use in small and medium organisations, the focus of this study was on investigating uses of microblogging in SMEs, in the UK. While a relatively remote location to the UK's busiest areas e.g. London and the South East, Sheffield is still a creative and energetic

region. It is one of the eighth largest cities in England and it is the third largest English district by population (Economy of Sheffield, 2015). In terms of new businesses, Sheffield is also recognised as one of the best business areas in the country (Middleton, 2008). It is one of the main city economies, recognised in manufacturing, engineering and design (Middleton, 2008, p. 5). This city is continuously regenerating itself as a modern technology based area (Economy of Sheffield, 2015). Before initiating the study, the researcher was aware of the existence of many IT based organisations in this region; this made the area appropriate for data collection. In addition, having more opportunity to collect face-to-face interview data would increase the chances of gaining in-depth responses, thus the quality of the research would increase, so it was decided to focus on businesses local to where the interviewer was based.

#### **1.4. Reasons to Undertake this Study and Motivation of the Researcher**

At a personal level, the researcher used social media, platforms such as Facebook, Twitter and LinkedIn. She particularly found Facebook and Twitter interesting platforms, through which she could socialise with her friends and family. These services also allowed her to easily communicate and share work-related information with colleagues. For instance, she sometimes organised meetings or uploaded information such as conference details or journal articles. Considering her personal experience of this form of communication, the researcher became intrigued to investigate how these systems are adopted and used inside organisations, for work purposes.

In terms of the researcher's educational background, her degree in "Computer Science" and "Information Systems Management", in addition to her career expectations encouraged the decision to undertake this study. For instance, having been taught about Web2.0 technologies and the interest they have gained from organisations, she wanted to find out more. Before initiating the study, the researcher knew that she wanted to base the data collection of the study on organisations, because of her interest in Management, in addition to wanting to engage with businesses at this level of her studies and later on in her career. The researcher was also influenced by her previous experiences in conducting interviews in modules such as "Human Computer Interactions". She knew about the nature and usefulness of interviews. She was aware that interviews could provide insights into the participant's opinions, thoughts and feelings, in addition to capturing their views and experiences in real-life situations. As a



result, qualitative interviews were chosen as the main method for data collection; a naturalistic approach was selected.

## **1.5. Thesis Structure**

This section provides an overview of the thesis and emphasises how each chapter contributes to the overall research aim.

### **Chapter 2 Literature review**

Chapter two is a review of the existing literature relevant to the study. The chapter discusses the literature on the nature of SMEs, before exploring the wider literature on the uses of Web2.0 technologies and social media in the context of SMEs. Microblogging is then introduced, as an example of social media. The chapter critically analyses where most studies to date about microblogging in organisations have been published and the types of methodologies which have been used. This is followed by reviewing marketing uses of microblogging and identifying that most of the existing literature has focused on the external uses of microblogs and are related to marketing aspects; less is known about internal uses of microblogging, particularly in SMEs. The chapter critically reviews and discusses the main literature on microblogging in SMEs and large organisations; the uses and risks are identified, as well as the types of actions taken by organisations to mitigate risk. The chapter seeks to identify gaps in literature in the field of microblogging and the need for undertaking further research in this area.

### **Chapter 3 Research methodology**

Chapter three discusses the research design and methodological choices in the study. Firstly, the philosophical assumptions are explained, including the ontological and epistemological assumptions, which shaped the study. The deductive and inductive approaches to research are discussed. A qualitative, interpretive, exploratory method was used, for reasons which will be discussed. The data collection methods employed in the research are then explained. A description is provided about the interviews in the two stages of the study. The next section discusses the strategies used to ensure the quality of the research. The last part of the chapter describes the ethical procedure for conducting the study.

### **Chapter 4 Uses of microblogging**

In Chapter four, the analysis and findings of the research are presented, focusing on the uses of microblogging in SMEs. The chapter also explores the process of microblogging adoption. The aim of this chapter is to answer the first two research questions. This

section also presents a visual representation, which summarises all of the uses of microblogs, based on the themes arising from the analysis of interview data. The diagram differentiates between internal and external uses of microblogging. The chapter also identifies what participants saw as the key features of microblogging that influenced its usage.

#### **Chapter 5 Perceived risks of microblogging and actions taken to mitigate risk**

Chapter five continues to present the findings of the study, focusing on the potential risks of microblogging in SMEs. It also describes the types of actions organisations take to mitigate risk. The aim of this chapter is to answer the third and fourth research questions. The chapter starts by discussing the different risk factors. A visual representation differentiates between the internal and external risks of microblogging in SMEs. The diagram also relates factors and it shows the relationships between them. The chapter also explores what specific actions are taken by SMEs to deal with risk and a visual representation summarises those actions.

#### **Chapter 6 Discussion**

Chapter six discusses the significance of the research findings in the light of previous literature on microblogging in SMEs and large organisations. Initially, an overall summary of the findings of the current study is given. It then compares the findings of this study with the existing literature on microblogging in SMEs. Similarities and differences are identified and discussed. The chapter then compares the findings of this research with the existing literature on microblogging in large organisations. The last part of this chapter develops an understanding of the results in the context of the nature of SMEs as organisations. The aim of this section is to answer the last research question.

#### **Chapter 7 Conclusion**

Chapter seven concludes the research. It gives a summary of the study, presents the answers to the research questions and explains the research contribution to knowledge and practice. The chapter also discusses the study limitations and provides suggestions for future research.

## **CHAPTER 2: Uses and Risks of Microblogging in Organisations**

### **2.1. Introduction**

In this chapter a review of the relevant literature is provided, related to how small and medium enterprises (SMEs) and large organisations make use of microblogging. The chapter first discusses the literature on the nature of SMEs (Section 2.2), before discussing the uses and risks of Web2.0 technologies and social media (Section 2.3), in the context of SMEs. The main characteristics of microblogging are described in Section 2.4, before the chapter discusses how there has been interest surrounding the potential of microblogging to bring value to organisations (Section 2.5). An overview of the quality of the literature is also given (Section 2.5.1); this section critically evaluates where most research to date about microblogging has been published. In the next part of the chapter, the main literature on uses of microblogging in large organisations and SMEs are reviewed and discussed (Section 2.6). The chapter goes on to discuss the risks of microblogging in large organisations and SMEs (Section 2.7). Section 2.8 presents the chapter overview.

### **2.2. Summary of literature on the nature of SMEs**

There is no single definition of small and medium enterprises (SMEs). Definitions are often based on factors such as employment, assets or a combination of both (Ongori & Migiro, 2010). In the USA, SMEs are often defined as organisations which have between 100 to 500 employees (Gray et al., 2003), while in the UK, the Department for Business defines SMEs as organisations with less than 250 members of staff (Summers, 2012); this is the commonest definition of an SME (Harindranath et al., 2008; Ward & Rhodes, 2014). According to Summers (2012), the UK government uses the EU definition of an SME. EU definitions differentiate, micro-organisations employing fewer than 10 members of staff and having a turnover under two million pounds. Small organisations are defined as employing fewer than 50 employees, with a turnover under ten million pounds. Medium sized organisations are defined as having less than 250 employees, with a turnover under fifty million pounds (Summers, 2012). In this research, although it is expected that different types of SMEs will make use of microblogs for business purposes, the commonest definition of an SME has been used; they have been defined as organisations with less than 250 staff members.

SMEs are considered to have a special role in the economy. Thus smaller organisations are recognised to have a key role in economic growth (Ale Ebrahim et al., 2010; Baregheh et al., 2012; Enright et al., 2001; Gray et al., 2003; Meske & Stieglitz, 2013; Ongori & Migiro, 2010). They also play a vital role in the creation of jobs (Ale Ebrahim et al., 2010; Enright et al., 2001; Gray et al., 2003; Jones, 2002; Ongori & Migiro, 2010; Statistisches Bundesamt, 2013). SMEs also contribute to innovation in economies (D’Imperio, 2013; Scozzi et al., 2005). So the study of SMEs is an important topic, and has often been the focus for research in the field of information studies, such as in the investigation of the adoption of technologies. The rest of this section discusses a number of characteristics which help explain how SMEs adopt and use microblogs.

Smaller organisations typically lack specialist expertise (Brown & Lockett, 2004; Devos et al., 2012; Ghobakhloo et al., 2011; Gray et al., 2003; Nguyen, 2009; Nwankwo & Gbadamosi, 2010). They also lack the essential resources needed to produce specialist expertise (Nwankwo & Gbadamosi, 2010). SMEs also do not have much time to build up expertise on specific areas. Instead, individuals tend to do many things, so may not do all of them professionally (Nwankwo & Gbadamosi, 2010). This affects how smaller organisations adopt and use new technologies. In comparison to large organisations, SMEs will have less formal processes of evaluation or seek to measure the success of the use of new technologies that might have taken place if there was an expert in charge of technology adoption. SMEs also have a short-range of management perspectives. The group is usually made up of one or two individuals and they are strongly influenced by the owner of the organisation (Levy & Powell, 2004; Ongori & Migiro, 2010; Pratyush, 2010). The reason for having a smaller management group can be explained by the fact SMEs usually lack IT or communication specialists (Ghobakhloo et al., 2011; Nguyen, 2009).

SMEs tend to exhibit less formality than large organisations (Ale Ebrahim et al., 2010; Blackburn, 2012; Gray et al., 2003; Storey et al., 2008). They are mostly dominated by custom and practice, with a lack of written procedures and policies to design (Storey et al., 2008). They also do not measure or regulate employment relationships. According to Storey et al. (2008), formality increases with the size of the organisation. In large organisations determining an HR manager is an example of having more formality. The role of an HR manager is related to performance management such as appraisal, educating and employee development in addition to creating procedures of handling engagements with staff members (Storey et al., 2008). The informality of smaller

organisations shapes their approach to adopting technologies. SMEs are less likely to have a formalised process of evaluation and adoption; technologies will be mostly adopted by a process of trial and error.

The organisational culture of SMEs is affected by the management team's attitude, personality and values. The management team decide on everything and their selection is based on their knowledge, personal judgement and engagement skills (Nguyen, 2009). The culture of smaller organisations affects the process of IT adoption. SMEs are known to be more open and flexible to adopting new technology (Nguyen, 2009; Ghobakhloo et al., 2011). Knowledge needed for adoption of technology is required to be merged within the organisation through a process of networking and sharing information, while the effectiveness of this process is influenced by the culture of the organisation (Ghobakhloo et al., 2011). The flat structure of smaller organisations and less hierarchy (Burley, 2015; Kiril, 2014; Wamba & Carter, 2013) facilitates them to have a more flexible work environment. It enables top managers to create a strong relationship with staff members (Burley, 2015; Kiril, 2014). The fewer levels of management among managers, executives, and other staff members result in considerably increasing communication accuracy (Burley, 2015). Flat communication enables teamwork and collaboration, as individuals from various parts of the organisation can engage with each other and share ideas (Grimsley, 2014). A smaller management team, less formality (Blackburn, 2012; Kiril, 2014), flatter communication structures and less hierarchy facilitates smaller organisations to have a more flexible work environment. Thus, managers can build strong relationships with other staff members (Gray et al., 2003; Kiril, 2014) and give an opportunity for easier and more direct leadership which can make easy the permeation of stronger cultures. Hence, a more supportive environment is created (Gray et al., 2003). Regarding the adoption of new technologies, especially communication technology within SMEs, staff members can help and encourage each other to make better use of the platforms, for example by providing training.

### **2.3. Web2.0 technologies and Social media**

Community-based Web systems, such as social networking sites, blogs and microblogs, are referred to as "Web2.0" (Camponovo, 2011; Van De Belt et al., 2010; Yoo and Kim, 2013). Web2.0 is an evolved version of Web1.0 (Camponovo, 2011), which for some commentators was mostly about relatively passive viewing of information (Van

De Belt et al., 2010) i.e. Web1.0 was mainly one-directional, whereas Web2.0 technologies actively encourage a wider and more desirable connection of users (Antunes & Isaias, 2014; Yoo & Kim, 2013). Web2.0 technologies enable users to edit or add to website contents (Yoo & Kim, 2013), thus, creating communication. According to Heath and Motta (2008, p. 76), “Web2.0 has enabled contributions to the Web on an unprecedented scale, through simple interfaces that provide engaging interactions”. Musser and O’Reilly (2006, p. 5) define Web 2.0 as “a set of economic, social, and technology trends that collectively form the basis for the next generation of the Internet- a more mature, distinctive medium characterized by user participation, openness, and network effects”. Similarly, Click and Petit (2010) view Web2.0 as being associated with the web; it enables information sharing and collaboration on the internet.

The term ‘social media’ is frequently used interchangeably with Web2.0 (Stockdale et al., 2012). To clarify the term, social media can be defined as “a group of internet-based applications that builds on the ideological and technological foundations of Web2.0 that allow the creation and exchange of User Generated Content” (Kaplan & Haenlein, 2010, p. 61). Examples of social media include blogs, microblogs such as Twitter and Yammer, instant messaging, social networking and wikis (Mangold & Faulds, 2009; Rouse, 2015; Stockdale et al., 2012; Zeiller & Schauer, 2011). These platforms, while commonly grouped with each other, have distinct qualities (Curran et al., 2011; Müller & Stocker, 2011; Ordioni, 2009).

Until recently, most of the interest in Web2.0 and social media has been about its use for personal purposes, such as interacting with friends or responding to the media. However, these technologies and associated social media platforms (Antunes & Isaias, 2014; Camponovo, 2011; Sjöberg, 2010; Van De Belt et al., 2010; Yoo & Kim, 2013) have progressively made their way into organisations (Antunes & Isaias, 2014; Meske & Stieglitz, 2013; Treem & Leonardi, 2012). There are several reasons for using social technology in organisations. Web2.0 has been seen as a vehicle for changing them (Antunes & Isaias, 2014; Boughzala, 2011). Enterprise2.0 is a term coined by McAfee (2006) to suggest that such changes in the way members of staff can communicate through Web2.0 can radically transform the whole workplace (McAfee, 2006; McAfee, 2009). According to McAfee (2006, p. 1), Enterprise2.0 is “the use of emergent social software platforms within companies, or between companies and their partners or

customers”. The literature claims that Enterprise2.0 could vastly improve communication and relationships between co-workers and with those outside of the organisation, such as clients, customers and potential customers. Antunes and Isaias (2014) have claimed that Enterprise2.0 represents a potential opportunity for organisations to minimise costs, increase revenue and efficiently develop innovation.

The following sections discuss the uses and risks of Web2.0 and social media in SMEs. This is because although there is a growing body of literature on Web2.0 technologies and social media, little research has focused on their use in the context of SMEs (Meske & Stieglitz, 2013; Stockdale et al., 2012; Zeiller & Schauer, 2011).

### **2.3.1. Uses of Web2.0 and social media in SMEs**

This section discusses uses of Web2.0 and social media in the context of SMEs. Kim et al. (2013) analysed the uses of Web2.0 technologies in 100 American SMEs (50 “best SMEs” to work for in America and 50 organisations randomly selected from an online source). The findings showed that, although the majority of the 50 “best SMEs” made some use of Web2.0, other smaller organisations needed to develop their use of the tools for marketing purposes further, and to engage more with end users. Antunes and Isaias (2014) distributed an online questionnaire to study how Portuguese SMEs use Web2.0 technologies. In terms of organisational communication, the findings, based on 99 questionnaire responses, showed that traditional methods of communication, such as e-mail and phone, were intensively used among participants. In contrast, the study revealed that people did not make much use of the new Web2.0 technologies to communicate with their stakeholders, such as with their employees and customers. Overall, more than 70% of the participants did not make use of Web2.0 technologies. Only 3% confirmed that they were already taking advantage of Enterprise2.0 practices and about having gained internal and external benefits from doing so. Those that did use Web2.0 were enthusiastic about its value. Internally, Web2.0 facilitated communication and collaboration between co-workers. People were able to have more access to knowledge and shared more ideas, which led to better personal performance. Externally, Web2.0 was beneficial for marketing purposes; to create and promote products and services, in addition to helping build closer bonds with the customers and attract new customers. Externally, Web2.0 technologies also helped maintain relationships among members of staff (Antunes & Isaias, 2014). This group of people were a minority and most of them did not use Web2.0. The participants of this study showed that their reasons for not using Web2.0 technologies in the work environment were based on the

idea that it involved a waste of time and the difficulty of adapting Enterprise2.0 practices to organisational culture. According to Antunes and Isaias (2014), the costs involved in using these platforms are another reason for not implementing Enterprise2.0.

Durkin et al. (2013) explored the existing research on the adoption of social media by SMEs. An action research methodology was used and they conducted a thorough case analysis of eight organisations in Ireland. The SMEs were selected from both the private and public sectors, including those from the area of tourism, technology and retail. The findings showed that a usual motivator for the adoption of the platforms was that people felt they had to make use of what was considered to be an important new tool for the organisation's development. The findings did not specifically reveal that these methods of adoption added benefits to the customer experience (Durkin et al., 2013). Similarly, Zeiller and Schauer (2011) examined the adoption of social media within SMEs. The findings were based on six case studies in European SMEs (Zeiller & Schauer, 2011, p. 3). All of the organisations adopted social media using a top-down approach; the adoption process was initiated by the management team. The findings also showed that users valued social media for assistance, particularly as individual could ask for help. Therefore, it was claimed that social media can become useful for group collaboration, if organisations indicate key individuals who are to assist users. The results revealed that the key success factors were support for tool activities by management, in addition to specialized and operational assistance for individuals. Furthermore, it was claimed that making use of social media is influenced by how much individuals are encouraged to engage with the platform. One of the key motivating aspects is that social media helps individuals to work more effectively within SMEs. Also, group members use the tools if they feel that they can gain a sufficient amount of high quality and useful information. Therefore, particularly in smaller organisations where their adoption process is initiated by the management team, organisations need to take actions that support individuals to increase their contributions. Thus, the platforms have to be easy to access and use (Zeiller & Schauer, 2011).

Meske and Stieglitz (2013) investigated how social media was used in German SMEs. The findings were based on surveys distributed to decision-makers in the organisations. Internally, people mainly used wikis. Blogs and internal social networks were also used. SMEs made use of these internal platforms so that they could assist collaboration



between co-workers, as well as enhance knowledge management. Overall, a rapid increase in knowledge, less communication costs and the increased accessibility to internal experts were the main reasons for using social media inside the organisations. The respondents also mentioned that social media had made the cooperation better, as well as positively altering the organisation's culture i.e. influencing how they operate. Similarly, Stocker et al. (2008) found value in using social media in SMEs. They investigated how weblogs affected knowledge exchange within smaller organisations. The findings showed that they sufficiently lowered the cost of providing knowledge. Thus, it was concluded that weblogs need to be further publicized, even in smaller organisations where there are not many employees.

Derham et al. (2011) carried out a study to examine how one SME, a New Zealand restaurant, gained benefits from using Facebook. The findings showed that this tool enabled users to communicate with a large number of people. Facebook was used for marketing (for example, photos were shared to promote the business) and customer relationship management (Derham et al., 2011). Similarly, Ainin et al. (2015) investigated the impact of Facebook on SMEs. The findings were based on 259 SMEs in Malaysia, using a survey. Facebook affected the financial performance of the organisations; it helped reduce the costs of marketing and customer service, as well as improving customer relations and gaining information. Stockdale et al. (2012) conducted a study to investigate how SMEs gain benefits from using social media applications. They initially studied the related literature to recognise how these platforms are used. Five US-based SME case studies and the case organisation's websites were then examined. Based on the findings, Stockdale et al. (2012) concluded that smaller organisations mainly valued social media for its potential to improve customer relationships. This includes increased communication with customers and providing more data and knowledge to increase reputation and develop trust, thus gaining competitive advantage. The findings showed that only the largest case organisation made use of the platforms for internal business purposes.

Nakara et al. (2012) carried out a study to explore how social media can help SMEs for marketing purposes and how these platforms affect the organisation's marketing strategies. They conducted seven semi-structured interviews with web marketing consultants, and distributed an online survey to the managers of tourism SMEs (they received 104 responses), as well as carrying out a netnographic study. Based on the

findings, 72% of the participants interviewed said they used social media, such as Viadeo (41%) or LinkedIn (11%) for business purposes. Also, some managers used tools like Facebook (52%) or Twitter (26%). With Facebook and Twitter, initially their aim was to communicate with their friends. Others made use of platforms such as Cityvox (48%) to connect to those in their field of work, and individual blogs to add information about their activities. The findings showed that one of the key marketing uses of social media was for advertising, as mentioned by 79% of the respondents. A number of organisations promoted hotels, or added regional news so that they could attract more people, such as tourists. In addition, 74% of the respondents talked about using social media for networking, where new contacts were made more impulsively (Nakara et al., 2012). Based on the findings, it was said that SME managers were motivated to make use of social media because the platforms were easy to use and they did not require special skills to engage with them. Also, new SMEs may lack financial resources and these tools are not costly to engage with (Nakara et al., 2012).

#### ***2.3.1.1. Overview of the uses of Web2.0 and social media in SMEs***

Section 2.3.1 discussed the uses of Web2.0 and social media in smaller organisations. SMEs valued social media for sharing knowledge or information (Ainin et al., 2015; Meske & Stieglitz, 2013; Stockdale et al., 2012) and assistance; having access to internal experts and asking for help (Meske & Stieglitz, 2013; Zeiller & Schauer, 2011). Social media was also found to be useful for group collaboration (Zeiller & Schauer, 2011). In addition, the platforms were used for marketing, for instance for advertising (Nakara et al., 2012) and promoting the business, as well as for customer relationship management (Ainin et al., 2015; Derham et al., 2011; Stockdale et al., 2012). As a result of using social media for marketing, the reputation of the organisation could be maintained and more trust could be developed (Stockdale et al., 2012). The existing literature on social media in SMEs also identified features of the tools that influenced their usage. SMEs used the platforms because they were easy to engage with and they did not require professional expertise (Nakara et al., 2012; Zeiller & Schauer, 2011). Also, social media was not too costly (Meske & Stieglitz, 2013; Nakara et al., 2012; Stocker et al., 2008); SMEs may lack financial resources and that is one reason why social media was used (Nakara et al., 2012). Ainin et al. (2015) added that social media helped to reduce the costs of marketing and customer service.

Although most of the existing literature on Web2.0 and social media in SMEs found that organisations valued the use of the tools, a few researchers said that smaller

organisations need to further develop their use of the platforms. For instance, organisations can use social media more for marketing purposes and to communicate with end users (Kim et al., 2013). Similarly, in the study by Antunes and Isaias (2014), more than 70% of the participants did not make use of Web2.0 technologies, for example to engage with their stakeholders, such as customers. Overall, little research has been devoted to Web2.0 and social media adoption and use in SMEs. What has been discovered so far, about their use in smaller organisations may help to reveal how other platforms, such as microblogs are used for business purposes.

### **2.3.2. Risks of Web2.0 and social media and actions taken by SMEs to mitigate risk**

This section discusses the potential risks of Web2.0 and social media in SMEs, and the types of actions taken by organisations to mitigate risk. The study by Nakara et al. (2012) found that some SMEs perceived risks to be associated with using Web2.0 and social media for business purposes. Thus, although some organisations were present on the platforms, they did not make much use of the tools. Nakara et al. (2012) gave several managerial implications, by considering the potential risks of social media. These were: loss of control over the contents shared and the tools negatively influencing their reputation. More specifically, the results showed that many managers did not like to be available on social media because they were worried about receiving bad customer evaluations. They were also worried about negative comments by competitors. According to Nakara et al. (2012), a negative comment could ruin the reputation of an organisation and smaller organisations need to be aware of such issues. They added that organisations must pay attention to the types of information being shared on social networks because it can quickly spread. Also, that there is a need to control the security of information and confidential internal data (Nakara et al., 2012). Although social media was found to be important for business purposes and some managers believed they should be present on it, a few participants considered it a waste of time (Nakara et al., 2012).

In the study by Meske and Stieglitz (2013), when the participants were asked to give reasons for not making more use of social media, they talked about several issues, such as having insufficient support by employees (32%) and poor effectiveness and efficiency (21%). Despite its many benefits, people still faced issues of managing social media and finding relevant business values. Meske and Stieglitz (2013) found that smaller organisations usually followed a strategy for the adoption of social media. For

example, they found that smaller organisations give social media guidelines and give training to members of staff, so that they can effectively use the platforms. According to one of the participants in their study, as a result of not having guidelines and no being given specific social media responsibilities, communication on non-private topics had stopped within the organisation. No one felt responsible for the next task anymore. Meske and Stieglitz (2013) said that a successful adoption of the platforms is influenced by the support of the management team and a planned adoption process. It was added that it is best for smaller organisations to provide training and create social media guidelines for their employees (Meske & Stieglitz, 2013).

#### ***2.3.2.1. Overview of the risks of Web2.0 and social media in SMEs***

Section 2.3.2 discussed the risks of Web2.0 and social media in SMEs. The risks were loss of control over the contents shared (Nakara et al., 2012) and the tools negatively affecting the reputation of the business. For example, by receiving bad customer evaluations and negative comments by competitors (Nakara et al., 2012). A few people also had concerns about the security of the organisation i.e. leaking confidential information, as well as wasting time when using social media (Nakara et al., 2012). Some researchers talked about how to mitigate risk. SMEs need to manage the types of information being shared on social media, because it can quickly spread i.e. private, company information (Nakara et al., 2012). Also, SMEs should give training and create social media guidelines for their staff members (Meske & Stieglitz, 2013). There has been a lack of research about the risks of Web2.0 and social media in the context of smaller organisations, as well as the specific types of ways that SMEs manage and mitigate risk. Thus, there is room to conduct more research, to investigate in more detail the risks of social media in general, or by investigating specific tools, such as microblogging in SMEs.

## **2.4. Microblogging**

Microblogging is defined as “a small scale form of blogging, generally made up of short, succinct messages used by both consumers and businesses to share news, post status updates and carry on conversations” (Reinhardt, 2009, p. 5). Han (2010) also views microblogging as a form of blogging, whose character differs from traditional blogs in that the content is typically much smaller and consists of a short sentence fragment, an image or embedded video. Similarly, according to Java et al. (2007, p. 56) microblogging is characterised by the posting of small pieces of digital content (usually

less than 200 characters) “about your life on the go and send them to friends and interested observers via text messaging, instant messaging (IM), email or the web.” How microblogging has been understood has been shaped by the emergence and popularity of platforms, such as Twitter (Riemer et al., 2010b).

Microblogs enable users to share information about personal activities, thoughts and status, in addition to receive quick notifications (Grace et al., 2010; Günther et al., 2009; Java et al., 2007; Zhang et al., 2010b). They have become popular quickly, interesting users in different contexts i.e. as both a means of public and social information exchange, and a medium for collaboration (Ebner & Schiefner, 2008), knowledge sharing (Hauptmann & Gerlach, 2010) and communication (Jansen et al., 2009) in the work context (Grace, 2010). Microblogging, allows for one-to-many online conversations (Lee & Warren, 2010) and the sharing of information with a large audience (Hauptmann & Gerlach, 2010) in the form of electronic word-of-mouth (Jansen et al., 2009), and the expression of ideas which are less likely to be expressed using other types of existing technologies, such as email, phone, IM or weblogs (Grace, 2010). The emphasis in using microblogging tools is on posting and broadcasting short, real-time messages (which are by their very nature relatively light in content) typically about one's activities, opinions, and status with friends, family and colleagues (Grace, 2010; Zhang, 2010), directly or indirectly (Ehrlich & Shami, 2010).

#### **2.4.1. Twitter**

The most well-known example of microblogging is Twitter (Barnes & Böhringer, 2009; Jansen et al., 2009; Pak & Paroubek, 2010; Riemer & Richter, 2010; Riemer et al., 2010b; Sakaki et al., 2010). According to Finn (2013), Twitter is the fastest growing social platform on the internet. Reports suggest that in 2009 Twitter had over 32 million users (Ehrlich & Shami, 2010) and in July of 2012, that figure had increased to more than 500 million (Lunden, 2012). It has been indicated that by 2015, this platform had 302 million monthly active users (Smith, 2015). Thus, Twitter has rapidly grown since its launch in 2006 and its popularity has further increased since 2012, 2013 (Honeycutt & Herring, 2009; Jansen et al., 2009; Java et al., 2007; Smith, 2015; Sullivan et al., 2012).

This platform asks one question, “What are you doing?” (Sakaki et al., 2010) and users can share messages restricted to 140 characters (Bollen et al, 2011; Giles, 2010; Java et al., 2007). One of the important characteristics of Twitter is that messages can be shared in real-time (Sakaki et al., 2010). Individuals can publicly post direct information

(Huberman et al., 2008), sharing and broadcasting (Greenwald, 2010) information (Humphreys et al., 2010) about their daily life, activities, thoughts and feelings (Java et al., 2007; Müller & Stocker, 2011). People can use Twitter and stay connected with others through computers and mobile phones (Huberman et al., 2008). Twitter's users vary from regular people, to celebrities and politicians etc. (Pak & Paroubek, 2010). This platform has also attracted attention from organisations of different sizes (Jansen et al., 2009; Pak & Paroubek, 2010). Businesses are using this tool for different reasons, such as communicating with their co-workers and sharing information with customers and clients (Jansen et al., 2009).

#### **2.4.2. Yammer**

Another example of microblogging is Yammer, but it is designed solely for internal use in the workplace (Günther, 2009; Ingebricson, 2010; Müller & Stocker, 2011; Stopfer & Gosling, 2013). Thus, this platform provides a private and secure network for staff to work in, further increasing security (Curran et al., 2011). Yammer was launched in 2008 (Stopfer & Gosling, 2013) and in 2012 sold to Microsoft (Kirkpatrick, 2015; Singh, 2014) for 1.2 billion US dollars (Singh, 2014). This tool has more than seven million users in 221 countries worldwide and it has been used by about 70,000 organisations (Lunden, 2013) of all sizes and in all fields (A´lvaro et al., 2010). Yammer's chief executive, David Sacks said that its aim was to make offices more productive. He said that users on Yammer can update their co-workers about organisational issues or ask or respond to questions without sending too many emails (Miller, 2008).

#### **2.4.3. Tumblr**

Tumblr is another microblogging platform (Bik & Goldstein, 2013; Chang et al., 2014; Marquart, 2010) which has become more popular in recent years, particularly among the younger generation. Tumblr was founded in 2007 (Marquart, 2010) and in 2013 it was sold to Yahoo. By 2014 there were 166.4 million people on the platform (Chang et al., 2014). This networking tool enables individuals to follow other users, to voice their opinions, share information, links, photos and video (Bik & Goldstein, 2013; Curran et al., 2011; Marquart, 2010; Murphy, 2008; Rainie et al., 2012). There are no restrictions on the length of messages but the swiftness of this platform tends to invoke short posts (Bik & Goldstein, 2013), unlike those on Twitter (Marquart, 2010). Tumblr has the option of automatically updating the users' Twitter or Facebook account(s) when something is posted. Thus, less time is taken in updating information on other

platforms, making Tumblr suitable for getting information across to many people quickly (Marquart, 2010).

#### **2.4.4. Jaiku**

Jaiku is a microblogging (Ebner & Maurer, 2009; Garrido et al., 2010; Grace & Zhao, 2010; Tong, 2008) and live-streaming application for the Web and mobile phones (Castro, 2009; Oulasvirta, 2008; Tong, 2008). It was launched in 2006 and sold to Google in 2007 (Tong, 2008). On Jaiku, people are able to update their activity, availability, and location and view other user's updates (Castro, 2009; Tong, 2008). Messages in Jaiku have a smaller size (restricted to 100 characters) in comparison to Twitter (Ebner & Maurer, 2009; Tong, 2008). However, Jaiku is more like a real blog, as messages get their own pages in which posts can be added (Tong, 2008).

### **2.5. Microblogging in organisations**

As businesses are continuously looking for innovative ways to improve how their staff members communicate with each other, as well as with their customers (Greenwald, 2010), there has been interest surrounding the potential of microblogging to bring value to organisations. Many organisations are thought to be using platforms such as Twitter for marketing reasons (Curran et al., 2011; Huberman et al., 2008; Rui & Yongsheng, 2010), as well as for engaging with customers (Curran et al., 2011; Burton & Soboleva, 2011). Twitter enables people in organisations to see in near real time how stakeholders really perceive their own brand and their competitors. In addition to this, Twitter allows businesses to directly engage with customers, enabling them to enhance customer relationships, bringing the customer and business closer together (Curran et al., 2011). In regards to Yammer, a few researchers have investigated how this platform is used within organisations for communication among co-workers as well as with those outside of the business (Riemer et al., 2011c; Riemer & Tavakoli, 2013; Zhang et al., 2010a). Also, some people have studied how Yammer can empower knowledge exchange and sharing, where internal knowledge could be extremely important for an organisation regarding what employees know, what they are doing (Günther, 2009) and what their opinions on company issues are, etc. (A´lvarez et al., 2010). Other microblogs, such as Tumblr, are also said to be advantageous for organisations. According to Curran et al. (2011), Tumblr supplies an excellent foundation for businesses to keep their clients up-to-date on products and services. For example, organisations can be listed in the Tumblr directory, making them more accessible to potential clients (Curran et al., 2011).



Although microblogging has attracted interest among organisations, it is still unclear exactly how it performs in the workplace (Yardi, 2009; Günther et al., 2009). Questions still remain as to how the adoption of microblogging tools affect the workplace and how problems with the tools are managed. In order to take one step closer to answering these questions, the following parts of this chapter review and critically analyse a number of papers studying the effects of microblogging in the work place, within large organisations and SMEs.

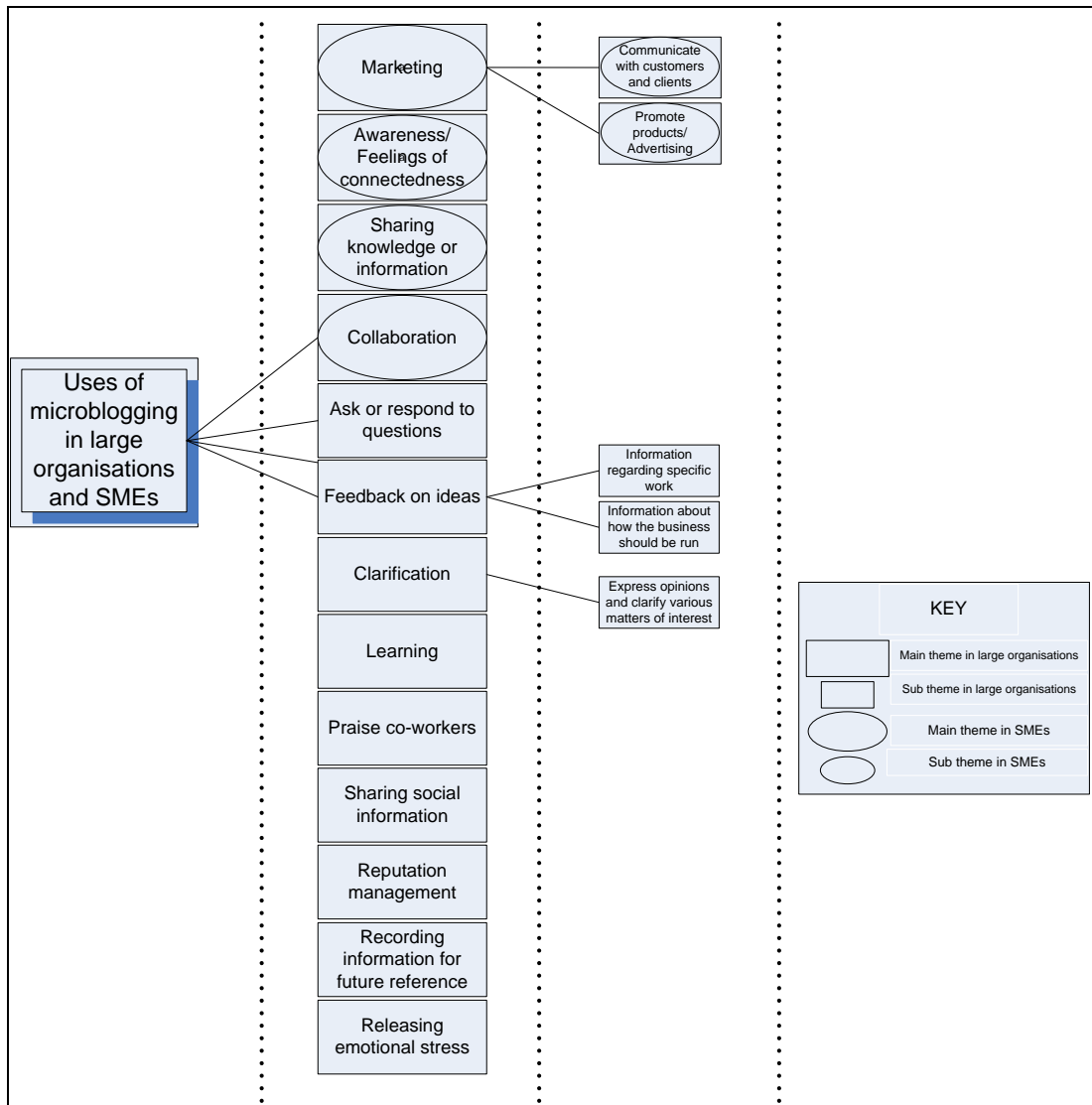
Before presenting a critical analysis of how SMEs and large organisations make use of microblogging, an overview of the literature is given. There has been surprisingly little research published on how colleagues make use of microblogs to communicate with each other within organisations – in contrast to the growing body of literature focussed on its use in marketing (Leonardi et al., 2013). Moreover, most existing literature to date about microblogs in organisations has been published about organisations in the USA and mainland Europe. Very little has been based on its use by UK organisations. Also research on microblogs has often been based on single case studies, rather than surveys of a number of organisations or an industry sector. Typically, these pieces of research are the result of trials of the tools within one organisation. Such studies, often in large organisations, are not necessarily a reliable guide to how other types of organisations, such as SMEs, might use microblogs. Thus the use of microblogging within organisations is a neglected but important topic. Little of the work that has been done has been concerned with risk; Lee and Warren (2010) called for more investigation of ways of protecting people from problems associated with microblogging. For the purpose of this research, as of mid-2015 fewer than 50 papers were found in total, based on how large organisations and SMEs make use of microblogging, with the first paper published in 2009.

## **2.6. Uses of Microblogging in larger organisations and SMEs**

This section is about how large organisations and SMEs make use of microblogging for business purposes. Section 2.6 elaborates on Figure 2.1, which is a visual representation of the existing literature on uses of microblogging in large organisations and SMEs. Figure 2.1 summarises the findings of the literature review and highlights knowledge gaps. Marketing, raising awareness and creating feelings of connectedness, sharing knowledge or information and collaboration are the uses of microblogging in large organisations and SMEs. However, the literature on microblogs in large organisations



discussed more uses of the platforms, in comparison to the literature on SMEs. Figure 2.1 shows that large organisations use microblogging for asking or responding to questions, for feedback on ideas, clarification, learning, praising co-workers, sharing social information, reputation management, recording information for future reference and releasing emotional stress. The diagram highlights that there is a need for more research to be conducted on microblogging in SMEs, to investigate how they can make use of microblogs for business purposes. Section 2.6.1 discusses the uses of the platforms in large organisations. In Section 2.6.2 the uses of microblogs in SMEs are critically analysed. Section 2.6.3 compares the uses of the platforms in large organisation and SMEs.



**Figure 2.1: The findings of the literature review, highlighting knowledge gaps about the uses of microblogging in large organisations and SMEs**

### **2.6.1. Uses of microblogging in large organisations**

Perhaps not surprisingly, researchers have viewed microblogging as a tool for communication. However, different authors have stressed rather different aspects of this and focused on particular modes of communication. When investigating the uses of microblogging in organisations, some researchers had no pre-conceived ideas about how these tools can be used, whereas others have had specific uses of microblogging in mind when carrying out their research. For example one of the researchers who have had particular uses of microblogging in mind is Riemer whose focus in a number of studies was on how microblogging could particularly influence communications at work (Riemer & Richter, 2010; Riemer et al., 2011a; Riemer et al., 2011b; Riemer et al., 2011c). The following parts of this section will discuss uses of microblogging in large organisations.

#### **2.6.1.1. Marketing**

There has been much research based on the public uses of microblogging by organisations and they are mainly related to marketing purposes (Burton & Soboleva, 2011; De Choudhury & Counts, 2013; Rui & Yongsheng, 2010). Adoption of platforms such as Twitter can be an advantageous business tool as it gives organisations the possibility to easily transfer information or promote their products, in comparison to traditional marketing methods (Hutchings, 2012).

Most literature about microblogging in organisations has emphasised the use of microblogging to communicate with external parties (Leonardi et al., 2013), such as customers (Curran et al., 2011; Gu & Wang, 2012; Leonardi et al., 2013), external stakeholders (Lovejoy et al., 2012; Leonardi et al., 2013) and the public at large (Leonardi et al., 2013). Microblogging enables users to send data easily and quickly and to also acquire real-time feedback (Lovejoy et al., 2012). According to Saffer et al. (2013), interactions through microblogging are controlled by the organisation and so a business can use platforms such as Twitter to build relationships with the public.

#### **2.6.1.2. Awareness/Feelings of connectedness**

Researchers have produced evidence to suggest that microblogging can be used to raise mutual awareness among co-workers (Günther et al., 2009). It can be used for creating or sustaining a feeling of connectedness, i.e. feelings of intimacy between colleagues (Zhao & Rosson, 2009). Similarly, Yap and Robben (2010) suggested that tools such as microblogging can connect employees together. They are good for maintaining and organising relationships; the actual connecting to people is one of the main

functionalities of the platforms. In a study by Müller and Stocker (2011), in order to raise awareness in the organisation, all employees were requested to use microblogging and to carry out their own postings. This happened soon after adopting microblogging in the organisation. According to Leonardi et al. (2013), tools such as microblogging offer people the opportunity to post information quickly. Individuals can easily make their activities visible to other employees within the business; their co-workers can more effectively see who posted information. These platforms enable people to witness more connections among individuals and to forge alliances. People can better understand others from different parts of the business; a sense of connectedness and belonging forms between co-workers. Ehrlich and Shami (2010) claim that reading posts will raise awareness among employees, as well as providing insights into what others are working on. People reported that the use of microblogs and frequent updates resulted in feeling more connected to others; information was provided and used to connect with employees who shared similar interests. Zhang et al. (2010b) found that Yammer can enable users to stay aware of what others are working on. They added that one of the positive aspects of Yammer was allowing people to make new connections. More specifically the survey responses showed that 55.3% of users found that Yammer helped them to “connect with people that I don’t know”. Only 39.3% of participants said it enabled them to “connect with people that I already know” (Zhang et al., 2010b, p. 130). Similarly, having further investigated which factors can influence the acceptance of microblogging in a large international organisation, Zhang et al. (2010a) found that people were positive about using Yammer; they were able to receive information related to others and their work. Also, this platform enabled individuals to connect with people they did not know.

Studies such as those by Riemer provide evidence to support claims about the ability of microblogging to raise awareness and provide feelings of connectedness among employees. Riemer et al. (2010a) wanted to identify how microblogging was used inside a software development team and found that it develops a necessary awareness of the activities of others and facilitates thoughts and ideas. This can lead to colleagues communicating and initiating discussions. Riemer and Richter (2010) found that interactions through microblogging can increase employee awareness.

Zhao et al.’s (2011) exploratory study found that employees who engage with Yammer can learn more about other employees beyond their own immediate team. Work related

posts and updates were said to provide “greater social awareness of team partners” (Zhao et al., 2011, p. 36). Zhao et al. (2011) claimed that Yammer had a positive effect on project work. Colleagues from outside the immediate group would be able to read comments and better understand details about projects and their progress. Particularly for employees who worked remotely, Yammer became very helpful in raising their awareness of others. It was also said to prompt employees to initiate conversations with group members in order to develop stronger connections within the organisation. As suggested by Müller and Stocker (2011), it becomes important for employees to learn about ongoing changes and issues in the organisation. People can be exposed to details about the types of projects delivered, as well as existing challenges, etc. This helps employees to become more familiar with some of the best practices used.

One of the earlier microblogging studies found that a main benefit of microblogging is becoming aware of what is on other people’s minds (Zhao & Rosson, 2009). The study was conducted to understand more deeply how people engage with Twitter, and to investigate the potential impact of this tool on informal communication. The authors found that awareness can help develop more common ground, i.e. a shared understanding between those communicating about a fact, and to create a sense of connectedness. They concluded that, as Twitter messages tend to be posted in ‘real time’ (Zhao & Rosson, 2009, p. 246), this platform becomes more useful than other tools. It enables users to understand what someone is concerned with and what they may be thinking about. In the study by Shami et al. (2014), ‘Enterprise Social Pulse’ (ESP) which was developed to support analysts who had to take account of and understand employee chatter. Results from a survey and interviews revealed that most people valued ESP for its capability to produce real-time insights into what other people were thinking and saying. Seebach (2012) investigated how microblogs facilitate knowledge sharing in organisations. Stronger ties and connections were formed between colleagues and this improved knowledge sharing.

As an aspect of awareness and a sense of connectedness, microblogging can also influence employees to develop a positive sense of community. This can lead people to feel responsible towards each other. For instance, some of the participants in the study by Ehrlich and Shami (2010) would read their co-worker’s messages to see if they could help them with their concerns or difficulties.

Microblogging can be used to provide work-related updates. Status updates are said to be an advantage to employees, helping increase their awareness of what is happening inside the organisation (Riemer & Richter, 2010; Mayfield, 2009). According to Riemer and Richter (2010), the most important reason for people to send messages on microblogging is to share status updates of what has just been carried out or achieved. Also, a number of employees from Walsall Council were revealed to be using Yammer and they were willing to mention details about the team; they were informing others at work (Slee, 2011). More specifically, of the sample of 188 posts and comments on Yammer, 82 percent were found to be work related (Slee, 2011).

#### ***2.6.1.3. Sharing knowledge or information***

Microblogging can be used for sharing knowledge or information. Drawing on a case study of a distributed engineering start-up business, Gibbs et al. (2013) found that social media such as microblogging enables easier knowledge sharing. Schöndienst et al. (2011) examined factors influencing the use of microblogging at work, and they found that easier and quicker sharing of data throughout the organisation makes a difference to people's intention to use microblogging. Mayfield (2009) explored the benefits of microblogging and said that one was sharing knowledge and information. Microblogging helps reduce the threshold for sharing links and data.

Riemer and Tavakoli (2013) carried out a case study about the use of Yammer at Deloitte Australia. By conducting a genre analysis on a collection of posts, they found that information sharing underpins most of the communication threads on Yammer. More precisely, 65% of communications were about some form of information sharing, including data about work-related links, videos, pictures, files, etc. The case study by Hoong et al. (2012) focused on topics of discussion which took place between employees. The topics were used to determine whether Yammer could facilitate better knowledge sharing and knowledge creation at work. The findings revealed that the project members used Yammer to share knowledge. More specifically, entries were posted related to the progress status of projects. It was concluded that microblogging can be useful for knowledge sharing in organisations. However, they needed to provide sufficient resources, such as allocating time and having a larger group of employees who use the tools. Similarly, Grit (2009) investigated the effects of microblogging on knowledge sharing, having adopted surveys and focus groups as their research methods. Based on the results, Yammer was viewed positively, indicating that individuals felt

safe to share and seek knowledge. Overall, microblogging was found to be valuable and it was said to allow access to information that would have otherwise stayed hidden.

Further studies also found that Yammer was used for sharing information (Riemer et al., 2011b; Riemer et al., 2011c). Exchange of knowledge and work-related data with others presented 15.9% of all instances (Riemer & Richter, 2010). For example, individuals shared references such as URLs, their ideas about how to solve problems or about new products (Riemer et al., 2010b). In addition to these studies by Riemer, other researchers have studied the effects of different microblogging tools, such as Twitter on information sharing. Zhao and Rosson (2009) found that Twitter users assembled information for professional purposes or personal interests. Barnes and Böhringer (2009) studied the case of an organisations' use of social software which resembled microblogging. They found that people regarded microblogging as a useful information source. In addition, microblogging was said to be an efficient way to stay aware of what goes on at work. Ehrlich and Shami (2010) studied the effects of microblogging inside and outside of work; they found microblogging was mainly used for sharing information with others.

Seebach (2012) investigated how microblogging can facilitate knowledge sharing in the work environment. They claimed that stronger connections between employees can directly influence knowledge sharing; greater connections can lead to more developed knowledge exchange. The results revealed that the kinds of knowledge individuals requested from co-workers included factual knowledge, opinions and thoughts, as well as rhetorical questions. Müller and Stocker (2011) claimed that engaging with microblogging more frequently can result in faster knowledge sharing and better networking. They regarded the exchange of information inside the organisation as benefiting both individuals and work. The study by Zhao et al. (2011) found that using microblogging within organisations can enable those outside the project team to become aware of the progress of work. Colleagues working in different parts of the organisation can therefore communicate and provide each other with helpful information and ideas. Various pieces of research have found that, more specifically, through microblogging people can share work-related updates and distribute news.

Riemer and Richter (2010) and Riemer et al. (2010b) found that 43.8% used microblogs to provide updates. People shared status updates of what had just been carried out or achieved within the work environment. Mayfield (2009), who introduced the benefits of

implementing microblogging, also said that it can enable regular and rich context sharing; microblogs can be used specifically for sharing knowledge. Riemer et al. (2011c), who explored uses of Yammer, found that 16.7% of genre appearances represent the sharing of updates and notifications. This reflected people's intention to share details about their situation, by updating information such as status, tasks and events. Zhang et al. (2010b), who also studied the use of Yammer in Fortune 500 Companies, found that 16% of the messages reflected information about the user or their activities. Within this category, most messages were related to a person's work. Moreover, Zhao et al. (2011) found 91% of posts on Yammer were work-related. Examples included steps towards finalising a project or task, as well as sharing ideas. In fact it was suggested that 44% of all posts represented the status of a specific project task and were shared with team members.

Case and King (2010, 2011) wanted to better understand microblogging and identify potential opportunities for organisations. They examined the use of Twitter by Fortune 200 firms and found that this tool was mainly used for news distribution (79%). For example, Wal-Mart provided details about unedited perspectives of their work, in addition to their responsibilities. Case and King (2011) also examined different ways organisations engage with Twitter. They found that Fortune 50 firms used this tool differently, depending on their sector and background. Twitter was found to be mainly used for news distribution (85%). Heilmann (2010) found one of the main talked about topics on Twitter to be the sharing of technology news (15% of all topics were talked about by the CEOs). This included the sharing of information about new inventions or software. One study, which investigated the early adoption and use of Yammer, suggested that a majority of messages were about non-personal news (Zhang et al., 2010b). A major topic of interest was sharing news about internal, company related issues. According to Zhang et al. (2010b), employees engaged with Yammer mainly for publishing news about their group work or business, and less about themselves. Event reporting was also found to be a further use of microblogging for businesses, also related to news reporting. Riemer et al. (2011a) found that event reporting represented the employee's intentions to provide information about peripheral events which often went unnoticed by others colleagues, such as phone calls, or events relating to conferences colleagues attended, etc. Other types of updates included notifying people about upcoming events.



#### ***2.6.1.5. Collaboration***

The study by Honeycutt and Herring (2009) revealed that some individuals used Twitter for informal collaborative purposes; extended conversations took place and were an essential element of collaboration. In the context of this study, it was suggested that, if people use microblogging for collaboration, they will communicate with others as part of a small group that would be more advantageous than having discussions with a large group.

#### ***2.6.1.6. Ask or respond to questions***

A number of studies provided evidence to suggest that microblogging can be used specifically to ask or respond to questions. Having compared roles of microblogging inside and outside the organisation, Ehrlich and Shami (2010) found that microblogging had different uses in the two settings. Unlike Twitter, the company's internal tool, called BlueTwit, was used for more focused, personal and directed interactions, such as sending direct posts to ask a question. This tool was also found to be effective for receiving help, as many employees engaged with it. In addition, the study found some participants were very aware of how posts could influence perceptions towards them. More specifically, if employees responded to questions, in addition to asking for help, they would be perceived as knowledgeable and helpful, rather than someone who only asked for help. Günther et al. (2009) claimed that microblogging enabled users to easily and quickly receive responses to their questions. Microblogging was also said to have the potential to minimise email overload in the workplace. In addition, Mayfield (2009) who introduced the benefits of implementing microblogging said that people could ask questions and receive fast responses through microblogging without interrupting other employees or increasing their workload.

The study by Riemer and Richter, (2010) and Riemer et al. (2010b) revealed that 13.7% of all posts were related to asking questions. Riemer and Tavakoli (2013) carried out a case study about the use of Yammer at Deloitte Australia which revealed that nearly 20% of all communication threads were related to people sharing problem solving messages. Riemer et al. (2010a) claimed that microblogging is useful for posting guidelines, as well as solving questions or general problems. Riemer et al. (2011a) also found microblogging was used by employees to ask for specific information. Furthermore, Riemer et al. (2011c) suggest that Yammer was perceived to be useful for supporting others, as well as problem solving; represented by 18.8% of all genre appearances. Zhang et al. (2010a) studied influential factors which resulted in the

adoption of Yammer. They found that Yammer enabled them to reach others and to ask questions. Zhang et al. (2010b) also studied the effects of this microblogging tool and found one of the main types of posts was conversation seeking. In this category 13% of messages were specifically related to asking specific questions. The research by Zhao and Rosson (2009) studied the effects of Twitter, revealing that interviewees engaged with this tool for different reasons, including seeking for help. Based on the results of a further study it was suggested that microblogging enables employees other than the project team to become aware of work progress. At times this led users to ask the team questions, or respond to their problems, including questions which would otherwise not have been mentioned through email (Zhao et al., 2011).

#### ***2.6.1.7. Feedback on ideas***

The literature found microblogging to be used for providing feedback on ideas. A study by Zhao et al. (2011) found microblogging to be an information communication tool for sharing less critical information, but updates still related and relevant to work. Such updates could enable individuals to start timely conversations and exchange feedback on work progress. As a result individuals would have the ability to receive help early on and solve any issues. Riemer et al. (2011a) revealed that users asked other employees for feedback on ideas and replied to such messages by also providing feedback. This, however, not only refers to gathering information in regards to work, but it can refer to ways that particular parts of the business should be run. For instance, Slee (2011) suggested that Yammer can become useful for web team members to gather information about presenting a website through asking colleagues for feedback. Riemer and Richter (2010) found team leaders valued the use of microblogging for communication and providing feedback to others, i.e. aiming to acknowledge the work of others.

#### ***2.6.1.8. Clarification***

As an aspect of communication, clarification was found to be a result of using microblogging. Riemer and Tavakoli (2013) carried out a case study about the use of Yammer and the findings revealed that with 21%, the third highest amount of communication threads, were related to users expressing their opinions and providing clarifications. For example, microblogging can be used by individuals to ask for opinions, voice their own opinions or engage in clarifying various matters of interest (Riemer et al., 2011c). Riemer and Richter (2010) found that by using microblogging, individuals may have clarified particular aspects or concerns that were unclear to others. The study by Riemer et al. (2010b) found that this was one of the smallest categories of

ways (2.9%) that microblogging was used; people seldom shared their personal opinions or tried to clarify issues for someone. In a further study, Riemer et al. (2011a) suggested that if further information was required through microblogging in regards to a specific topic, people would consult each other and, in response, questions would be answered or particular aspects clarified. Moreover, Riemer et al. (2011b) found that Yammer was used within a large company mainly to provide opinions and clarify different matters of interest. This was the largest genre category, with 44.3% of all instances. More specifically, clarification alone accounted for 11.5% of all instances; where messages sometimes intended to clarify specific aspects by giving more details or rectifying other people's posts (Riemer et al., 2011b). According to Riemer et al. (2011b), in this study this particular category illustrated that by being able to express ones points of view and thoughts, as well as gaining clarification, are an important part of the conversations happening via microblogging.

#### ***2.6.1.9. Learning***

Learning is one of the central themes of microblogging use in large organisations. Learning can be enhanced in organisations through the sharing of contents and information, (Yap & Robben, 2010). According to Zhao et al. (2011), microblogs such as Yammer not only facilitate those outside the core project team to become aware of the progress of work, but in fact a number of individuals reported that people can learn from related projects for their own benefits. This can be achieved by reading project group posts, as well as learning more aspects about people beyond one's own immediate working teams. Leonardi et al. (2013) claimed that what makes microblogs distinct from other technologies commonly adopted by organisations is that they enable individuals to become aware of the communicative actions of their co-workers. As a result, the range of users and networks from which individuals can learn across the business can expand. Consequently, one of the main benefits for businesses is more opportunities for social learning.

#### ***2.6.1.10. Praise co-workers***

Riemer and Tavakoli (2013) carried out a case study about the use of Yammer at Deloitte Australia. The findings revealed that 29%, the second highest amount of communications, were related to praising others. Yammer was considered as a sociable and polite environment in which individuals communicated with each other, thanking and praising their co-workers for their contributions.

#### ***2.6.1.11. Sharing social information***

Zhao and Rosson (2009) reported Twitter was used to provide frequent and concise updates about personal activities. This resulted in users keeping in touch with friends and colleagues, this being one example of how microblogging is used to share social information. Other researchers also claimed that employees can engage with microblogging tools and interact for social purposes, such as sharing information about places to meet for lunch, etc. (Ehrlich & Shami, 2010). According to Heilmann (2010), Twitter is not only beneficial for having conversations about work-related topics. 14% of all conversations were about people's private lives. In addition, 12% of all posts involved talk about sports. Zhang et al. (2010b) investigated the early adoption and use of Yammer, and found that 16% of messages were about the individual or related to their actions. Within this category, only 12% of individuals referred to personal events outside of work. An example of personal activities includes informing others about vocations, as suggested in the study by Riemer et al. (2011a).

#### ***2.6.1.12. Reputation management***

The use of microblogging to enhance someone's status in their social network or manage their reputation may have a direct impact on the intention to use microblogging (Schöndienst et al., 2011). For example, employees use microblogging to share information, such as news related to projects, and this indicates their contribution, in addition to capabilities. This can result in more interactions with employees as well as with clients (Schöndienst et al., 2011). Günther et al. (2009) carried out a study to understand factors which can influence and affect decisions to engage with microblogging. They claimed that, as most jobs require employees to interact with others, it becomes important to consider reputation as a factor which can affect their work. Ehrlich and Shami (2010) found that people were aware of the fact that messages can affect their reputation. For example, some individuals reported that, if employees only asked for help, they would be viewed as someone who only requires help. However, if they also responded to other people's queries, they would be seen as a knowledgeable and beneficial person.

#### ***2.6.1.13. Recording information for future reference***

There is evidence to suggest that employees often use microblogging to post information which requires attention from the rest of the team and such information can then become available for future reference (Riemer & Richter, 2010). There were some instances where individuals posted information on microblogging in order to record information such as login data, inputting contact information or meeting minutes

(Riemer & Richter, 2010; Riemer et al., 2010b). A number of individuals mentioned that people shared certain data for future reference, as it could be accessed from the microblogging tool's search function (Riemer & Richter, 2010). According to Riemer et al. (2011a) people used their platform, Communote, to keep particular data for later reference, using the term 'information storage'. By engaging with microblogging, others were notified about documents or team-related information. Users were able to post locations of specific files or attach documents relevant to their posts.

#### ***2.6.1.14. Releasing emotional stress***

A further advantage of microblogging was said to be communicating to release emotional stress, as explained by participants in the study by Zhao and Rosson (2009). More specifically, the "broadcasting and voluntary listening nature" of Twitter helped individuals to release emotional stress (Zhao & Rosson, 2009, p. 248).

#### ***2.6.1.15. Features of microblogging that influenced large organisations to use them***

Regarding the features of microblogs which help large organisation to make use of them, Twitter's limited number of characters was valued. In the study by Zhao and Rosson (2009), Twitter's 140 characters enabled people to post information in a low-cost way. In contrast, some people found that the restrictions on posting messages can make it difficult to easily share knowledge and post messages (Grit, 2009; Riemer et al., 2011a). Another feature of microblogging which was valued was the sharing of posts in 'real time'. This was regarded as increasing the value and quality of messages and according to Günther et al. (2009); it speeds up communications.

#### ***2.6.1.16. Overview of the uses of microblogging in large organisations***

Section 2.6.1 discussed uses of microblogging in large organisations. They used microblogs for marketing, creating awareness and feelings of connectedness, sharing knowledge or information, for collaboration and to ask or respond to questions. The platforms were also used for receiving feedback on ideas, clarification and learning, praising co-workers, sharing social information, reputation management, recording information for future reference and releasing emotional stress. The last part of this section identified certain features of microblogging, which influenced large organisations to use them. For some researchers, the most valued feature of microblogs, such as Twitter, was the limited number of characters in messages. Thus, information could be posted easily (Zhao & Rosson, 2009). Another valued feature of microblogging in large organisations was the ability to share posts in 'real time'; this increases rapid communication (Günther et al., 2009).

Although some investigators have sought to determine what the uses of microblogging are in large organisations, a number of gaps exist in the literature. Firstly, most investigations to date about uses of microblogs in large organisations have been published about businesses in the USA and Europe and not much is known about how the platforms are used in UK based organisations. Issues to do with how microblogs are chosen and whose decision it is within the organisation to adopt them require more investigation. In addition, more work can be done to explore how the platforms are adopted and who can access them.

### **2.6.2. Uses of microblogging in SMEs**

Having reviewed the existing literature on microblogging in large organisations, this section discusses the specific uses of the platforms in SMEs.

#### **2.6.2.1. Marketing**

Several studies have been conducted within SMEs and have found that microblogs can be used for marketing. Bulearca and Bulearca (2010) wanted to explore whether SMEs should consider adopting Twitter for marketing purposes. They conducted pilot in-depth interviews in a British SME. The findings revealed that, Twitter was an important platform to use, particularly if businesses wanted to be able to listen to and influence their consumers' opinions. Carter (2014) conducted six semi-structured interviews with people in organisations in the North West of England, to investigate how SMEs made use of platforms such as Twitter. The businesses which took part had less than 50 members of staff and the participants were selected from a range of business sectors. In half of the businesses interviewed, managing the platform was the responsibility of the marketing manager. The results revealed that SMEs appreciated platforms, mostly Twitter, for a variety of uses, such as sales (Carter, 2014) and interacting with their customers.

McLaughlin (2014) had the aim of investigating how key attitudes, perceptions and abilities of the owners or managers of SMEs could influence the use of social media for work purposes. Having selected a mixed-methods approach, in-depth interviews and surveys were conducted. Overall, six various professionals who were academics, SME advisors and researchers were interviewed, using an in-depth semi-structured approach. Also, 89 SMEs completed the survey. The findings revealed that one of the important uses of such platforms, as identified among the participants was as a promotional tool. Businesses would be able to generate increased awareness and communication of products or services between the organisation and their customers. A more personalised

two-way exchange of information would take place, which supports customer satisfaction. Comparably, the results from a postal mail survey by Michaelidou et al. (2011) revealed that more than a quarter of SMEs in the UK use tools such as Twitter to maintain customer relationships and to attract new potential customers (Michaelidou et al., 2011). These uses prevailed as the most important reasons for SMEs to make use of these platforms.

A further study was carried out, with the aim of identifying whether and how organisational, managerial and environmental characteristics of SMEs affected the adoption of Twitter (Wamba & Carter, 2013). A survey was distributed to 453 managers of SMEs in the United States, United Kingdom, Australia and India. The findings revealed that Twitter enables all types of businesses to reach their customers, suppliers and other stakeholders, independent of the organisations' size or industry type. Hence SMEs in different sectors all valued the benefits of Twitter. Wamba and Carter (2013) further found that the participant's gender or education did not significantly impact on the use of Twitter.

#### ***2.6.2.2. Awareness/Feelings of connectedness***

Regarding the internal uses of microblogs, SMEs are implementing platforms such as Yammer to better connect employees internally, and with reduced communication costs (McLaughlin, 2014; Meske & Stieglitz, 2013). The aim of the study by Meske and Stieglitz (2013) was to examine how SMEs adopt and make use of social media, including microblogs. They also wanted to find the potential concerns organisations might have which could prevent SMEs from making use of these platforms. The findings were based on conducting a survey among decision-makers in German SMEs and receiving responses from 190 participants. The results revealed that about one third of the SMEs had used Yammer, so that members of staff could connect with each other.

#### ***2.6.2.3. Sharing knowledge or information***

In the study by Carter (2014), a few participants talked about using platforms such as Twitter to update their own knowledge, as well as to provide knowledge to clients. People also used Twitter to inform customers about issues such as postal delays. Also, some organisations used microblogs to post information about conferences (Carter, 2014). Carter (2014) identified the importance of having a two-way dialogue between the organisation and clients. This was instead of having a one way provision of data about the business.



#### ***2.6.2.4. Collaboration***

In the study by Meske and Stieglitz (2013), when the participants were asked to what extent social media, including microblogs had an impact on the business, some people referred to a positive change and opening up of the corporate culture (Meske & Stieglitz, 2013). The findings revealed that SMEs started to use the platforms, in order to support collaboration between co-workers.

#### ***2.6.2.5. Features of microblogging that influenced SMEs to use them***

The literature also identified what people saw as key features of microblogging that influenced smaller organisations to use them. The platform's cost effectiveness and minimum level of IT skills was highly valued (McLaughlin, 2014; Michaelidou et al., 2011). According to McLaughlin (2014), as a result of the minimal costs in their adoption, just like large organisations, SMEs can also make use of microblogs; it is a free promotional tool. Hu et al. (2012) also identified a feature of microblogs, which makes it possible for organisations to gain more recognition from those outside of the business. They stated that the more the number of followers, more people will see the information being shared, thus marketing will be much greater.

#### ***2.6.2.6. Overview of the uses of microblogging in SMEs***

Section 2.6.2 discussed the uses of microblogging in SMEs. The examination of the literature revealed that smaller organisations used microblogs for marketing, to promote products or services (McLaughlin, 2014) and for sales (Carter, 2014). The platforms were also used to interact with stakeholders, such as customers (Bulearca & Bulearca, 2010; Carter, 2014; Michaelidou et al., 2011; Wamba & Carter, 2013) and to attract new potential customers (Michaelidou et al., 2011). Microblogging was also used to create awareness and feelings of connectedness (McLaughlin, 2014; Meske & Stieglitz, 2013) and to share knowledge and information, such as details about conferences (Carter, 2014). The literature also identified that SMEs started to use microblogs for collaboration with their co-workers (Meske & Stieglitz, 2013). The last part of this section showed that people within SMEs highly valued microblogging for its cost effectiveness and minimum level of IT skills (McLaughlin, 2014; Michaelidou et al., 2011). The following feature of microblogs was also valued and it allowed organisations to get more recognition from those outside of the business (Hu et al., 2012).

The existing literature on microblogging in SMEs has shown that a number of important gaps exist in this field of work. Firstly, not much is known about how microblogging is used in UK based organisations. Also, less is known about internal uses of microblogs



within SMEs i.e. how co-workers communicate with each other through microblogging. There is a need to further explore how the platforms are chosen by organisations and who decides to adopt them within SMEs. Further, there is a need to study how the tools are adopted and who can use them.

### **2.6.3. Comparison between uses of microblogging in large organisations and SMEs**

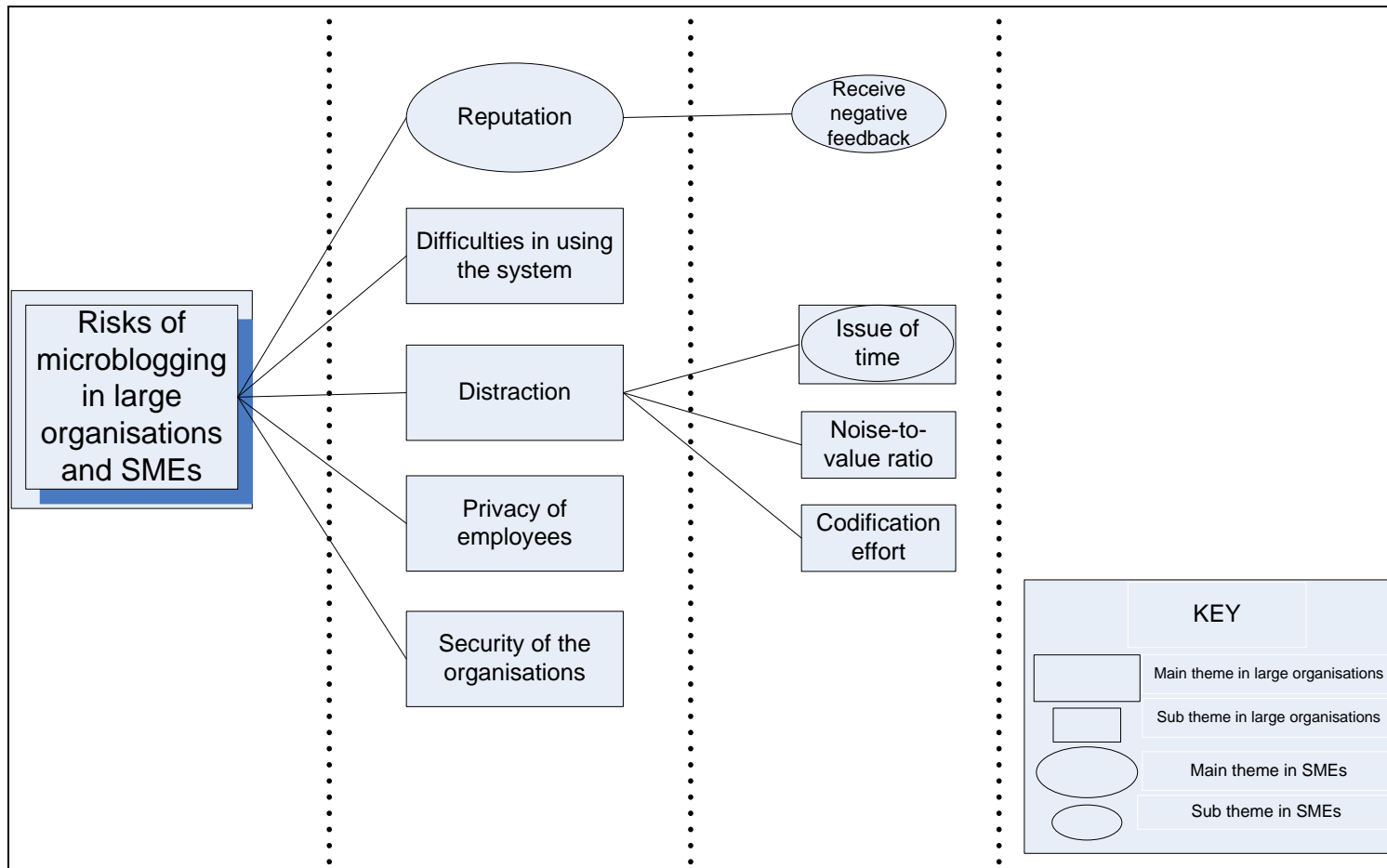
Based on the existing literature on uses of microblogging in large organisations and SMEs, it was found that research on microblogs has been usually the result of trials of the platforms within large organisations (Riemer et al., 2011c; Zhang et al., 2010a). Based on the visual representation (see Figure 2.1), some similarities were identified in how large organisations and SMEs make use of microblogs. They used the tools for marketing, creating awareness and feelings of connectedness, sharing knowledge or information and collaboration. However, the literature showed that larger organisations used microblogs to ask or respond to questions, to receive feedback on ideas, for clarification and learning, to praise co-workers, to share social information, for reputation management, record information for future reference and to release emotional stress.

The literature on microblogging in the context of organisations showed that most investigators in this field of work have used quantitative methods to research the effects of the tools in organisations. They have relied on methods such as surveys. A small number of people have relied on qualitative methods such as interviews. Therefore, more qualitative research needs to be conducted, which would enable investigators to study in depth, how organisations adopt and use microblogging.

## **2.7 Risks of microblogging in large organisations and SMEs**

The aim of this section is to discuss the potential risks of microblogging in large organisations and SMEs, and how to manage and mitigate risk. This section elaborates on Figure 2.2, which is a visual representation of the existing literature on risks of microblogs in large organisations and SMEs. Figure 2.2 summarises the findings of the literature review and highlights knowledge gaps. The literature on risks of microblogging in SMEs showed that smaller organisations are more concerned about damaging the reputation of the organisations, for example by receiving negative feedback. The literature on microblogs in large organisations discussed more risks of the platforms, which are different from those identified in SMEs. Larger organisations were more concerned about difficulties in using the system, distraction, privacy of

employees and security of the organisations. Figure 2.2 highlights that there is a need for more research to be conducted on microblogs in SMEs, to study how they perceive risks of the platforms. Section 2.7.1 begins by discussing the risks of the platforms in large organisations, as well as the types of actions taken by organisations to mitigate risk. In Section 2.7.2 the risks of microblogs in SMEs are critically analysed, and what actions were taken to mitigate risk. Section 2.7.3 compares the risks of microblogging in large organisations and SMEs.



**Figure 2.2: The findings of the literature review, highlighting knowledge gaps about the risks of microblogging in large organisations and SMEs**

### **2.7.1. Risks of microblogging in large organisations and actions taken to mitigate risk**

In this section the risks of microblogs in large organisation are described, and how organisations can manage and mitigate risk.

#### **2.7.1.1. Difficulties in using the system**

Difficulties in using or unfamiliarity with microblogging can be considered a risk when attempting to introduce it (Grit, 2009). Having investigated the effects of microblogging on knowledge sharing, Grit (2009) said that some individuals wanted to engage with the tool quickly, without being willing to invest time to find out how to use it fully. According to Grit (2009), individuals should ideally be able to work with microblogs by intuition without needing to go through the learning process for using the tool. Grit (2009) suggested that, within organisations the right balance between less important and the most critical messages should be administered, which will result in forming a healthy environment.

#### **2.7.1.2. Distraction**

Distraction has been identified in the literature as another risk of microblogging. According to Bughin et al. (2011), there are three kinds of internal risks of microblogging for users. Firstly, users have concerns that those who engage with microblogging may get distracted from their core tasks. The study by Case and King (2010), which examined the web pages of the Fortune 200 companies, found that roughly one-third of the organisations were either sceptical about engaging with microblogging or unable to find a reason to use the tools. The authors thought that these organisations viewed microblogging as a distraction from work and as a cause of reduced productivity. As an aspect of distraction, the issue of spending too much time microblogging is introduced below, and has been found to be a concern for organisations in a number of studies (Ehrlich & Shami, 2010; Günther et al., 2009; Zhang et al., 2010a).

Previous literature suggests that companies may find the use of microblogging to be time-consuming. A study by Müller and Stocker (2011) revealed that some employees may stop early on or in fact never begin to use microblogging if they find the tool takes up a lot of their time. Ehrlich and Shami (2010) found that some individuals had concerns about spending too much time wading through different pieces of information when using the microblogging tool, BlueTwit. Günther et al. (2009) also claimed that participants had concerns about microblogging taking up too much time, partly due to expected participation in microblogging and as a result, an increased ‘codification

effort'. This refers to the amount of work needed to turn knowledge into a form that can be understood by others (Günther et al., 2009). Zhang et al. (2010a) state that, when individuals were asked to give their reasons for not engaging with Yammer or for posting messages, they found one of the most common responses was: "don't have time" (Zhang et al., 2010a, p. 373). The study by El-Sayed and Westrup (2011) wanted to find out how Enterprise Web2.0 technologies, including microblogging, are understood and used by management accountants, in two organisations. They claimed that some organisations may be sceptical about using these tools because they can be distracting for employees and as a result people can waste their time. The informants spoke about "self-governance based on users' 'common sense' " (El-Sayed & Westrup, 2011, p. 7). Although within both organisations some special policies and rules were adopted to help people make better use of these technologies, the businesses nevertheless mainly drew on the user's own judgments, i.e. their 'common sense' when dealing with the tools. Several pieces of research have identified other concerns that are closely related to the issue of time: noise to value ratio (Günther et al., 2009; Zhang et al., 2010a) and codification effort (Günther et al., 2009).

Zhang et al. (2010a) use the term 'noise-to-value ratio' to refer to the difficulty of finding relevant and valuable information among many postings. Günther et al. (2009, p. 6) attributed a high noise-to-value ratio to microblogging: "you will get flooded with information". Zhao and Rosson (2009) investigated reasons and ways people use Twitter and its effects on informal communication at work. It was mentioned that one possible issue arising from the use of microblogging is that employees may start following a vast number of employees and groups to find work-related data and expertise. One of the possible outcomes of this can be 'cognitive overload', through monitoring a large number of individuals and reading many daily updates. According to Ehrlich and Shami (2010) there is a need to find intelligent ways of filtering data, such as maintaining data relevant to individual users. Leonardi et al. (2013) provided prospects for the study of enterprise social media use in organisations and suggested that too much information input can result in cognitive overload. The study by Günther et al. (2009) identified that perceptions of the noise-to-value ratio played an important role in influencing the decision to use microblogs. They claimed that although some people viewed microblogging as having the potential to increase relevant information, others were concerned about saving time and not being flooded with large amounts of data. Schöndienst et al. (2011) who examined factors which can influence the decision

to use microblogs, also said that microblogging could lead to more incoming data than an individual can cope with (“information overload”). Grit (2009) conducted a survey about the use of Yammer within organizations. He also found that people were concerned about being overloaded with too much irrelevant information.

According to Zhang et al. (2010b) the difficulty of finding specific contents can influence perceptions of Yammer’s usefulness. Zhang et al. (2010b) also talked about the same issue with Twitter. Microblogging was said to provide two ways to address the issues of noise-to-value ratio; by “following” selected individuals or by following specific topics through “hash tags”. Yammer did support both functions, though Hashtags were used to a lesser extent. Yammer supported topics with “user groups” and Zhang et al. (2010b) said that some groups engaged with this tool more actively than others. The most reported way that people said they tried to filter information was by “select(ing) people to follow” (Zhang et al., 2010b, p. 129). However, for helping find the most appropriate data, it was not as effective as “I sign up for groups” (Zhang et al., 2010b, p. 129). Thus people did not understand how to use the tool effectively to avoid a high noise ratio. Zhang et al. (2010b) also reported another observed issue with the noise-to-value ratio was the “local context and global audience paradox” (Zhang et al., 2010b, p. 130). Their survey questioned ways that individuals thought about connecting to others on Yammer. The findings revealed that for 23.4% it was found useful to “connect with people in my work location” (Zhang et al., 2010b, p. 130) and 57.7% found Yammer worked better to “connect with people in different work locations” (Zhang et al., 2010b, p. 130). Although this tool was used to spread posts to the whole organisation, posts and discussions were usually local. People followed others outside their local work group, but the content in such postings was hard to understand. On a number of occasions, individuals outside the work group found it difficult to understand posts, and this increased frustrations, for example “*I don’t know why he posted this*” (Zhang et al., 2010b, p. 130).

#### **2.7.1.3. Privacy of employees**

Notions of privacy may affect the decision to use microblogging (Günther et al., 2009; Lee and Warren, 2010) for sharing data, contributing content and responding to others (Schöndienst et al., 2011). Individuals may have concerns about the safety of using microblogs for discussing data, particularly as they have no control over who views their messages and posts (Zhao & Rosson, 2009). The issue of trust becomes important and can affect ways of using microblogging (Mayfield, 2009). For instance, the person

who provides data is required to be proficient, credible and trustworthy (Zhao & Rosson, 2009). Lee and Warren (2010) discussed the potential risks of exposing confidential data about an individual through microblogging. According to them, individuals can be trained, educated and better informed about such issues. They suggested that this may possibly be the most efficient method available to organisations. Barnes and Böhringer (2009) found that microblogging was a good information source which allowed employees to keep up-to-date with what goes on in the business. On the flipside, employees had concerns regarding privacy aspects, such as the monitoring of their work.

#### ***2.7.1.4. Security of the organisation***

According to Lombardo (2013), in the first place, companies are concerned about data security. Robinson (2013) referred to security breaches as one of the key risks associated with social media marketing. There is evidence to suggest that people may leak confidential and private information about the organisation to outsiders through microblogging (Case & King, 2010). Case and King (2010) stated that rules and guidelines may be required in order to balance the benefits of using microblogs, such as Twitter, with the risk of spreading private data. According to Mayfield (2009), for the most effective use of microblogging, the tools need to be secure and in agreement with the organisations' security guidelines. Privacy restrictions should be placed on content, and documents and workspaces provided to an extent, so that individuals only see work relating to them (Mayfield, 2009). Similarly, Schöndienst et al. (2011) said that issues of privacy should be minimised by having in place rules on who can receive content, and for how long they will be shared.

Zhang et al. (2010b) studied how people used microblogging and were concerned about issues such as security concerns regarding the sharing of sensitive data outside of work. Research by Zhao and Rosson (2009) showed that individuals would be more prepared to increase their activity on Twitter and in relation to work if they sensed that microblogging was a protected area for sharing data within the organisation. A case study by Gibbs et al. (2013) revealed that social media, including some microblogging tools were subject to leaks. Having conducted interviews with their research participants, they found that risks about confidentiality and security of jobs usually resulted in people setting out to control rather than to post certain types of knowledge. Risks concerning data and information confidentiality deterred members from engaging with public tools such as Twitter. They deemed Twitter to be "leaky". They avoided

posting potentially confidential data to large audiences, based on perceived concerns about unapproved distribution of proprietary data (Gibbs et al., 2013). Ehrlich and Shami (2010) found that employees avoided posting any confidential information about the organisation publically through Twitter. Instead, they preferred to share details through BlueTwit, their internal microblogging tool. According to Othman and Siew (2012), organisations should always clearly state what the benefits of their internal systems are, as well as continuously educating users on how to best engage with the platforms. This will help mitigate risks of leaking private information to those outside of the organisation. Similarly, Raeth et al. (2009) emphasised the need to train the early adopters of technology.

#### ***2.7.1.5. Overview of the risks of microblogging in large organisations***

Section 2.7.1 reviewed and discussed the risks of microblogging in large organisations, as well as the types of actions taken by organisations to mitigate risk. The examination of the literature showed that the risks of microblogging in large organisations that have been identified were difficulties in using the system, distraction, privacy of employees and security of the organisation. The literature also identified how to manage and mitigate risk. For instance, some researchers talked about providing training for employees, educating and better informing them (Lee & Warren, 2010; Othman & Siew, 2012; Raeth et al., 2009) about the potential risk of exposing confidential data about people through microblogs (Lee & Warren, 2010). Also, rules and guidelines may be required in order to balance the benefits of using tools, such as Twitter, with the risk of sharing private information (Case & King, 2010). Similarly, Schöndienst et al. (2011) talked about having concerns regarding sharing private information. They suggested that this risk can be reduced, by having rules on who can receive content, and for how long they will be shared.

While the literature on microblogging in large organisations showed their potential risks, in most studies the aim was to try and support better uses of microblogs. Thus, many researchers have not investigated risks. Also, there has been a lack of research about the types of actions organisations can take to mitigate risk. Overall, more research can be conducted to investigate the risks of microblogging in the context of organisations, and how to manage risk.

#### **2.7.2. Risks of microblogging in SMEs and actions taken to mitigate risk**

This section discusses the risks of microblogging in smaller organisations and the types of actions taken by them to manage and mitigate risk.



### *2.7.2.1. Damage to reputation*

The literature identified damaging the reputation of the business as one of the main risks of microblogging in SMEs. Carter (2014) found that in most of the organisations interviewed, not all of the employees had access to social media. The participants identified several reasons for this, including reluctance of employees to engage with the tools due to fearing something inappropriate would be mentioned about the organisation. Carter (2014) also found that negative posts could be added by people such as customers or clients which could potentially damage the reputation of the organisation. One solution mentioned for managing these posts was to respond to them politely and in a timely manner, maintaining the reputation of the business (Carter, 2014). Comparably, McLaughlin (2014) concluded that one of the risks of engaging with social media inside SMEs is being aware of negative feedback which could be viewed by other people. The fear of receiving negative feedback from those outside of the organisation such as customers, were also barriers to usage (McLaughlin, 2014). Hu et al. (2012) provided marketing strategies for SMEs regarding the use of the platforms. They talked about monitoring the information posted and handling the negative posts in a timely manner. In addition, they mentioned the need for SMEs to appoint particular individuals to monitor the comments and ensure appropriate responses are provided for negative posts. As a result, the negative comments can be handled appropriately, restricting any reputational damage.

McLaughlin (2014) found that, when the majority of participants were asked about what can be done to support SMEs to make use of social media at work, the majority said that there should be more awareness and support regarding the use of these technologies. Likewise, Michaelidou et al. (2011) established that a lack of training and management or technical support were significant barriers to using the tools within organisations. Similarly, in the study by Meske and Stieglitz (2013), when questions were asked about issues regarding the adoption and use of social media, such as microblogs within SMEs, people mainly referred to aspects such as a lack of support by employees. Based on these results, Meske and Stieglitz (2013) stated that making use effectively of social media the support of the CEO is important, in addition to having a well-structured process of adoption. For instance, SMEs should provide training, so that employees would be able to effectively make use of the tools. In this study, one of the managers stated that, as a result of not having guidelines and not appointing responsibilities to people, individuals had stopped communicating on non-private topics. This was as a

result of no one taking responsibility for any further actions or to commit to using these technologies. Meske and Stieglitz (2013) also recommended that SMEs always take into account the culture of the organisation and mind-set of their staff. It was suggested that strict regulations should be avoided because people should feel ‘free’ to engage with the tools. They should also be allowed to communicate about private topics. They concluded that SMEs should perform training and develop specific guidelines to make use of these technologies.

#### ***2.7.2.2. Issue of time***

A further risk was regarding the amount of time and resources required by SMEs to fully make use of tools such as Twitter (McLaughlin, 2014; Michaelidou et al., 2011). According to McLaughlin (2014), the impact of time and abilities spent on engaging with social media can be a factor which prevents people using these platforms over time. For example, some information being posted may only be useful for some sectors within the business and not others. Therefore, some individuals may feel that the irrelevant information is distracting them and they are wasting their time reading that information. Carter (2014) also found that an investment of time was required to support the use of platforms such as Twitter. With only one exception, none of the organisations were able to appoint a full-time individual to handle the tools. A couple of participants recognised the need to monitor and respond to messages from stakeholders on these platforms, outside of regular working hours; they scheduled Tweets on Twitter to save time.

#### ***2.7.2.3. Overview of the risks of microblogging in SMEs***

Section 2.7.2 discussed the potential risks of microblogging in SMEs, as well as the types of actions taken by smaller organisations to mitigate risk. The literature identified damage to the reputation of the organisation as one of the risks of microblogging in SMEs. The platforms were also considered by some as a waste of time to use. Some studies also showed the types of actions that smaller organisations could take to manage risk. For example, a few researchers suggested the need to provide more support and training for using microblogs (McLaughlin, 2014; Meske & Stieglitz, 2013; Michaelidou et al., 2011). Also, SMEs should avoid having in place strict regulations, because users should feel free to use the platforms (Meske & Stieglitz, 2013). In order to stop wasting time on microblogs, some people scheduled Tweets on Twitter (Carter, 2014).

Other researchers have found some potential risks of microblogging in the context of smaller organisations. Yet, most of them have tried to support better uses of the platforms. As a result, they have not thoroughly investigated risks of microblogs and how to mitigate risk. Overall, more studies need to be carried out within SMEs to better understand the risks of microblogging and how to mitigate risk.

### **2.7.3. Comparison between risks of microblogging in large organisations and SMEs**

The existing literature found more risks of microblogging in large organisations, in comparison to the literature on microblogs in SMEs. This could simply be as a result of there being more studies on microblogging in large organisations. Difficulty in using the system, distraction, privacy of employees and security of the organisation were the risks of microblogs identified for large organisations. SMEs were found to be concerned about damaging the reputation of the business, as a result of using microblogs. The literature on microblogging in large organisations and SMEs found a common risk of the platforms. This was the amount of time required to use the tools. Based on the existing literature on microblogging in organisations, similar types of actions were found, for managing and mitigating risk in large organisations and SMEs. For example, some researchers talked about the need to provide more support and training for users, so that they can make better use of microblogging and avoid risks. Overall, there is a need to conduct more studies within organisations, especially in SMEs, to better understand the risks of microblogging and how to mitigate risk.

## **2.8. Chapter overview**

The literature discussed in this chapter has focused on understanding how organisations make use of microblogging. The aim was to establish what the process was through which large organisations and SMEs adopted microblogging, how microblogging was used, what risks were perceived with the use of the platforms and what actions were taken to manage the perceived risks. Although previous studies have contributed to enhancing our understanding of microblogging in organisations, a gap has been identified in this field of work and there is a need to conduct more research to investigate the uses and risks of microblogging in the context of organisations. Based on the existing literature, it is evident that less research to date about microblogging in organisations has been published about UK. In addition, most research on microblogs has been in large organisations. Therefore, some aspects mainly related to how SMEs adopt and use microblogs, as well as the potential risks of the platforms and how to deal

with risk remain under-explored and require more inquiry. Further, the existing literature failed to critically analyse how the nature of SMEs as organisations influences how they use microblogging.

Thus, the aim of this thesis is to study the uses and perceptions of risks of microblogging in SMEs in the UK, and to answer the following research questions:

1. What was the process through which SMEs adopted microblogging?
2. How was microblogging used?
3. What risks were perceived with the use of microblogging?
4. What actions were taken to manage the perceived risks?
5. How does the nature of SMEs as organisations help explain the adoption of microblogging?

By considering the type of questions which need to be answered, the most appropriate research method will be chosen. The following chapter will discuss the methodological approach of this thesis; a qualitative method.

## **CHAPTER 3: Research Methodology**

### **3.1. Introduction**

Having reviewed the current literature and identified the need for this research, chapter 3 provides a detailed description of the research methodology. The research paradigms are introduced in Section 3.2 before the chapter goes on to discuss the deductive and inductive approaches to research in Section 3.3. The methodological approach of this thesis is explained in Section 3.4. The rationale for adopting a qualitative approach over others is then explained and justified (Section 3.5). Details regarding the process of data analysis (Section 3.6) are also given. The focus of Section 3.7 is to explain the approach taken to research quality, highlighting the validity and reliability strategies adopted in this study for ensuring the trustworthiness of the findings. The ethical considerations associated with the research are given in section 3.8. This chapter closes with a summary and chapter overview in Section 3.9.

### **3.2. Research paradigms**

This section gives an overview of the common paradigms in social science research, so that an explanation can be given of the most appropriate research paradigm for this thesis. According to Slife and Williams (1995), although philosophical ideas are mostly hidden in research, nevertheless, they impact on the practice of research and require recognition (Creswell, 2013). Every study is informed by specific worldviews or perspectives held by the researcher within their discipline (Creswell, 2013; LeCompte & Schensul, 1999). ‘Worldview’ is defined as “a basic set of beliefs that guide action” (Guba, 1990, p. 17) as has been stated by various researchers (Creswell, 2013). Some people, however, use alternative terms, such as ‘paradigm’ (Lincoln et al., 2011). A paradigm establishes a method for perceiving the world, interpreting what is viewed, and what is factual, valid, and critical to record. Paradigms are simple belief systems formed by ontological, epistemological, and broadly conceived, methodological assumptions (Guba & Lincoln, 1994; Lincoln et al., 2011).

Ontological assumptions relate to “the nature of social phenomena- are they relatively inert and beyond our influence or are they a product of social interaction?” (Bryman & Bell, 2015, p. 6). According to Schwandt (2007) ontology is the worldviews in which investigators work when exploring for current knowledge. The Ontological question is “What is the form and nature of reality and, therefore, what is there that can be known

about it?” (Guba & Lincoln, 1994, p. 108). In short, ontology is concerned with ways of constructing reality, the way things actually are and the way things actually work (Anderson, 2013; Guba & Lincoln, 1994).

Epistemological assumptions deal with the way the social world can be understood (Bryman & Bell, 2015). A succinct explanation of epistemology is that it is the philosophical theory of facts (King & Horrocks, 2010). According to Creswell (2007), epistemology seeks to determine the association between the inquirer and that being investigated. The epistemological question is: “What is the nature of the relationship between the knower or would-be knower and what can be known?” (Guba & Lincoln, 1994, p. 108). The aim is to discover “how things really are” and “how things really work” (Anderson, 2013; Guba & Lincoln, 1994, p. 108).

Methodology is the procedure for finding out new facts and information, the principle of the inquiry and how it must begin (Schwandt, 2007). The methodological question is: “How can the inquirer (would-be knower) go about finding out whatever he or she believes can be known?” (Guba & Lincoln, 1994, p. 108). According to Anderson (2013), the aim of the methodology is to decide what tools to use in order to know reality.

In social science research the main paradigms are positivism; interpretive, phenomenological, or constructivist theory; critical theory (Creswell, 2013; Guba & Lincoln, 1994; LeCompte & Schensul, 1999); ecological theory; and social network theory (LeCompte & Schensul, 1999). Researchers choose these approaches based on their research questions, their personal preferences and limitations and by considering the setting of the investigation (LeCompte & Schensul, 1999). The following parts of this section examine the positivistic, critical, ecological, social network and interpretive paradigms. The ontology, epistemology and methodology of the positivistic and interpretive paradigms are also given; these are the two most popular paradigms in social science research and most authors talk about them. However, some authors have discussed a wider-range of paradigms and this research follows LeCompte and Schensul (1999) in considering five possible paradigms.

### **3.2.1. The positivistic paradigm**

Positivism is also referred to as the scientific paradigm (Creswell, 2013; Mack, 2010). Denzin and Lincoln (2013) also use the term “hard science” to refer to positivistic research. Positivism has particularly influenced investigations in experimental

psychology, medicine and mental health, as well as education and clinical studies (LeCompte & Schensul, 1999). According to Creswell (2013), positivism is also normally considered as an approach to quantitative research. It is claimed that using the positivist approach, reality is observable and comprehensible (LeCompte & Schensul, 1999). Also, it is thought that, if studies are carried out with a representative sample of participants, the results will be true or possibly true for all those taking part in the study; i.e. the findings can be generalised to the whole research population (LeCompte & Schensul, 1999; Mack, 2010). The aim of positivistic research is to prove or disprove a hypothesis (LeCompte & Schensul, 1999; Mack, 2010).

In positivistic research, the inquirer is the person who observes an objective reality (Mack, 2010). Positivists presume a well-defined conceptual and social detachment of the investigator and the object or occurrences being studied. In positivist research this means objectivity (King & Horrocks, 2010; LeCompte & Schensul, 1999). In practice, objectivity needs the investigator to withhold their own biases and preconceptions with regards to the study and the individuals taking part in it, and to attempt to control any external effects (together with beliefs and thoughts about the results) on the findings (King & Horrocks, 2010; LeCompte & Schensul, 1999). The inquirer attempts to entirely avoid impacting on or “manipulating” the setting, even when information is gathered via face-to-face communication (LeCompte & Schensul, 1999).

For positivists, the methods adopted can and must be neutral and value-free, yet they are aware that their personal values do affect the types of questions asked. In addition, they know that values or preferences impact on how the findings are used (LeCompte & Schensul, 1999). However, positivists perceive that they must stay detached in the main conduct and results of the investigation – at least during the study. Thus, a positivist’s personal beliefs should not become a source of bias during data collection, or when interpreting the findings. Positivists also adopt research methods and procedures that preserve this objectivity (LeCompte & Schensul, 1999).

Having completed the study, positivists may come to be quite active as advocates for those individuals or issues they have investigated. Nonetheless, positivists hardly, if ever, get involved in talking about the findings with participants or presenting or carrying out any unrelated study projects or interventions at the investigation site when the main study is taking place – particularly if it is imagined that these actions could have an impact on the results. If the inquirer were to get involved in the setting, they

would not be complying with this paradigm's conditions, that investigators should remain effectively neutral with regard to research results and the investigator's personal impact on conduct of the research (LeCompte & Schensul, 1999). The scientist is an objective observer, and everything has to be done not to contaminate the experiment (LeCompte & Schensul, 1999).

Positivistic researchers can come together with non-researchers for work. These associates can include the heads of community organisations and establishments, as well as the directors of funding agencies (LeCompte & Schensul, 1999). These members can influence the investigation in several ways and can also alter the selection of research methods and techniques. The associates can take part in interpreting the findings, often contributing to innovative and appealing perspectives on the information that the inquirers might not have taken into account. In addition, they can offer ways of interpreting unforeseen or unanticipated findings. Gathering insights from research associates is beneficial as it is a type of member-checking that certifies the validity, genuineness, and credibility of the findings (LeCompte & Schensul, 1999).

The ontology, epistemology and methodologies of a positivist approach are as follows. *Positivist research ontology- realism:* There is a detectable, objective reality, and it can be understood through natural laws and mechanisms; the laws by which it is governed (Anderson, 2013; Guba & Lincoln, 1994). Positivists believe there is a tangible social reality which exists independent of those developing the reality (Guba & Lincoln, 2005). It is external to the investigator and represented by objects in space (Mack, 2010). A social relation can occur, just as a natural reality exists. There is one truth that can be considered and investigated. The aim of the investigation is to speculate and control nature (Guba & Lincoln, 2005).

*Positivist research epistemology- dualist and objectivist:* Knowledge is created from a theory or hypothesis (Mack, 2010). The researcher and the object are independent of each other. The investigator is assumed to be capable of investigating the object without having an impact on it or being affected by it (Anderson, 2013; Guba & Lincoln, 1994; Guba & Lincoln, 2005). The inquirer must value only the scientific rigor and not its effects on society or research subjects (Guba & Lincoln, 2005).

*Positivist research methodology- experimental and manipulative:* Questions and/or hypotheses are asked in propositional manner and empirically tested for confirmation (Anderson, 2013; Guba & Lincoln, 1994). Research is predominantly quantitative and



the variables are identified prior to conducting the research. Empirical testing is carried out to identify the truth of the proposition (Guba & Lincoln, 2005).

In regards to the current study, if the research was carried out using the positivistic approach, existing theory would be applied, to investigate the uses and risks of microblogging in SMEs. For example, using the positivistic approach, some researchers have adopted the technology acceptance model, which is a theory that models how technology is accepted and used. For this study, the model would suggest that several factors affect decisions, regarding how and when microblogs are used. However, the focus of this research was more on the user's experiences and beliefs, based on their points of view, about the nature of social reality and the best way to build knowledge. Thus, given the aim of this research, the positivistic paradigm was inappropriate.

### **3.2.2. The critical paradigm**

The critical paradigm wants to “create change, to the benefit of those oppressed by power” (Denzin & Lincoln, 2013, p. 208). A critical research paradigm is “one of the emerging research paradigms in educational research which aims to promote democracy by making changes in different social, political, cultural, economic, ethical as well as other society oriented beliefs and systems” (Basnet, 2011, p. 1). Democracy is defined as a person's ability to share their thoughts and feelings without fearing anyone or having a sense of freedom from different limitations in society, in addition to the social, political, economic, cultural, faith, gender and cast barriers. Critical theorists have previously paid more attention to injustices in society (Basnet, 2011). Today, critical investigators also want to change society to address inequalities, mainly in regards to gender, class, culture, race, ethnicity, sexual orientation, physical or mental conditions and various sectors of society that are marginalized (Anderson, 2013; Basnet, 2011; Creswell, 2013; LeCompte & Schensul, 1999). Investigators are also required to be mindful of how their personal class status; racial, ethnic, and gender orientation; and power relationships, vis-à-vis research participants, impacts on what and how phenomena are researched and how information is interpreted (LeCompte & Schensul, 1999). Critical research focuses on supporting political programmes for making alterations by questioning and testing the interpretation, in addition to the values which exist in society (Basnet, 2011).

Investigators are required to apply the tools of study to determine inequities and to obtain methods – whether via investigation, dialogues, involvement, political activity, or by altering policies – to make changes in the unequal supply of power, cultural

values, and alternative sources (Creswell, 2013; LeCompte & Schensul, 1999). Critical theorists, similar to positivists, believe that inquirers can find reality precisely in the particular historical and geographical context they investigate (LeCompte & Schensul, 1999). Nonetheless, they consider that the interpretation of cultural aspects they investigate (terms and expressions, behaviours, symbols, physical objects etc.) are affected by the context in which they are created and recreated. As critical theorists perceive cultural behaviour and beliefs as positioned within a certain historical era, these actions and viewpoints are considered to change over time. Critical researchers also consider that most of what may be revealed as cultural practice between oppressed individuals is a response to their status (LeCompte & Schensul, 1999).

A number of points make this paradigm critical. One point is to make people confront or question untrue ideas which are present. A further point is to question and make a critical judgment in relation to those beliefs (Basnet, 2011). Furthermore, critical researchers attempt to take into account the ideas and thoughts of the minority group, i.e. those who are not heard in society (Basnet, 2011; LeCompte & Schensul, 1999). Also, it aims to question the already existing ideologies, and establish an alternative, current one (Basnet, 2011).

The aim of the current research was to study organisations and how they make effective use of new technology. While inequalities could have an effect on how SMEs make use of microblogging, such as who has more power and control over the platforms, this was not central to the intentions of the study nor did they emerge as key features from the data. Thus, given the aim of this research, the critical paradigm was not appropriate.

### **3.2.3. The ecological paradigm**

Ecological researchers see people as operating in a social context that affects their actions. Context incorporates the human and concrete settings in which things occur; it incorporates social measures (such as family sets, peer networks, school or work environments, communities, and the broader society) and categories (such as social, specialised and regional). Ecologists view these sectors or institutions within a community as systematically associated with and impacting each other. Furthermore, it is believed that change must be established in all areas at the same time (LeCompte & Schensul, 1999). Also, it is thought that research must recognise those contextual components which have a significant impact on people or institutional behaviour. Unlike critical researchers, ecologists have few preconceived ideas about which components are most vital (LeCompte & Schensul, 1999).

Ecological researchers seek accommodation between people, institutions and surroundings. In the investigation and findings, researchers stress adaptation instead of conflict, and they pursue increased understanding of how social structures continue and adjust to conflict, in addition to how they alter (LeCompte & Schensul, 1999). For ecologists, the direction of change is realised through localised study, due to the perspective guiding investigators to examine communication in local settings. What separates critical researchers from ecologists is that notions of class, authority, and equity guide critical theorists, but not inevitably ecologists. Therefore, for critical researchers, the direction of change is absolute from the start, but for ecologists, they appear inductively through the investigation (LeCompte & Schensul, 1999).

Applying an ecological paradigm would indicate the importance of the relationship among people and their physical, emotional, and cognitive behaviours as they happen in relation to certain environmental contexts. This was not central to the intentions of this research; the focus here was on investigating user's personal experiences and understanding of microblogs. Thus, given the aim of this study, the ecological paradigm was considered inappropriate.

#### **3.2.4. The emerging social network paradigm**

Social network perspectives provide an analytic structure for social science research (LeCompte & Schensul, 1999; Li et al., 2013). Studies of social networks have created a key component for the work of sociologists for a number of years (Kjos et al., 2013; LeCompte & Schensul, 1999). Social network studies are used across disciplines and so social scientists have begun to use a new term – the network paradigm. Research into social networks enables social scientists to place people with their family members, with their associates, and in connection with members of different social or cultural communities. Examining social networks further enables individuals to observe and record vital exchanges among people, to analyse the places in which exchanges take place, and to establish what aspects affect them (LeCompte & Schensul, 1999). The concept of “social network” not only relates to people but also environments that are connected by exchanges of individuals, resources, and infrastructures, or to organisations linked by people, or other components determining what the relationships (Kjos et al., 2013; LeCompte & Schensul, 1999) and connections exist between these communities; critical data can be gained regarding how environments or more global systems operate (LeCompte & Schensul, 1999).

Historically, people have used network theory to investigate family systems and conversion in diffusion work, which is interested in the flow of innovation and data; and in studies of the efficacy of group interventions in natural sets or networks (LeCompte & Schensul, 1999). Social network investigators focus on natural categories determined descriptively via observations in the area (Kjos et al., 2013; LeCompte & Schensul, 1999). They are also interested in distinctive or ego-centered networks, which are determined in terms of people who are connected to an individual respondent. Some investigators focus on distinctive or ego-centered networks, others on the wider community networks, termed “full relational networks,” where each person is considered in regards to everyone else in the set (LeCompte & Schensul, 1999). Some people are only interested in how social networks operate. Others like to explore the factors which could possibly impact on the expansion of certain kinds of social networks. For example, if age, ethnicity, or both are connected to the size and configuration of drug-using networks. Inquirers use various methods to carry out studies with social networks (LeCompte & Schensul, 1999). For example, some rely on survey techniques, where a random group of people are requested to provide information about their contacts or associates and to specify how the contacts act in relation to the subject of investigation, ego-centred network surveys. Other researchers may use snowball or network sampling, where individuals provide information about their contacts, and either everyone or random contacts are interviewed. The aim is to understand how they connect with the respondents and with others. Finally, nearly all of the people in a community are interviewed (LeCompte & Schensul, 1999).

To a certain extent, social networks could become useful for the current study in terms of enabling the researcher to observe and record vital exchanges between people. Social network analysis could be used to describe how the social interaction between microblogging users is associated with their using behaviour. For example, statistical representations could reveal each user’s position in the network, thus, indicating how influential they are; influential users are more likely to be connected with their co-workers and with those outside of the organisation, such as customers and clients. The investigator could also have analysed, to some degree, the places in which exchanges take place, and established what aspects could affect them. However, the aim of this study and research questions would not be answerable within this approach. Social networks could not generate rich responses, based on user’s experiences and perceptions

of the uses and risks of microblogs. As a result, this paradigm was considered inappropriate for this research.

### **3.2.5. The interpretive, phenomenological, or constructivist paradigm**

Although the terms ‘interpretive’, ‘phenomenological’ and ‘constructivist’ are used interchangeably, they originate from various disciplines. Interpretivism tends to be mainly applied by sociologists and anthropologists. Phenomenology comes from philosophy and Constructivism is mainly used in education, sociology, and psychology (LeCompte & Schensul, 1999). In this thesis the term interpretivism is mainly used.

According to Denzin and Lincoln (2013), interpretivists seek understanding by interpreting perceptions. Bryman and Bell (2015, p. 28) regard interpretivism as “a contrasting epistemology to positivism”. The interpretivist paradigm can also be called the “anti-positivist” paradigm, due to being developed as a reaction to positivism (Mack, 2010, p. 7). Important for these researchers is the “social construction of reality” (LeCompte & Schensul, 1999, p. 48). This means that interpretivists consider that what individuals believe to be correct about the world is formed as individuals interact with each other over time in particular social situations (Creswell, 2013; LeCompte & Schensul, 1999). For interpretivists, meaning is directed towards specific objects. The researcher aims to rely on the individual’s beliefs of the situation being investigated (Creswell, 2013). Unlike positivists, for whom the findings are “true”, at least probabilistically, and are empirically confirmable, interpretive theorists feel that the social “constructions of individuals and groups are not more or less ‘true’ in an absolute sense, but simply more or less informed and/or sophisticated” (LeCompte & Schensul, 1999, p. 48). For interpretive researchers, constructs are not established; they can change during communication or with time and the variations can cause different perceptions of reality and alternative forms of action (LeCompte & Schensul, 1999).

Interpretivists perceive culture as cognitive and affective. To them culture is “constructed” as individuals communicate together in shared actions (LeCompte & Schensul, 1999). Another essential element to the interpretive approach is that it continually defines joint meanings as “situated”; they are positioned in or influenced by societal, political and cultural background, and by ethnic, age, gender, and various contextual attributes of people who embrace them (LeCompte & Schensul, 1999). These attributes impact on how people think, believe and present their ideas. Therefore, a key component in interpretivism is initially defining the socio-political status of every individual taking part in the research before their place in the web of meaning is set by

the investigator (LeCompte & Schensul, 1999). Unlike positivists or critical theorists, interpretivists pay attention to local meanings and consider it challenging to just share one “story”. Rather, they usually make available complicated accounts as poly-vocal texts, or narratives told by individuals (LeCompte & Schensul, 1999). Interpretivists are inherently participatory, as meanings can be developed entirely via communication (Creswell, 2013; LeCompte & Schensul, 1999). Thus, it is important for the investigator to interact with the participants so that they can observe social dialogue and communication - the procedure of developing constructs, thoughts, opinions, and meaning - as it happens (LeCompte & Schensul, 1999). The researchers usually ask more general questions, so that people can establish the meaning of the situation. It is more beneficial to ask open questions, so that the investigator can listen carefully to what the individuals have to say about their experiences and life settings (Creswell, 2013).

Authentic or valid personal constructs or thoughts and opinions can be obtained and refined only by communication between every investigator and participant in the study. Therefore, the results of interpretivists are developed and redeveloped as the investigation proceeds; instead of beginning with a theory, interpretivists create or inductively produce a theory or pattern of meaning (Creswell, 2013; LeCompte & Schensul, 1999). It is worth mentioning that, for interpretivists, it is vital that the meaning systems of investigator/s and participants carry equal weight because negotiated meaning cannot happen unless the investigator takes part in the procedure (LeCompte & Schensul, 1999).

The ontology, epistemology and methodologies of the interpretivist approach are as follows. *Interpretivist research ontology- relativist*: “Realities exist in the form of multiple mental constructions, socially and experientially based, local and specific, dependent for their form and content on the persons who hold them” (Guba, 1990, p. 27; Guba & Lincoln, 1994). There are many realities, which can be examined and established through communications, and meaningful activities. The aim is to discover how individuals understand their social worlds in the natural setting through daily events, interactions and writings, while communicating with people around them (Anderson, 2013). In other words, the world and knowledge is developed by social and contextual understanding (Anderson, 2013).

*Interpretivist research epistemology- subjectivist:* The researcher and the object are merged into one being. The results are developed based on communication between the two (Guba, 1990). The inquirer and the inquired into are considered to be connected, so that the findings are shaped and developed with the progress of the study. The standard difference between ontology and epistemology disappears (Guba & Lincoln, 1994). The research findings result from communication between the researcher and the subject. What can be found is based on that communication (Anderson, 2013; Guba, 1996).

*Interpretivist research:* The researcher communicates with the object being investigated. Each construction of reality is examined and is interpreted by the researcher (Lincoln & Guba, 1985). Interpretivism is normally considered as an approach to qualitative research (Angen, 2000; Creswell, 2013), using methods such as interviews, observation, ethnography and case studies (Anderson, 2013; Angen, 2000; Creswell, 2013). These approaches ensure sufficient dialogue takes place between the investigator and respondents (Guba & Lincoln, 1994) so that together they construct a meaningful reality (Angen, 2000; King & Horrocks, 2010).

In regards to this study, the research questions are about how people perceive and experience microblogging in the context of SMEs. Interpretivist researchers investigate a natural environment and they are interested in meanings and experiences of people, it is natural that this study has taken an interpretivist stance. Thus, the ontology, epistemology and methodologies of the interpretivist approach were provided for this thesis.

### **3.2.6. Overview of this section**

In Section 3.2 different research paradigms were reviewed. The examination revealed that the most appropriate paradigm for the current study is interpretivism, which is interested in the meaning and experiences of people. The assumption of this approach is that people continuously interpret their world. Therefore, intrerpretivists think that the social world is established by people; thus it varies from the world of nature. Intrerpretivists carry out studies in naturalistic settings and use inductive methods for research and theory. They also stress the adoption of qualitative methods. Considering the ontology, epistemology and methodologies of interpretivism, this research, which aims to investigate the uses and risks of microblogging in SMEs, is best conducted using an interpretive approach.

### 3.3. Deductive and inductive approaches to research

According to Patton (1990), researchers can adopt either deductive or inductive approaches. The deductive approach is usually driven by “prior assumptions, theories or hypotheses” (Braun & Clarke, 2006; Thomas, 2006, p. 238). When adopting a deductive approach, previous theories shape the interpretation and understanding of data. During the analysis, the coding process would usually use codes taken from previous researchers and literature (Ali & Birley, 1999). Thus, the deductive approach is referred to as “top down” coding (Crabtree & Miller, 1999).

The inductive approach, in contrast, is mainly driven by data (Patton, 2002, p. 453; Thomas, 2006) and it is “a process of coding the data without trying to fit it into a pre-existing coding frame” (Braun & Clarke, 2006, p. 83). In adopting an inductive approach, though the area of enquiry is determined; there are no theoretical pre-determined frameworks for analysis. Participants establish constructs and describe the relationship between them (Ali & Birley, 1999; Thomas, 2006). Theory is developed on an entirely inductive basis, from the underlying structure of experiences or processes that are evident in the raw data (Ali & Birley, 1999; Thomas, 2006). This understanding of inductive analysis is consistent with Strauss and Corbin’s (1998) description: "A researcher does not begin a project with a preconceived theory in mind (unless his or her purpose is to elaborate and extend existing theory). Rather, the researcher begins with an area of study and allows the theory to emerge from the data" (p. 12). Thus, the inductive approach is referred to as “bottom up” coding (Boyatzis, 1998).

According to Thomas (2006), in practice many researchers adopt both deductive and inductive analysis, i.e. a hybrid approach. However, for this study an inductive approach was used. The existing literature helped to gain some understanding about the uses and risks of microblogging; the researcher expected the type/s of data which could emerge from the interviews. However, the researcher allowed for new themes to emerge from the collected data, without being driven by prior expectations or theories. The interview transcripts were read several times to establish codes and themes. Also, all the ideas were discussed with the supervisor, for example, how the researcher was coding the interview data. The investigator came to the data with an open mind and while coding the data, she was always trying to develop new codes, to discover new and unique themes, and to go beyond her understanding that she brought from the literature. This



enabled the researcher to take into account all of the participant's responses, thus making sure the research was driven by data.

### 3.4. Methodology

The research methodology sets the framework for conducting research and relates to the types of methods and tools which could be adopted for answering the research questions. According to Blaikie (2009, p. 57), “a research project is built on the foundation of its research questions”. As stated by Bryman (2007), generating the research question is frequently thought of to be the initial step in carrying out a research project. For the purpose of this study, the process of selecting the research questions and methodology has evolved continuously with the progression of the research. A number of factors influenced and affected the choice of the research topic, and hence the adoption of the methodology. During the first year of the study, relevant literature was reviewed to develop the preliminary research questions. In addition, as the researcher had background knowledge about various research methods, some time was taken to review and refresh her understanding of approaches to research. This was very important, in terms of enabling her to focus the direction of the study and to be able to decide which path to take. Influenced by the naturalistic approach to research (Golafshani, 2003), qualitative methods were adopted in this research (see Section 3.5). Employing qualitative methods allowed for issues to be explored in greater depth than would have been possible using other techniques (Hove & Anda, 2005). Section 3.4.1 introduces different approaches to research, before specifying which method has been selected for this study.

#### 3.4.1. Three Approaches to Research

There are several research methods for investigating questions in Information Science, and these are the *quantitative*, *qualitative* and *mixed methods* approaches. Based on the objectives of the study, the most appropriate approach and research paradigm is selected and used. The following part of this section provides a description of each of these approaches, and introduces one of the most widely used research techniques, which have been adopted for this study.

As already mentioned in Section 3.2.1, the positivist approach is usually associated with using quantitative methods, where large scale surveys or experiments are often conducted (Guba & Lincoln, 1994; Rubin & Rubin, 2012, p. 3), techniques that

emphasise measuring and counting (Rubin & Rubin, 2012, p. 14). The quantitative approach can include using “standardised measures so that the varying perspectives and experiences of people can be fit into a limited number of predetermined response categories to which number are assigned” (Patton, 2001, p. 14). In this research, the original intention was to adopt a quantitative approach, by means of distributing a questionnaire to organisations. A questionnaire was created using software called LimeSurvey. The software enabled the researcher to include as many questions as required, to use different types of questions, upload files, and to be able to direct participants to the questionnaire simply by using a link. However, it was soon decided to disregard this approach. This was because people did not complete the questionnaire; more than half of the questionnaires were incomplete. Thus, the participants did not give in-depth responses as required, to help answer the research questions. Also, soon after distributing the questionnaire, the researcher realised that data collection had not remained within the boundaries of South Yorkshire. The organisations completing the questionnaire were not a sensible sample. For example, one of the participants emailed the researcher and informed her that they had sent the questionnaire to someone in London, who was the manager of an IT organisation.

Unlike quantitative research, which seeks to determine, predict, and generalise the findings, qualitative research uses a naturalistic (interpretive) approach (Patton, 2001, p. 39; Golafshani, 2003) and looks for illumination, understanding, and extrapolation of data (Golafshani, 2003). Qualitative methods consist of systematically collecting, organising, and usually interpreting textual material derived from having a conversation or having conducted an observation (Malterud, 2001). The researcher would be concerned with developing explanations and examining the qualities of communication phenomena (Malterud, 2001; Taylor & Trujillo, 2001, p. 162). The “data tend to be continuous rather than discrete, and the emphasis is on description and explanation more than on measurement and prediction” (Taylor & Trujillo, 2001, p. 162). This approach is broadly defined by Patton (2001, p. 39) as “any kind of research that produces findings not arrived at by means of statistical procedures or other means of quantification” and instead, the type that develops the findings through ‘real-world settings’ where the “phenomenon of interest unfold naturally”, i.e. the attempt is not to manipulate the phenomenon of interest (Patton, 2001, p. 39). In this research, a qualitative method was adopted because it would allow for in-depth responses to be gained from the participants, about their experiences, perceptions and points of view in

regards to the phenomenon under study i.e. about the uses and perceived risks of microblogging. The third approach is mixed methods and it involves incorporating both qualitative and quantitative methods and gaining the best of both approaches (Creswell, 2003, p. 22; Bryman, 2008). According to Teddlie and Tashakkori (2009, p. 129), a mixed methods approach can be used to answer the research questions when there is a need to integrate qualitative and quantitative data, i.e. it may be that one method alone does not provide answers to the research questions. The integration of the two types of data would allow for various types of questions to be asked. In this study, adopting a quantitative method showed not to provide detailed responses from the participants, to help answer the research questions. Thus, a mixed-methods approach was not used. For the current study, the qualitative method has been adopted by considering the type of questions which need to be answered:

1. What was the process through which SMEs adopted microblogging?
2. How was microblogging used?
3. What risks were perceived with the use of microblogging?
4. What actions were taken to manage the perceived risks?
5. How does the nature of SMEs as organisations help explain the adoption of microblogging?

Section 3.5 will provide a rationale for adopting qualitative research; having decided on this approach, the research questions can only be answered successfully by selecting this approach.

### **3.5. Rationale for Adopting a Qualitative Methods Approach**

A description and justification for selecting the qualitative method using interviews is introduced in this section. This includes the interview plan (Section 3.5.1), piloting interviews (Section 3.5.2), selection of participants (Section 3.5.3), conducting interviews (Section 3.5.4) and recording interviews (Section 3.5.5).

In comparison to positivist research (Guba & Lincoln, 1994; Rubin & Rubin, 2012), this study has employed semi-structured *face-to-face interviews* as the main method for collecting empirical data. This specific method was selected among the many different forms of qualitative interviews. These include focus interviews which ask questions about a specific situation or event (Bryman, 2008) and focus group interviews, also known as group interviews (Hove & Anda, 2005) which are the same as focused

interviews, but where several subjects discuss the specific issue in groups (Bryman, 2008; Hove & Anda, 2005; Lee, 2008). There are also oral history interviews (Bryman, 2008), where participants are asked to recall events from the past and reflect on them. Furthermore, there are life history interviews, with the aim of gleaning data on the entire biography of each participant (Bryman, 2008). This method is usually combined with different types of personal documents, such as diaries and letters.

In order to collect detailed responses from the participants, about their perceptions of the uses and risks of microblogging, as well as their experiences of using the platforms, face-to-face interviews were considered to be the most suitable type of data collection. As opposed to structured interviews, also referred to as a 'standardized interview', which tend to be inflexible, and mostly adopted for quantitative research (Bryman, 2008, p. 437; Cohen & Crabtree, 2006; Hove & Anda, 2005), semi-structured interviews, also known as 'focused interviews' (Hove & Anda, 2005) offer the flexibility to capture opinions and points of view of participants (Cohen & Crabtree, 2006; Hove & Anda, 2005). This is without predetermining their thoughts by using an *a priori* selection of questionnaire categories (Patton, 2001). For example, using semi-structured interviews, the researcher would never give examples, for instance of the uses or risks of microblogs, which could motivate or influence the participant's responses; using semi-structured interviews, an effort would be made not to prompt answers or ask leading questions. Unlike unstructured interviews (Hove & Anda, 2005), semi-structured interviews make it easier for the interviewer to stay on topic and explore relevant and emergent topics. An 'interview plan' is created and used in order to produce an adequate balance in the flow of the conversation with participants (see Section 3.5.1). The researcher was mainly influenced by the following aspects.

Many previous researchers captured in the literature have experience in conducting interviews and they know about their nature and usefulness, i.e. they know that interviews could provide insights into the participant's world; their points of view, beliefs and emotions (Hove & Anda, 2005), in addition to capturing their views and experiences in real-life situations. Moreover, in many studies, interviews have revealed the meanings behind interviewees' perceptions, which could not be directly measured or observed (Patton, 2002). With this study aiming to investigate the uses and risks of microblogging in SMEs, interviews could lead the interviewer to answer the research questions. More specifically, interviews could provide rich details about the process

through which small and medium enterprises adopted microblogging, as well as how the platforms were used. In regards to the process of adopting microblogging, observations would also be a suitable choice; at times participants may not be that accurate in their reflection and recall of what they do. In this research, interviews could also allow the participants to provide in-depth information about what benefits and risks they perceived with the use of microblogging. In addition, interviews would enable the participants to present their views and opinions about how the risks of microblogging could be managed. With the continuous evolution of research questions throughout the study, there was a need to access companies first hand and examine the different uses and risks of microblogging in the workplace, and how they were shaping and influencing businesses at that time. Conducting interviews thus became critical and important, as they could provide in-depth and rich detail which could not be achieved through other methods alone, such as questionnaires.

### **3.5.1. Interview Plan**

In order to ensure a successful flow of questions during the interviews, an interview plan was used (see Appendix 1). This created a certain amount of order to the discussion and ensured that all relevant topics were covered (Bryman, 2008). The interviewer was able to pursue topical trajectories during the conversation that strayed from the interview plan when it appeared to be relevant (Cohen & Crabtree, 2006; Bryman, 2008). For example, where it seemed appropriate, the order of questions changed and/or more questions were raised, based on the interviewee's responses (Bryman, 2008). This plan was designed prior to conducting the pilot interviews during the first stage of the study. After carrying out the pilot interviews, a few questions were added and minor changes were made to the plan, before carrying out more interviews. These changes were made because the aim was to probe further in areas that seemed interesting from the initial data. For example, before conducting the initial interview, in regards to the second research question, the interview plan included the following question: What specific benefits has the microblogging/blogging tool/s brought to the company? After the pilot interviews another question was added to the plan: What are the uses of microblogging? (Uses you have experienced or perceptions of use). Based on the response to the pilot interviews, it emerged that it was of value to add an additional question about uses of microblogging. This was so that the participants could identify more clearly that the intention was to find out about the uses of microblogging; initially during the pilot interviews, by asking a question about benefits, the aim was to

find out how participants used microblogs, thus a more direct question was also added. Also, regarding the third research question, before the pilot interviews the plan consist of the following question: Do you see any specific limitations the microblogging/blogging tool/s has brought to the company? However, after the pilot interviews, a more direct question was also added: What are the risks of microblogging? (Risks you have experienced or perceptions of risk). The interview plan did not include many questions about risks of microblogging. This is because during the interviews, the participants talked a lot about risks of microblogs, in comparison to the uses. They talked about risks more willingly and in detail. In fact, most participants talked about risks of microblogs before being asked about them.

The plan followed a logical order of topics that helped to have a conversation with flexibility and awareness. The plan was designed to ensure the exploration of relevant issues during the interviews and to maintain the focus on asking relevant questions (Bryman, 2008; King & Horrocks, 2010). It also enabled the interviewer to use relevant language that was comprehensible to interviewees and to avoid using theoretical terms in her vocabulary that could have been unclear or confused participants during the interview (Bryman, 2008, p. 442). When designing the plan, questions were placed under three headings. The first section asked background information about the company and process of microblogging adoption; the second focused on use of microblogging over time; and the third reflected on the uses and risks of microblogging for the business.

### **3.5.2. Pilot interviews**

Two interviews were conducted during a pilot exercise and were useful to:

- Determine whether relevant and insightful questions were being asked (Hove & Anda, 2005)
- Determine potential emerging issues during the interview process, such as asking questions in an inappropriate manner, which could lead to interviewees not understanding the specific questions being asked or asking questions in an inappropriate and illogical order, or in a threatening manner (Hove & Anda, 2005, p. 3) etc.
- Speaking too much rather than encouraging individuals to speak freely (Hove & Anda, 2005) and not allowing them to respond or explain their opinions.
- Calculate the duration of interviews.
- Produce an initial data analysis identifying key themes

- Develop initial insights on potential questions and areas for further exploration during the second part of the study, when more interviews would be conducted and analysed.

### **3.5.3. Selection of Participants**

Deciding on the numbers and types of participants is a fundamental issue in qualitative studies. As interviews can shed light on the experiences and knowledge of participants about the use of microblogging in organisations, it becomes important to select the most appropriate interviewees. This section describes how interviewees were selected for this research.

The interviewer sought a diversity of opinions (King & Horrocks, 2010) that could be relevant to understanding the uses and risks of microblogging in SMEs in the area of South Yorkshire. In contrast to the strategy followed by quantitative studies (Rubin & Rubin, 2012), where participants of the study must be randomly selected for the generalisation of results to other contexts, the naturalistic and interpretive nature of this research (Rubin & Rubin, 2012) was reflected in the strategies selected to recruit interviewees, where participants were carefully chosen, through purposeful sampling (Palinkas et al., 2013; Patton, 2002). The emphasis for this study was on the quality and usefulness of data, so the objective was not to consider a large number of participants; rather, it involved selecting those who would contribute most towards answering the research questions. Prior to approaching the potential interviewees, several criteria were specified and potential strengths and limitations were identified of the sample.

- Initially IT organisations were considered, as they are early adopters of technology; they help receive early ideas of the way other organisations might use microblogging for business purposes.
- The aim was to select managers or heads of IT from each company, whose decision it was to adopt microblogging within the workplace, or to select employees who engaged with microblogging.
- SMEs were searched for online including through Twitter.
- Initially SMEs were contacted by email. Sometimes the manager and director of the organisation were directly emailed, if their contact details were found online.
- Organisations from other fields were also contacted, businesses from Consultancy and Sports. This was to ensure that the experience of other sectors was portrayed.

- Overall, 194 organisations and managers were emailed, from different sectors. 43 people were from the field of IT, 21 from Healthcare, 26 from Engineering, 17 from Pharmaceutical companies, 42 from Manufacturing, 29 from Sports and 16 were from the field of Consultancy.
- Snowball sampling which “consists of identifying respondents who are then used to refer researchers on to other respondents” (Atkinson & Flint, 2001, p. 1) was found to be helpful. For example, several IT managers and directors of SMEs introduced people they knew and most of them had similar positions and businesses.
- As not many organisations were found through emailing, the researcher began to contact organisations by phone. Some interviewees were found this way.
- Another strategy was also used to find participants. A meeting was arranged with the Business Development Manager by email, at the Research and Innovation Services, University of Sheffield. With the Business Development Manager, an ICT event was attended in July 2012, which was supported by the University of Sheffield. The aim was to find more SMEs using microblogging. The event was intended for businesses, academic and other interested parties working in areas of future networks, software engineering and services, robotics, advanced control systems, ICT for health, aging well and governance, ICT for low carbon economy i.e. energy efficient data centres. Through the Business Development Manager, the Business advisor at Sheffield Enterprise Agency was contacted by email, as well as the manager of the Sheffield Chamber of Commerce. However, no new participants were found through these individuals.
- The nature of some microblogging platforms, made it difficult to find SMEs which used them for business purposes. For example, it was much easier to directly find organisations which used Twitter, as this is a public platform. However, the nature of Yammer is that it is completely private to organisations, thus, finding SMEs which used this microblogging tool proved to be a much more difficult task.
- The researcher attended a Yammer conference in London in 2013 and spoke to one of the co-founders of Yammer, Adam Pisoni, about needing to find SMEs using Yammer in the area of South Yorkshire. Although the researcher was put in touch with someone at Yammer and emails were exchanged between them, no new participants were found by taking this approach.



- A large number of SMEs were initially willing to participate, but due to work commitments, they said that they were busy and they were eventually unable to take part in an interview. Overall, the research would have been based on 36 interviews, however, 13 people later dropped out. From those 13 people, six were from the field of IT, one was from Consultancy, four were from Engineering and two were from the field of Manufacturing.
- Although two interviews were disregarded and the research is based on conducting interviews with participants across three sectors of IT, Consultancy and Sports, the sample is still valid. This is because IT and Sports organisations are very different and the findings are not only based on one type of organisation. Therefore, the findings of this study can be used, to suggest that organisations from other fields of work are likely to use microblogging in similar ways.

#### **3.5.4. Conducting interviews**

Empirical data was collected through conducting interviews in two stages. 21 interviews were conducted with individuals from 19 different SMEs in the area of South Yorkshire, UK. Although two other interviews were conducted, they were excluded from the analysis because they were not from sectors of IT, Consultancy or Sports. One of the participants was the marketing manager of a hotel who used Twitter for business purposes. The other had an online directory business and also used Twitter. Even though these interviews were excluded from the analysis, the participants' responses helped the researcher to better understand how microblogs are used for business purposes.

Overall, the first stage of the study consisted of two face-to-face interviews and the rest of the interviews were conducted for the second stage of data collection, comprising four *phone interviews*, while the remaining were face-to-face interviews. The breakdown of information about the research participants is given in Table 3.1.

<b>Number of Interviewees</b>	21
<b>Organisation Sector</b>	IT/Software (14 interviewees) Consultancy (3 interviewees) Sports (4 interviewees)
<b>Interviewee Role</b>	Director (8 interviewees) Manager (9 interviewees) Employee (4 interviewees)
<b>IT</b>	Director (5 interviewees) Manager (7 interviewees) Employee (2 interviewees)
<b>Consultancy</b>	Director (2 interviewees) Manager (0 interviewees) Employee (1 interviewees)
<b>Sports</b>	Director (1 interviewees) Manager (2 interviewees) Employee (1 interviewees)

**Table 3.1: Interview information**

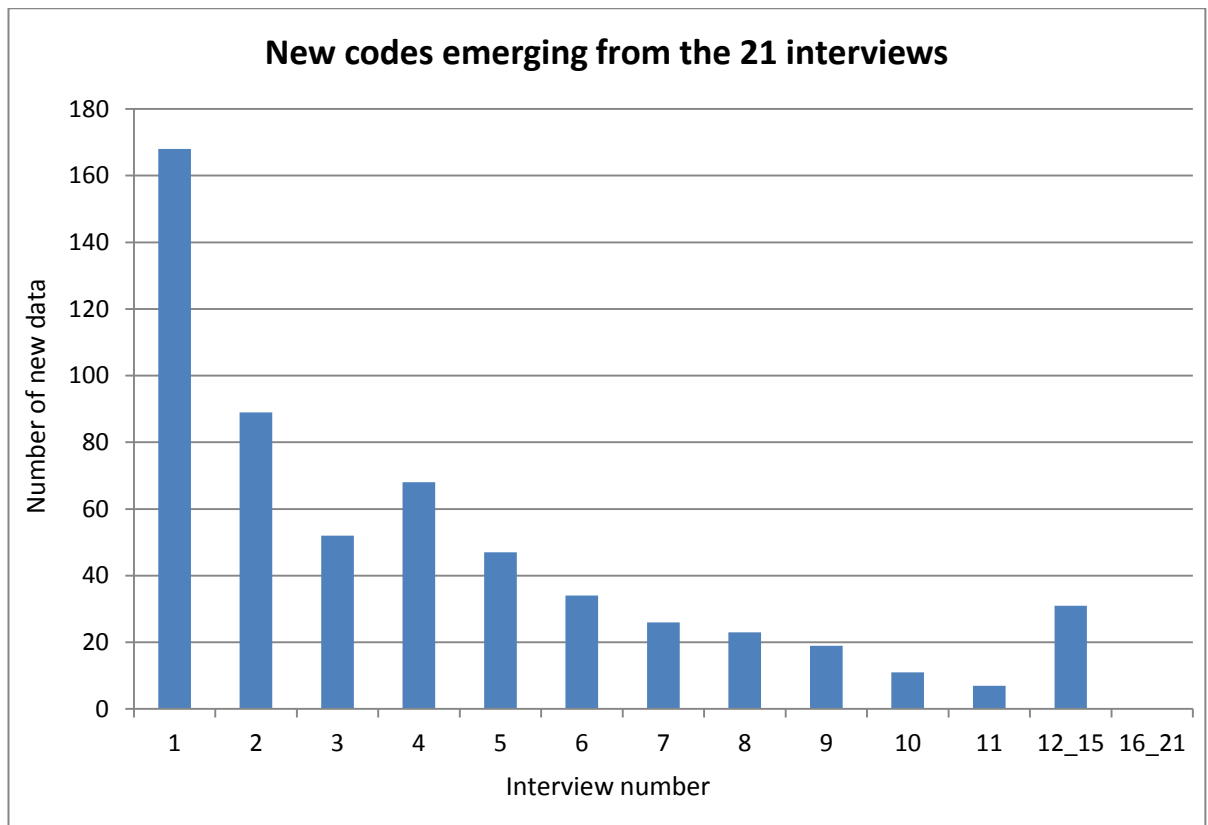
As can be seen from Table 3.1, interviews were conducted with nine managers, eight directors and four employees. 14 participants were from the field of IT, three were Consultancy-based, and four were in the field of Sports. Organisations from different fields were included in the data collection and this was to ensure that the experience of other sectors was represented. The research participants were anonymised by being allocated pseudonyms; codes were used to ensure total anonymity. The complete list of codes can be found in Appendix 2. Three examples are given below.

<b>Participant</b>	<b>Participant Code</b>	<b>Type of Company</b>	<b>Position in the Business</b>	<b>When interviewed</b>
1	<b>IT-E-1</b>	<b>IT:</b> IT/Software	<b>E:</b> Employee	<b>1:</b> The first participant interviewed
16	<b>CO-D-16</b>	<b>CO:</b> Consultancy	<b>D:</b> Director	<b>16:</b> The sixteenth participant interviewed
21	<b>SP-M-21</b>	<b>SP:</b> Sports	<b>M:</b> Manager	<b>21:</b> The twenty-first participant interviewed

**Table 3.2: Code used for research participants**

The first participant interviewed ('1') was an employee ('E') from an IT-based company ('IT'). The code allocated to this participant was: 'IT-E-1'. The sixteenth participant ('16') was a director ('D') from a Consultancy-based organisation ('CO'). The code allocated to him was: 'CO-D-16'. The twenty-first participant interviewed ('21') was a manager ('M') from a Sports company ('SP') and the code given to him was 'SP-M-21'.

In order to become familiarised with the data, the researcher herself conducted all the interviews and analysed the data. Data analysis was continuously carried out, to the point where no additional data was emerging from the interviews and all the concepts in the theory were generated because similar or repeated responses were provided during more interviews (Morse, 2003). It was decided to analyse the 21 interview data and to see if there was a need to conduct more interviews. As 'theoretical saturation' was achieved, the researcher did not collect more data (Morse, 2003). Figure 3.1 shows the exact number of new codes emerging from the first 11 interviews. The fifth interview was conducted with the first Consultancy participant, which generated 47 new codes. The sixth and seventh interviews were carried out with two Sports interviewees and they generated 34 and 26 new codes. During interviews 12 to 15, only 31 new data was generated. During the last six interviews, i.e. 16 to 21, no new data emerged and theoretical saturation was achieved. As can be seen from Figure 3.1, during the fourth interview, more data emerged than the previous interview. The reason for this is because the fourth interviewee was one of the main participants who associated many risks with microblogging for business purposes. Thus, many data emerged from this interview.



**Figure 3.1: Codes emerging from the interviews**

Although face-to-face interviews were chosen to be the main method of data collection, four phone interviews were conducted, based on the following reasons:

- Potential interviewees were found through snowball sampling and they were not within reach in the area of South Yorkshire. It was therefore difficult to conduct face-to-face interviews with them.
- The interviewer did not want to miss the opportunity to collect data from these potential participants and decided to conduct phone interviews.

A few days prior to the interviews, the interviewees were emailed and in a few cases contacted by phone, depending on the method arranged with the participants beforehand. This was for confirmation of the interview date, time and the location for face-to-face interviews. For the face-to-face interviews, the majority were conducted at the participant’s workplace. However, a few participants decided to have the interview in a different location, such as a coffee shop close to work or the library/reception area in another building. The participants selected the location, as the aim was to make them feel comfortable and relaxed during the interviews. On the day of each face-to-face

interview, the researcher usually arrived at the location 10 to 15 minutes early. After introducing herself to the participants, she began by briefly and informally chatting to the interviewees, explaining the purpose of the research and how her academic background and interests in Information Systems Management had led her to conduct this type of study. This facilitated a friendly and relaxed atmosphere and minimised the risk of being judged to be a complete stranger (Hove & Anda, 2005). She also showed her appreciation by speaking about how the interviewee's collaboration in the study was critical to the research.

Before the interviews formally began, the voluntary nature of the interviews was explained and the right to withdraw at any time was clearly stated (King & Horrocks, 2010). In addition, issues of confidentiality and anonymity were highlighted and the interviewer briefly explained the purpose of the study and her intentions (Hove & Anda, 2005; King & Horrocks, 2010; Valenzuela & Shrivastava, 2008). This was before providing participants with an information sheet (see Appendix 3), which provided more details about the project. Although the information sheet was emailed to the participants a few days before the interview, so that they could prepare for the types of questions that were going to be asked (Hove & Anda, 2005), a paper-copy version was also provided before the face-to-face interviews, in case interviewees wanted to have a second look and to refresh their memory. The interviewees were also asked to read and sign a consent form (King & Horrocks, 2010) which was provided for the research (see Appendix 4). In addition, the interviewer asked permission to record the conversations and explained that the recordings would only be used for research purposes (Daly & Walter Kille, 2014; Hove & Anda, 2005; Teijlingen, 2014). Every participant agreed to be recorded, during both face-to-face and phone interviews. Participants were also asked if they had any questions before starting the interviews. The interviews were started by asking participants about what their business did and their specific role/s and responsibilities at work. At all times during the interview process, the interviewer attempted to be non-judgemental and sensitive, and the participants were allowed to talk freely and to introduce more ideas, opinions and comments. The use of leading questions, which may ask for a desired but inaccurate response, was also avoided (Lewis, 2009). Therefore it became important to minimise potential biases in this way. Efforts were also made to enhance the credibility of the research by sometimes asking repeated questions; to make sure there was no contradiction in the responses (Krefting, 1991). The following are examples of repeated questions:

- What specific benefits have the microblogging/blogging tool/s brought to the company?
- What are the uses of microblogging? (Uses you have experienced or perceptions of use)

The interviewer also showed her genuine interest in what the participants were talking about at all times during the interview (Hove & Anda, 2005). This was done through concentrating, listening carefully and nodding to the participants, paying attention, maintaining eye contact with interviewees and asking follow up questions (Hove & Anda, 2005).

All interviews, during the pilot interviews and interviews in the second stage of the study were guided by the interview plan (see Appendix 1). Using the plan, there was flexibility to prompt questions without having to follow a sequential order under each heading; rather, a conversational style was used and, where necessary, extra questions were asked. Conducting the interviews in this way, however, meant the interviewer had to pay more attention to make sure all themes stated in the plan, under each heading, were explored.

The first interview was conducted with 'IT-E-1' in mid-October 2012. The other interviews followed. The last one was carried out in mid-2013. The duration of the first interview was 67 minutes. Overall, the shortest interview was conducted in 35 minutes with 'SP-E-20' and the longest interview lasted for 90 minutes with 'CO-E-15'; the average time for an interview was around 45 to 50 minutes.

As time went on the interviewer felt more relaxed when conducting interviews. She had gained enough experience from the first two interviews to familiarise herself with the nature of interviews, to understand what was mainly required from the interviews, as well as having a clearer focus for the research. All these enhanced her confidence, made her feel more comfortable, and facilitated the flow of conversation. An argument can be made against the use of less-structured interviews, in that the conversation can potentially stray away from the main focus of the research. In order to avoid this happening, the interview plan was designed prior to conducting the interviews as a guide to ensure all the important and relevant aspects were addressed during the interview. Furthermore, despite the fact that the interviewer had been guided by the same plan and was intended for use during future interviews, each interviewee made their own interview unique, based on their experiences, thoughts and hence responses.

Once having conducted the interview, the researcher asked each participant whether, prior to getting in touch with them about the final results of the study, it would be possible to contact them if required; every interviewee accepted this. On the same day as each interview, an email was sent to all interviewees, appreciating their time and participation.

#### *3.5.4.1. Complimentary observation method*

The use of interviews was complemented by the adoption of a second qualitative method. Observations are usually carried out in combination with other research methods (Patton, 2001). In this study, observations complemented several face-to-face interviews. The researcher was unable to meet a number of participants for a face-to-face interview due to the time constraints of their working hours, so the interviews had to be conducted over the phone. Thus, the interviewer was unable to carry out observations in these interviews. Although the uses of microblogging was observed in five organisations, most interviews were conducted in a room where other employees were also working, and so the interviewees decided it would be best to move away from the computer. A number of participants also preferred to move to another room for the interview, so overall the interviewer was unable to observe the use of microblogging as much as was initially intended.

Observations “provide a check on what is reported in interviews, interviews on the other hand permit the observer to go beyond external behaviour to explore feeling and thoughts” (Patton, 2002, p. 306). According to Silverman (2006, p. 21), observations are used to directly gather information about a specific phenomenon or situation in a “naturally occurring context”. It is argued by Patton (2002, p. 262) that an observation is a “personal experiencing” of a particular setting, in order to better realise the problem at hand. However, this method needs to be combined with other methods, in order to capture the feelings, thoughts, intentions and perceptions of others.

During each interview, notes were taken to accompany short periods of observation. As stated by Creswell (2003, p. 188), the observer takes notes about the behaviour of the “observant”, i.e. the individual being observed. Notes were taken in an unstructured or semi-structured way, describing and explaining the person’s activities and behaviour. During the interviews, unstructured observation notes were collected related to the following:

- The office environment and how employees were situated around the room; whether they could see and hear each other, and speak across the room without having to use microblogging. This was important, particularly as the environment could affect the need to use microblogs. This data would be particularly useful for all of the research questions.
- Whether the environment could help identify the roles and responsibilities of specific employees during their day-to-day work. This information would be useful for all of the research questions.
- How easy it was for the interviewee to use microblogging and look for information: i.e. ease of use. This data would be particularly useful for three of the research questions: how was microblogging used, what risks were perceived with the use of microblogging and what actions were taken to manage the perceived risks.
- The ability to search for particular information and provide examples; for instance, one participant took a long time scrolling up and down the Yammer page, trying to find particular information which he mentioned during the interview. This information would be useful for three of the research questions: how was microblogging used, what risks were perceived with the use of microblogging and what actions were taken to manage the perceived risks.

Although the observation data has not been coded or directly reported, overall they helped the researcher to better understand how organisations made use of microblogging; observations influenced the analysis and some are mentioned in the findings chapters.

### 3.5.5. Recording of Interviews

In order to maintain *descriptive validity*, i.e. recording the exact words of the participants (Maxwell, 1996), each interview was recorded, with the permission of interviewees, using one digital audio recorder (Hove and Anda, 2005; Bryman, 2008; King & Horrocks, 2010) and her mobile phone. According to Bryman (2008, p. 443), “this procedure is important for the detailed analysis required in qualitative research and to ensure that the interviewees’ answers are captured in their own terms”. The advantages of using audio recorders include increasing the richness of details and having a more accurate interview report, in addition to losing less information (Hove & Anda, 2005) than when taking notes. Moreover, during data analysis the interviewer had



accurate data (Hove & Anda, 2005) from which she could quote exact and specific examples. However, it can be said that the use of audio recorders can have disadvantages, such as the danger of not taking notes to check if all questions have been answered; and, in the case of audio recorder malfunction, i.e. not recording conversations properly and clearly, or in cases where the recorder runs out of battery. To overcome these disadvantages, the interview plan was used to make sure all the important questions were asked during the conversation. Also, in case of audio recorder malfunction, each interview was test-recorded prior to the interview, and each conversation was also recorded using the interviewer's mobile phone.

A further disadvantage of audio recording interviews is the issue of time and energy. For example, one hour of tape recorded interviews is said to take about eight hours to transcribe (Hove & Anda, 2005). According to Hove and Anda (2005) this is time-consuming in nature, and recording equipment smooths the process of transcribing or making summaries, in comparison to other methods, and without such equipment the time needed for transcription and data analysis can in fact significantly increase (Hove & Anda, 2005). For this research all the statements made by interviewees during the interviews were recorded from the start to the end of the interview, and transcribed by the researcher herself. Moreover, the recordings also enabled the interviewer to gather more information about the participants which could become useful during data analysis. For instance, the participants' strong and confirmative tone of voice could be used to indicate whether they were sure about their responses, or whether they might be guessing, due to a questioning tone.

### **3.6. Data Analysis**

The focus of this section is on the analysis of qualitative data. According to Bogdan and Biklen (2007, p. 159) data analysis implies "working with the data, organising them, breaking them into manageable units, coding them, synthesising them and searching for patterns". In broad terms, there are three types of qualitative data analysis: content, thematic and theoretical (Braun & Clarke, 2006). If content analysis is applied, categories would be developed and statistical analysis would follow, to systematically examine what contents appear in the data set (Hambrick et al., 2010; Hsieh & Shannon, 2005; Ma, 2013; Mayring, 2000); in this study it would be examining what content users actually place on microblogs. Using thematic analysis, also known as deductive analysis (Patton, 2002), the focus is on units of data, such as the number of

words, sentences or paragraphs which refer to a concept, and the generation of a particular ‘code’ would then follow. These are then extracted and examined with more care, for generating new and refined themes. Theoretical analysis, also known as inductive analysis (Patton, 2002), involves testing theories which emerge against those which exist in the literature, or conducting further analysis of data. In order to answer the research questions, there is a need to generate new and refined themes, i.e. in this study to find the specific benefits and risks of using microblogging in organisations.

Having selected thematic analysis, this section describes the process of data analysis. Although after conducting and analysing the pilot interview, a few changes were made to the questions prior to initiating the second stage of the study, the same rationale was used for data analysis throughout the research. The analysis of pilot interviews:

- Was driven by the interviewer’s interest in answering the research questions, set before the interviews.
- Aimed to help the interviewer by starting the analysis process early on in the study in order for her to continue refining the data collection methods and improve data collection skills, i.e. to gather more quality data.
- Wanted to refer to specific themes which represented the ‘core meaning’ of what the interviewees expressed during the interview, in regards to the phenomenon under investigation.
- Prepared the interviewer to correctly conduct thematic analysis, which is a core and widely used qualitative analysis method (Braun & Clarke, 2006).

The rest of this section will provide details about the analysis of interviews. Section 3.6.1 introduces and describes thematic analysis and, in Section 3.6.2, information is given about how the analysis was conducted.

### **3.6.1. Thematic Analysis**

In order to analyse qualitative research, a basic approach is to review the data and identify themes (Braun & Clarke, 2006; Bryman, 2008), which constitute building their ‘core meaning’ (Patton, 2002, p. 453). Thematic analysis has been viewed as a “foundational method for qualitative analysis” (Braun & Clarke 2006, p. 78) and it is popularly used in interpretive studies. Braun and Clark (2006, p. 79) further define thematic analysis as a method “for identifying, analysing and reporting patterns (themes) within data.” These themes are developed after constantly reading and

checking the data transcript (Bryman 2008). It has been suggested that thematic analysis can be viewed as a ‘realist method’, due to the reports being based on the interviewees’ personal experiences, meanings and realities. This type of analysis can also be regarded as a ‘constructionist’ method, by examining how factors such as events, facts, meanings and occurrences influence the different discussions taking place in society (Braun & Clarke, 2006). Thematic analysis is driven by two approaches; inductive and deductive (see Section 3.3).

In the literature there are many approaches to conducting thematic analysis (King & Horrocks, 2010). For example, adapted from Boyatzis (1998) and Crabtree and Miller (1999), six phases were developed for coding data. Phase one involves making the code handbook or guide. For them, in any research, the option of having a code handbook is vital, as it serves as a data management system for arranging parts of alike or associated extracts or words. This facilitates the interpretation (Crabtree & Miller, 1999), thus it affects the research credibility (Fereday & Muir-Cochrane, 2008). Phase two tests the reliability of the code. An important point is to establish the relevance of the code to the unprocessed data (Boyatzis, 1998). At phase 3 the investigator summarizes data and identifies emerging themes. The action of outlining every component of data places information “into your unconscious, as well as consciously processing the information” (Boyatzis, 1998, p. 45). The procedure includes going over and paying attention to, as well as outlining, the raw data (Fereday & Muir-Cochrane, 2008). At phase 4, the researcher applies the codes from the code handbook to the extracts or words in order to recognise meaningful components in the texts (Fereday & Muir-Cochrane, 2008). Analysis of the text can be lead, but not restricted by the initial codes. While coding the transcripts, inductive codes can be allocated to pieces of data that explain a recently discovered idea (Boyatzis, 1998). The codes can be either considered to be different from the established ones, or, by referring to the handbook, the codes can be expanded (Fereday & Muir-Cochrane, 2008). During phase 5, the researcher begins to connect the codes and identify themes. This is to determine themes and patterns in the data (Crabtree & Miller, 1999). Here, similarities and differences among disconnected categories of data begin to emerge, designating regions of agreement in regards to the research questions and regions of possible disagreement. Themes inside every data category also start to come together and dissimilarities start to be recognised (Fereday & Muir-Cochrane, 2008). Phase 6 is about corroborating coded themes. The themes that were already recognised from the coded text are clustered. The phrase corroborating

explains the approach of affirming the results (Crabtree & Miller, 1999, p. 170). The following section discusses the chosen approach for conducting thematic analysis in this research (Braun & Clarke, 2006).

### **3.6.2. Conducting the Analysis**

Braun and Clarke (2006, p. 87) have developed a ‘6-phase guide to performing thematic analysis’. This guide has been selected for this research and it will be introduced in this section. The reason for selecting this method was that it is one of the most cited approaches to conducting thematic analysis. Also, Braun and Clarke (2006) provide detailed, step-by-step instructions for conducting the analysis. These phases are “*Familiarising yourself with your data*” (Section 3.6.2.1); “*generating initial codes*” (Section 3.6.2.2); “*searching for themes*” (Section 3.6.2.3); “*reviewing themes*” (Section 3.6.2.4), “*defining and naming themes*” (Section 3.6.2.5), “*producing the report*” (Section 3.6.2.6). It is important to highlight that analysis is not a ‘linear process’, but more of a ‘recursive’ one (Braun and Clarke, 2006). Therefore these phases were not always followed in a specific order; rather iteratively the researcher moved back and forth throughout the phases and across the empirical data, as required (Braun & Clarke, 2006, p. 16).

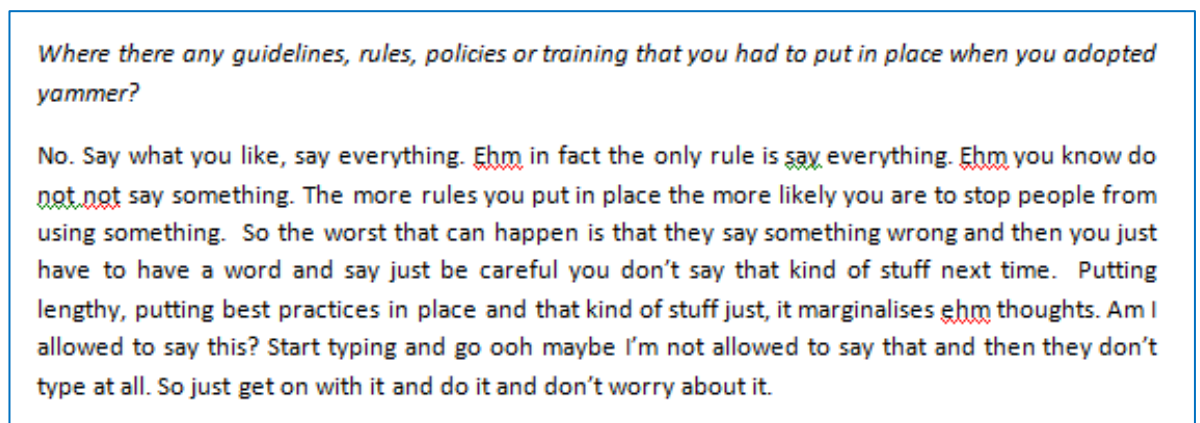
#### **3.6.2.1. Familiarising yourself with your data**

According to Braun and Clarke (2006, p. 35) this is the first phase, “transcribing data (if necessary), reading and re-reading the data, noting down initial ideas”. Prior to carrying out the interviews, the researcher began familiarising herself with the literature and previous studies in this area of work, conducted by other researchers (King & Horrocks, 2010). This literature led to the design of two frameworks, about the uses and risks of microblogging. As a result, prior to conducting the interviews, some understanding had already been gained regarding the type/s of data which would be expected to emerge from the interviews. The researcher personally conducted all the interviews and transcribed them into written form using Microsoft Word. This guaranteed more accuracy and rich data, i.e. as the interviewer was familiar with the interview contents and she could refer to her notes from the interviews, whilst transcribing the conversation. Familiarisation with the data was continuous during the interviews and the transcription process. Each interview was transcribed more than once and then each one was listened to several times to check for accuracy in the transcript (Hove & Anda, 2005; Bryman, 2008, p. 443), i.e. to make changes or to add details which may have been left out the first time round. After the first interview, the process of transcription

became slightly faster, due to the experience gained during practice. The process of transcription, while it can at times be frustrating and time-consuming (Braun & Clarke, 2006), is nevertheless an excellent way to achieve a better understanding of and to become more familiar with the data.

Moreover, during the process of transcription, the interviewer organised her notes clearly and had a standard style that she followed for presenting the transcripts; the interview questions were presented using a different style of writing to the responses. Figure 3.2 below represents part of the transcription from the interview with 'IT-M-2', showing the style used for presenting the question and response. This method was also found to be useful when comparing participants' responses to the same question at a later stage.

To familiarise herself with the data, the interviewer read and re-read the interview transcripts in order to gain a holistic sense of the collected empirical data. Each transcript of interviews led the researcher to generate a list of themes and to start noting down ideas to help with coding later on (Braun & Clarke, 2006). These notes became useful during the analysis stage, and helped remind the interviewer about relevant aspects and ideas that she may have otherwise missed or neglected.



*Where there any guidelines, rules, policies or training that you had to put in place when you adopted yammer?*

No. Say what you like, say everything. Ehm in fact the only rule is say everything. Ehm you know do not not say something. The more rules you put in place the more likely you are to stop people from using something. So the worst that can happen is that they say something wrong and then you just have to have a word and say just be careful you don't say that kind of stuff next time. Putting lengthy, putting best practices in place and that kind of stuff just, it marginalises ehm thoughts. Am I allowed to say this? Start typing and go ooh maybe I'm not allowed to say that and then they don't type at all. So just get on with it and do it and don't worry about it.

**Figure 3.2: Part of transcript from interview with 'IT-M-2'**

### **3.6.2.2. Generating initial codes**

This is the second phase, and it involves “coding interesting features of the data in a systematic fashion across the entire data set, collating data relevant to each code” (Braun & Clarke, 2006, p. 35). The coding process is in fact considered to be part of the analysis, where the data is organised into meaningful groups (Braun & Clarke, 2006). Different phases were undertaken to generate the initial codes.

Also, the interviewer attempted to select the most appropriate qualitative data analysis program for coding, from which NVivo was selected for this study, as it is known as a qualitative data management software program (Li & Seale, 2007). NVivo was used for coding the interview data. This decision was made based on the value of use of Computer Aided Qualitative Data Analysis Software for larger corpuses of textual data (Lewins & Silver, 2004).

A set of open codes were first generated, based on the first interview. Notes were also made about emerging themes that could be recognised, and how they might relate to each other. The codes were developed using pen and paper only, in Microsoft Word. This process was checked and changes were made three times, before coding in NVivo, i.e. working iteratively with codes to improve them over time. This process helped the researcher gain more knowledge and understanding about coding. Based on the interview with 'IT-E-1' a list of 168 initial codes was produced. The coding for the second interview was developed in the same way and 89 new codes emerged. The codes consisted of the features, uses and risks of microblogging, actions taken to help manage the tool/s, in addition to information such as company details, customer information, participant's role in the business and the process of microblogging adoption. For each code that was developed, a brief definition was also created to ensure consistency in the coding process, to keep the meaning of the codes clear, to know what each code represented and to help avoid vague and repeated codes.

The rest of the interviews were coded straight into NVivo. When coding the interviews in NVivo, the researcher differentiated between the sectors of IT, Consultancy and Sports. For the Consultancy interviews, firstly the word "Consultancy" was placed before the name of each code. Similarly, when coding the Sports interviews, the word "Sports" was placed before the name of each code. For the IT interviews, a name was given to the codes only. This way the researcher could identify which field of work the codes were from. The researcher revised the long list of codes, in order to ensure the initial structure of codes was appropriate and to reconsider choices. The list of codes was then separated by sector, and three separate files were developed. This was done by exporting the list of codes into Microsoft Excel and then creating three separate Excel files, one for IT, Consultancy and Sports. Looking at each file separately, the codes were constantly compared to each other to identify similarities, differences and general patterns. Some sections of text were in fact allocated multiple codes. Some codes were fully replaced and put under a different code. New codes were also created, in addition

to a few codes overlapping or having the same/similar contents. In the latter case, they were carefully revised by reviewing their definitions, and considering the specific segments. For those codes a decision was made to keep them separate or merge them.

### ***3.6.2.3. Searching for themes***

According to Braun and Clarke (2006, p. 35), searching for themes is the third phase of analysis. This process consists of “collating codes into potential themes, gathering all data relevant to each potential theme”. At this stage, all the data had been coded and collated, and various codes were identified based on the data set. Attention shifted towards exploring the different codes and sorting them into possible themes (Braun & Clarke, 2006; King & Horrocks, 2010). Firstly, themes were searched for from the IT interviews; by focusing on the Excel file which represented the IT interviews. It was found that reviewing the empirical data several times stimulated thoughts and allowed for the exploration of potential themes. In addition, during phase 1, “familiarising yourself with your data”, a list of initial ideas for themes were noted down (Braun & Clarke, 2006) and they were used at this stage for early ideas for developing themes. A number of initial codes were used for forming the main themes, whereas others were considered as sub-themes. A few repeated codes were also completely deleted and discarded. Several codes also did not seem to belong anywhere and a new, temporary theme was created. The codes with potential themes were checked over time, until the best and most appropriate theme was considered for these codes (Braun & Clarke, 2006). The same process was repeated for the Consultancy and Sports interviews.

### ***3.6.2.4. Reviewing themes***

This is the fourth phase and it examines the themes associated with the coded extracts (Level 1) and the whole data set (Level 2), creating a thematic ‘map’ of the analysis (Braun & Clarke, 2006, p. 35). At this stage, a number of themes are fitted with each other, such as two separate themes coming together to form one theme. There were also a few themes which had different content and required breaking down into separate themes. According to Braun and Clarke (2006, p. 20), this stage consists of two levels: to review and refine the themes. When reviewing themes, there is a need to read all collated extracts for each theme, and consider whether a coherent pattern is formed. If this was the case, the themes were then refined. However, if the researcher was unable to move on to this stage, she re-considered the themes; i.e. reviewed them to see if new ones should be created and whether they needed to be replaced, or ignored and deleted from the analysis. She considered the validity of each theme in relation to the data set,

and whether the thematic map ‘accurately’ showed the meanings evident in the data set (Braun & Clarke, 2006, p. 21). All codes which were identified as sharing similar themes were grouped closely together in Microsoft Excel and this process helped categorise themes and led to a better understanding of the data.

The researcher analysed the data of different sectors of IT, Consultancy and Sports separately and then put them together. Firstly, from the IT interviews, visual representations were developed based on the types of themes which emerged from the data. This was in regards to the uses, risks and types of actions taken to manage risk. The researcher then focused on the Consultancy interviews, by looking at the Consultancy Excel file and repeated the same process of identifying themes. The themes which emerged from the Consultancy interviews were added to the visual representations already developed, to see if different themes could be identified between the two sectors of IT and Consultancy. The same process was also carried out for the Sports interviews and the themes were added to the visual representations. It was found that no new themes were found from the Consultancy or Sports interviews, which had not already been identified from the IT interviews. This process helped to ensure the researcher that theoretical saturation was reached and that the analysis was confirmed with the other samples.

#### ***3.6.2.5. Defining and naming themes***

According to Braun and Clarke (2006, p. 35), this is the fifth phase and involves an “ongoing analysis to refine the specifics of each theme, and the overall story the analysis tells; generating clear definitions and names for each theme”. At this stage the researcher defined and refined the themes more, illustrating the importance of each theme and what they meant (Braun & Clarke, 2006).

#### ***3.6.2.6. Producing the report***

This is considered the sixth and final phase and is “the final opportunity for analysis. Selection of vivid, compelling extract examples, final analysis of selected extracts, relating back of the analysis to the research question and literature, producing a scholarly report of the analysis” (Braun & Clarke, 2006, p. 35). The analysis was written to convey the story of the data, and convince others about its merit and validity (Braun & Clarke, 2006).



### 3.7. Research Quality

Having adopted an approach based on naturalistic inquiry (Golafshani, 2003), this study has been defined as having an interpretive character. Different research paradigms and methodologies have their own criteria for ensuring and evaluating quality of work (Krefting, 1991; Guba & Lincoln, 1994). This section will introduce the specific criteria which have been considered appropriate for evaluating this study. Terms such as ‘validity’ and ‘reliability’ are often applied to assess the quality of research. These terms are appropriate to this study and they are discussed in the following parts of this section.

#### 3.7.1. Validity of research

According to Bryman (2008, p.32), in many ways the main criterion of judging quality in a study is validity. “Validity is concerned with the integrity of the conclusions that are generated from a piece of research” (Bryman, 2008, p.32). Creswell and Miller (2000, p. 124) have defined validity as “how accurately the account represents participants’ realities of the social phenomena and is credible to them”. According to Creswell (2007), ‘validation’ in qualitative research is an “attempt to assess the ‘accuracy’ of the findings, as best described by the researcher and the participants” (Creswell, 2007, p. 206). Guion et al. (2002) view validity in qualitative research as being concerned with two concepts in regards to the findings; “truth”, as to whether the findings accurately reflect the situation, and “certain”, for whether any evidence is provided.

Creswell and Miller (2000) and Creswell (2007) stated that, in order to ensure quality in a qualitative study, researchers needed to employ one of a number of approaches (Creswell & Miller, 2000, p.124; Creswell, 2007, p. 209). The validity procedures are *prolonged engagement in the field, disconfirming evidence, triangulation, the audit trail, peer debriefing, researcher reflexivity, collaboration, member checking, thick rich description and external audits* (Creswell & Miller, 2000, p.126; Creswell, 2007, p. 207).

For the purpose of this research, the criteria have not been blindly followed or applied in a mechanistic fashion, but rather at the judgment and discretion of the researcher. The criteria which relate to this research and are appropriate to achieve quality in this study have been considered. *Peer debriefing, audit trail and researcher reflexivity* have been applied to this study and they are discussed in the following parts of this section.

One of the procedures used to ensure validity in this research was ‘peer debriefing’. The research process was continuously checked by the supervisor (Creswell, 2007, p. 208; Lincoln & Guba, 1985). The investigator and the supervisor discussed the methods, definitions and interpretations of interview data. Lincoln and Guba (1985, p. 308) define the responsibility of the peer debriefer as a “devil’s advocate”, someone who tries to keep the investigator truthful; asking difficult questions regarding methods, definitions, as well as interpretations. By applying peer debriefing to the study, it will ensure the investigator has gathered valid information.

Also, in this research an ‘audit trail’ was used (Creswell & Miller, 2000, p. 128), which involved precisely documenting all notes and keeping track of the decisions made and activities conducted during the research process. For example, details were kept about how transcriptions were analysed (King & Horrocks, 2010; Lewis, 2009). The audit trail enables any observer to follow the study step-by-step via the choices made and methods reported. They can then consider whether they think the study has been carried through in an appropriate manner.

Another procedure used to ensure validity in this study was ‘researcher reflexivity’. Among the different strategies which became relevant in this research, a critical and reflective attitude was developed (Creswell & Miller, 2000, p. 127). The role of the researcher was discussed and any possible biases considered, along with the possible effects she may have had on the phenomenon under investigation (Creswell & Miller, 2000; Malterud, 2001; Krefting, 1991). An attempt was therefore made to acknowledge the importance of reflexivity and to recognise that her social identity, background, experiences, preferences and biases may have impacted on and influenced the research process (Malterud, 2001).

Reflexivity is “an attitude of attending systematically to the context of knowledge construction, especially to the effect of the researcher, at every step of the research process” (Malterud, 2001, p. 484). There was a need to minimise the possibility of bias “in the sense of undesirable or hidden skewness” being accounted for (Malterud, 2001, p. 484), when interpreting the data. In terms of maintaining the trustworthiness of the research, it was important for the researcher to consider any biases of the findings (Krefting, 1991; Maxwell, 1996) and to maintain confirmability (Krefting, 1991), especially as the researcher was the only person who conducted the interviews. The

interviewer could have been influenced by her past experiences and knowledge when observing the use of microblogging during the interviews, and when conducting the analysis, which could in return have affected the observation notes, the interpretation of data and influenced the overall findings. In terms of analysing data, ideally it would be best for this to be carried out by more than one researcher to minimise bias (Silverman, 2006). However, as this study was undertaken as part of a PhD, only one researcher was involved. Therefore the following methods have been considered, in terms of overcoming bias: all the data has been re-checked several times, and the researcher continuously discussed the data with the supervisor to minimise bias in in-depth discussions about how she was coding the first few interviews, for instance, and later providing specific examples to illustrate how the themes and sub-themes emerged from the data. In addition, the impressions gained through the observation notes were continuously checked against the interview data. By continuously looking at the data and the interpretations, reflexivity can be maintained (Malterud, 2001). Care was taken to ensure that the results which were presented were truly representative of the views expressed and that quotations were used from different interviewees.

### **3.7.2. Research Reliability**

Reliability refers to replicating a study (Bryman, 2008) and “whether a particular research technique will yield the same results if applied repeatedly to the same object” (Lewis, 2009, p. 7). Therefore a study is considered reliable if the results can be repeated by other researchers (Lewis, 2009). In order to ensure the reliability of this study, records of interviews and observation notes were maintained and the following were documented in detail: the research design and its implementation, the processes and procedures involved, and all the methods used. For example, the report discussed how research participants were selected, how many interviews were conducted and using which types of interviews. It was reported that NVivo was selected as the software for analysing the interview data. The report discussed the process of conducting the analysis. It was explained that the researcher first familiarised herself with the data, she created initial codes, searched for themes, reviewed themes, defined and named themes and produced the report. By explaining precisely how everything was carried out, the in-depth coverage enables other investigators to conduct the research, using the same methods, measures and techniques. It also allows people to consider whether they think the research has been carried through in an appropriate manner.

### 3.8. Ethical Considerations

Since studies involve working with human subjects, researchers in the field of social science face ethical issues (Bryman, 2008; Fritz, 2008) and have to consider a number of principles. According to Fritz (2008, p. 5) it is important to ensure that participants:

- Understand the purpose of the study they are being asked to participate in;
- Are aware of who will see their responses and the potential risk/s involved, (such as revealing their responses) as a result of participating in the research, if any;
- Understand the advantages that might accrue to them as a result of taking part;
- Feel free to decide independently, without fear of negative consequences.

In this research, initially, in March 2012, the ethics application forms were submitted to the Ethical Committee (Li and Seale, 2007) of the Information School of the University of Sheffield. Ethical approval for the study was granted six month later (see Appendix 5).

Prior to each interview all participants were informed about the purpose of the study they were being asked to take part in (Fritz, 2008), via a copy of the 'Participant Information Sheet'. This explained and described the study in depth. Details included the aim and methodology of the research; the potential advantages and risks of taking part (Fritz, 2008); the freedom to make any decisions independently (Fritz, 2008); the duration of interviews; and the types of questions which would be asked, in addition to strategies to be used for data storage and analysis, all of which would guarantee the anonymity and privacy of participants. The participants were also made well aware of who would see their responses (Fritz, 2008). This sheet was emailed to participants a few days prior to the interviews and a hard copy was also provided on the day of the interview (for face-to-face participants). At the start of each interview, the participant was also informed of their right to withdraw at any time and assured that all responses would be treated in confidence and kept private (King & Horrocks, 2010; Longhurst, 2003). *Informed consent* was obtained from all interviewees (Fritz, 2008; King & Horrocks, 2010), where they signed two copies of the 'Consent Form', the participants receiving one copy and the interviewee keeping the other for the record. For phone interviewees, the consent form was emailed to the participants, and they were asked to email it back to the interviewer, having signed and completed the form. In order to reassure the interviewees about confidentiality, for them to freely express their thoughts

and opinions throughout the conversation, the issue of strict confidentiality and privacy were reiterated when needed (King & Horrocks, 2010). This was critical, given that all interviews were audio recorded and, prior to starting each interview, permission for the audio recording the conversation was sought, which every participant, in both face-to-face and phone interviews, agreed to. Once each interview was conducted, all empirical data was placed in a secure, password-protected folder; the interviewer was the only person with access to this folder. It was decided from the outset of the study that the identity of interviewees would not be disclosed.

### **3.9. Summary and chapter overview**

This chapter first discussed different research philosophies. The three approaches to research were introduced, as well as the main features of this study and a definition of the research as an interpretive one, adopting the naturalistic approach. By providing the rationale for adopting a qualitative methods approach, relevant decisions were made as the study evolved; i.e. introducing and explaining the different stages of the research.

The practicalities of the research were explained, in addition to justifying and describing the processes and methods for data collection. As the current study has relied on interviews, details about the data collection process were offered. The selection of participants has been specifically described for both the first and second stage of the study. Each interview was supported by a developed interview plan, which was made ready prior to conducting the face-to-face pilot interviews. Throughout the interviews, a conversational mode was privileged; the plan was used to ensure that relevant aspects were discussed during the semi-structured interviews. In terms of the process of data analysis, a detailed description was provided, in order to make this important research process transparent. To conduct the analysis, the analytical procedure introduced by Braun and Clarke (2006) was followed; the ‘6-phase guide to performing thematic analysis’. The aim was to illustrate the detail and care that went into ensuring a systematic data analysis process. At this stage, there was a need to regularly review the empirical data from the interviews, to ensure high quality analysis took place.

An important section in this chapter is the one on research quality, which provides details regarding the criteria which have been introduced for ensuring and evaluating this aspect of the study. A series of strategies have been followed to meet these criteria thus: to meet the ‘validity’ criterion, ‘peer debriefing’, ‘audit trail’ and ‘reflexivity’ strategies were applied; and to ensure ‘reliability’, the research design and its

implementation, the processes and procedures involved, and all the methods used were documented, allowing future researchers to conduct the study, using the same methods, measures and techniques. To conclude, this study has been carried out using a naturalistic research paradigm. The methodologies employed have been selected in response to the existing literature in this area of work.

## CHAPTER 4: Uses of microblogging

### 4.1. Introduction

In previous chapters the current literature has been reviewed, the need for this research has been identified and the methodological approach has been discussed. This chapter presents an analysis of the interview data collected in 2012/2013, focussing specifically on the uses of microblogging. The analysis of the interview data on the risks of microblogs and what the participants suggested their organisation did, or thought organisations should do to mitigate risk are presented in the next chapter. The focus of this chapter is to answer the first and second research questions:

1. What was the process through which SMEs adopted microblogging?
2. How was microblogging used?

The chapter is organised as follows. Section 4.2 discusses the process of microblogging adoption in SMEs. In the next part of this chapter, the uses of microblogging are examined (Section 4.3). Section 4.4 discusses the internal and external uses of microblogs, based on participants' views and in Section 4.5 the specific internal uses of microblogs are examined. In the next part of this chapter, the external uses of microblogs are discussed (Section 4.6), before giving an overview of the uses of microblogging in SMEs as perceived by participants (Section 4.7). In Section 4.8 the key features of microblogging that influenced its use are examined. Section 4.9 discusses what the interviewees thought were the alternative methods of communication used within SMEs. Section 4.10 presents the chapter overview.

### 4.2. Process of microblogging adoption in SMEs

This section discusses what interviewees said about the adoption of microblogging as a process. The majority of participants talked about this process. Regarding Twitter, 'IT-D-4' said:

*“There were no objectives. It was we'll see what happens with it [...] It was part of the discussion in a meeting with the directors, I'm one of the four, we discussed it but it was my decision. So I said 'shall we give this a go?' Yeah so there were four people in the meeting and we had a chat about it.”* (IT-D-4)

Most interviewees talked about adopting microblogging by a process of trial and error, rather than a formalised way of evaluation and adoption. 'IT-D-4' said that he made the decision to adopt Twitter, for business purposes, because of his status within the organisation. However, the participant thought that his decision was influenced by what other senior staff members said about microblogging.

Many interviewees thought that because of their background in IT, they should keep up to date with the latest technology and adopt microblogs. For example, 'IT-D-4' said:

*"We literally adopted it because we thought we are a technology firm, we probably ought to stay in front of all these things and you need to bag your company name and things like that, before anybody else does. So when they come out we tend to jump on these things straight away and then we see how the usage goes from there [...] So we tend to run around grabbing everything we can in our own name. And plus if one of them actually really takes off and actually really works this kind of thing, we'll already have it."* (IT-D-4)

Another interviewee said:

*"I had forgotten about Yammer and then it wasn't until, I think I probably had a shower moment. Techies generally have light bulb moments in the shower and I was like huh Yammer! I remember reading about that and I remember disregarding it. I thought we should give it a go. And so it came about and we gave it a go and it started quite slowly because you know some people are sceptical still. Well not still but you know that people are going to be sceptical about taking on a tool, when actually opening themselves up a little bit more [...] I created everyone a username, here's your username, feel free to start using it. We will give it a go and see how it goes. If it doesn't work it doesn't work we will stop using it. And it was slow, but me and another manager, we started straight away and then it's one of those things that everyone's a bit competitive, they see other people doing something. Then they start to get a bit intrigued. And they start to slowly open themselves up [...] So you've kind of got to get over that period of acceptance and yeah they have now. I mean there's till one person who is kind of not engage with it as much as everybody else, but you are going to get the odd person that doesn't anyway [...] Now actually I think overall it's been pretty successful."* (IT-M-2)

The participant thought that because of their background in IT, they are always looking to adopt new technologies. The interviewee talked about adopting Yammer in an informal way and not everyone saw its benefits to begin with. However, over time most staff members started to use it for business purposes.

Another participant said:



*“I think we’ve always known about Yammer, but we just hadn’t consumed it until four months ago [...] We were using another product previously which was Forum based and we needed something that was better. So with Yammer we thought let’s give it a go now and as soon as we put it in place, it got consumed really quickly [...] It took two minutes. There’s not a lot to it, so it’s fairly straight forward to pick up, and we are an IT business, so we understand technology. Yeah so two minutes and you’re on your way [...] With Twitter it is good for mass marketing, we’ve known about Twitter for a long time and we’re an IT business, so we look for technology that’s out there [...] I would say I probably use Twitter more than others [...] Either I’ve done that or Lisa who is not in the office. She deals with the marketing as well.” (IT-M-3)*

This interviewee thought that because they work in the field of IT, they are aware of technologies and understand how they work. The participant thought that this helped them to easily make use of microblogging. ‘IT-M-3’ went on to say that due to the public nature of Twitter, he was one of the only people in the organisation who use it, to communicate with those outside of the organisation. Yammer, however, he said was used by many colleagues, to communicate with each other within the organisation.

A few interviewees said that people outside of the organisation influenced their decision to adopt microblogging. Participants thought that because others in their field of work are using microblogs, they should too.

*“We got an account and started to use it because I said so [...] I suggested to one of the teams to get an account and we started using it. It was not a decision that was made based on anything else we were seeing from other competitors or anything, I just thought let’s do it because I already knew about it.” (IT-M-12)*

The participant said that the decision to adopt microblogging was driven by seeing other people use it.

*“My boss at the time sort of thought maybe we should be doing it. And we weren’t sure but we set it up because he had seen other people and thought maybe we have to, so we thought maybe we should give it a go.” (IT-M-10)*

Similarly another participant said:

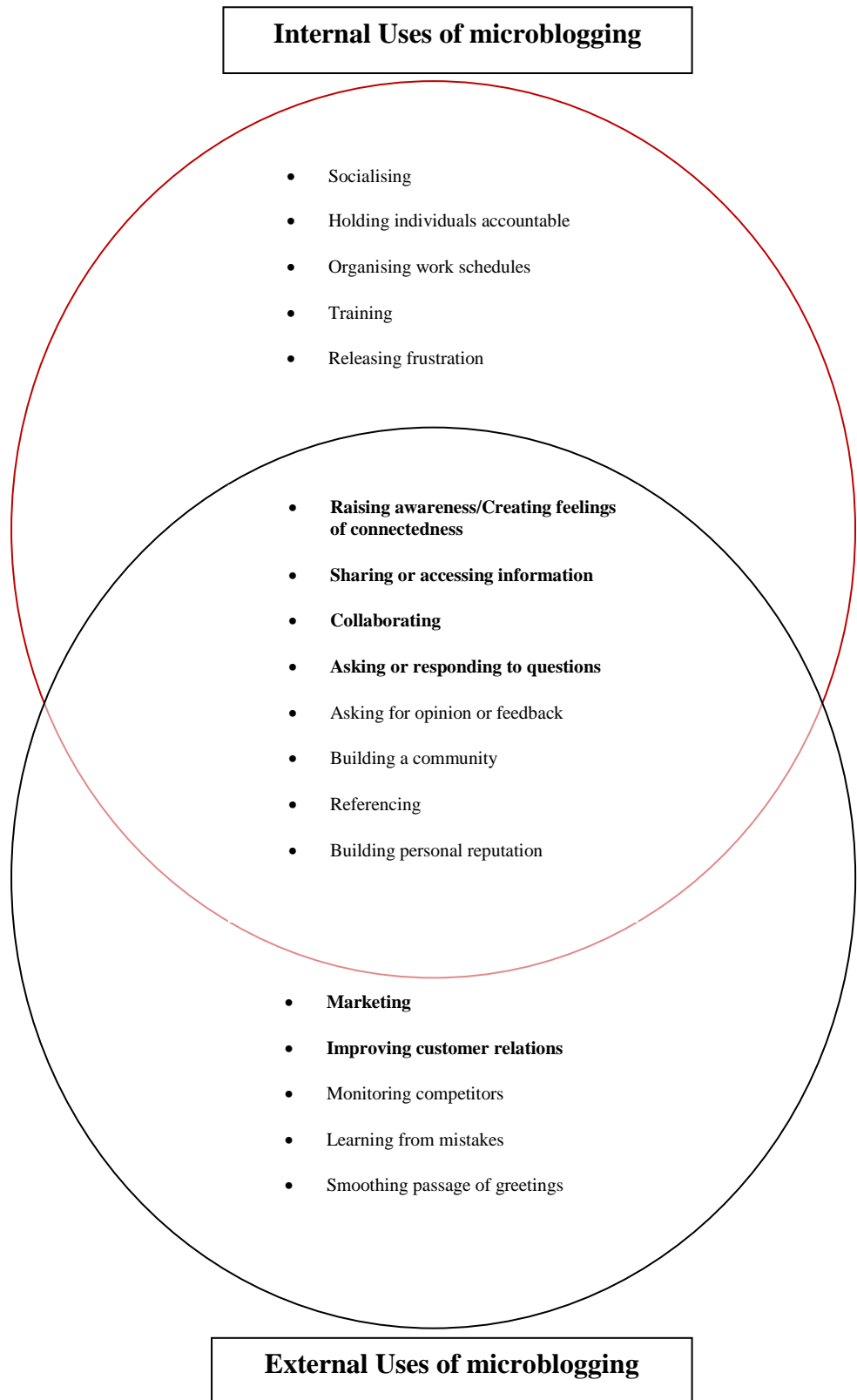
*“There are many companies on Twitter, I know lots of people that are coaching and they use Twitter [...] I know loads of football coaches that use Twitter and they always share their ideas and it is really good for the company. So we thought it is good for us to adopt Twitter and use it as well.” (SP-E-20)*

At the time of data collection in 2012/2013, participants said that they adopted microblogging through trial and error. The main individuals within the organisation

who used microblogs were the manager or director. This was mainly with external microblogging, Twitter, which was mostly used to interact with those outside of the organisation. With Yammer, which was used internally to communicate with staff members, some SMEs did sign up a wider group of employees.

### 4.3. Uses of microblogging in SMEs

This section explains Figure 4.1, a visual representation of what participants said about how they used microblogs. The information on Figure 4.1 appears in the order of importance, as mentioned by participants. Some of the information appear in bold, to show that many respondents talked about them. The diagram shows two overlapping circles and it is divided into three sections. This is so to clearly represent the different types of uses. The overlapping area shows what was found to be the common internal and external uses of microblogs; how the participants thought the platforms were used to communicate with colleagues and with those outside of the organisation. The top part of the first circle represents what the participants found to be distinct internal uses of microblogs; how the interviewees thought microblogging was used to communicate with colleagues. The bottom part of the second circle shows the uses of external microblogs, as identified by interviewees; how the participants thought Twitter was used to communicate with people outside of the organisation, such as customers and clients. Figure 4.1 shows that the commonest types of internal and external uses of microblogs mentioned by interviewees were to raise awareness and create feelings of connectedness. The participants thought that microblogging was also commonly used to share or access information. The platforms were also used for collaboration, asking or responding to questions, asking for opinion or feedback, building a community, referencing and for building one's person reputation. Some participants used internal microblogging i.e. Twitter and Yammer, and a few of them identified their distinct uses. Internally, microblogging was said to be used for socialising, holding individuals accountable and organising work schedules. It was also considered beneficial as a training device and for releasing frustration. Participants also talked about distinct uses of external microblogging, Twitter, and they are presented on the diagram, in the order of importance. Externally, Twitter was said to be used for marketing, for improving customer relations, monitoring competitors, learning from mistakes and smoothing passage of greetings i.e. helping to build networks.



**Figure 4.1: Visual representation of participants' views of the uses of microblogging**

## 4.4. Internal and External Uses of microblogging

The common internal and external uses of microblogs will be discussed in this section, based on participants' views. The uses are presented in the order of importance interviewees gave to them. Most participants talked about using internal and external microblogging to raise awareness and to create and maintain a feeling of connectedness with colleagues and with those outside of the organisation.

### 4.4.1. Raising awareness/Creating feelings of connectedness

The majority of participants said that microblogging is used for raising others' awareness; through microblogs colleagues and those outside of the organisation can understand what is happening inside the business. Most participants also said that they felt more connected with others as a result of using microblogs. These two uses were frequently mentioned together by participants and they needed to be treated as one category.

In regards to Yammer, the majority of interviewees thought that through this platform, everyone within the organisation could get an understanding of what others were working on, even those outside of their immediate team or group.

*“From a communication point of view, it’s all about I’m doing this, or I need some help doing this, or I’m talking to these people and I’m saying this to these people. For us, Yammer, the whole point of it is complete and utter transparency; i.e. everybody gets to see everything. And that way everybody is informed to the same level.” (IT-M-3)*

Another interviewee said:

*“It has made us feel more connected, I think that one of the benefits of Yammer is that in 2010 or maybe even into 2011, we were larger as a company. Yammer certainly enabled me as an individual to feel connected when I was working at home for days at a time. So I suppose it made us closer as staff members and meant that knowledge was flowing a bit more freely through the company [...] I come into the office once a week, or every two weeks, or sometimes less. If we were not using Yammer, some people here I might have only seen at the company meetings. So it was kind of a way for us to still be connected. So we were operating in a kind of a dispersed organisation and it enabled us to have a central point to interact with each other without using you know these emails that get longer and longer [...] Say if colleagues are seeing each other a lot more, you know if they are coming into the office more often, I can just imagine that it can be something that you can start to forget about.” (CO-E-15)*

The participant said that Yammer seems to work particularly well for people who are not in the same place. ‘CO-E-15’ thought that this was a common use of the platform in

their small organisation. The interviewee thought that feeling connected was really important because people were often located in different places, at least part of the time.

Similarly, another participant said:

*“I think the benefits of Yammer are it allows you to bring together a group of people with a specific interest within a virtual work space. It creates a virtual workspace and that is really important for people that are dispersed, to be able to collaborate but not actually physically have to travel. I think this is what Yammer tends to enable [...] We would do an update say oh I have added my bit in, I have worked on these objectives, have a look at that [...] Everyone gets a chance to have a look at it, update it [...] and someone else can look at it and work on the same document.”* (CO-D-17)

This participant also thought that Yammer works well to coordinate the work of people who are not in the same place. The director provided specific examples of the types of information employees can post on Yammer, to help raise awareness of others within the organisation. He went on to say that individuals can post updates about what they are working on, such as uploading and working on documentation.

Many participants thought that Yammer made businesses less hierarchical, by flattening the organisation and allowing more people within the organisation to share information and to voice their opinions. For example, ‘CO-D-16 said’:

*“People who would not otherwise bump into one another are able to have those conversations. It flattens the organisation and allows those conversations to take place [...] In terms of making people feel more engaged in the organisation that they are working for, thinking ‘well I have got a voice and I might have some ideas, I might be able to contribute to solutions, new ways of working’ [...] I think with Yammer with what I mentioned a second ago about hierarchy, I think that is quite interesting. Fascinating area actually if you think about it, because in some of these organisations you have got the chief executives to the cleaner having conversations as equals. And there is something really interesting going on there [...] I think I have seen something before, there is a bit of a permit around social media usage isn’t there, you have the people at the bottom who are kind of listeners and observers and then you have the people at the top who are the prolific engagers but yeah I think the hierarchy thing is good, it is about building a community.”* (CO-D-16)

The participant thought that Yammer allows people within the organisation to have conversations as equals. The interviewee said that conversations can take place horizontally across the organisation and people will feel more connected.

In regards to external microblogging also, the majority of participants thought that Twitter was useful for raising awareness and creating feelings of connectedness. This was found to be the commonest type of external use of microblogs.

*“You take a view of where the most interesting conversations are taking place and bearing in mind, our main client group is the government. And there is a lot of interesting local government conversations taking place, in particular on Twitter. It just seemed natural that that would be the platform that we would use [...] I think for us now as a business, it is very much about building a network and maintaining a network. Something for us around kind of credibility, so if we are going to be talking about digital innovation and new ways of working, we need to be present on platforms where conversations about those things are taking place.”* (CO-D-16)

This participant thought that Twitter works well for people who want to communicate with others in the same field of work. The interviewee thought that the platform is good for raising their awareness of wider conversations and raising others’ awareness of the organisation. Similarly, ‘CO-D-17’ said:

*“The reach with Twitter, I think it was that ability to kind of network and very quickly connect with other people, other like-minded individuals. And that provided you then with the confidence to explore it more widely.”* (CO-D-17)

Another participant also thought that Twitter creates awareness and it is a good method for maintaining interest in the organisation.

*“I see the main benefit is people being able to see what is going on, becoming aware of what is happening, or find out information quickly, easily and regularly. It is always there, they do not have to log on to our website, they can go on their phone and they can just scroll through Twitter and see what is going on or ‘oh yeah I forgot about that, I better do that. I have not registered yet, there is only a day left, I better do that’.”* (SP-M-18)

The interviewee identified that Twitter makes everything transparent and visible to everyone. This participant thought that Twitter works well for raising others’ awareness of the organisation. ‘SP-M-18’ thought that people can use Twitter from any location, and easily access information.

Another participant thought that although Twitter did not lead to direct business with people outside of the organisation, it helped them to feel connected with their colleagues and others.

*“I use it to connect with colleagues within our sector, people working on our projects [...] I think it enables us to be part of an eco-system. We are kind of plugged into all*

*these different sources of information and viewpoints that if we were not on Twitter and if some of my other colleagues were not on Twitter, how would you get that information? You would get it from maybe a few email lists that we are on which you know there are a few different ones that we are signed up to [...] I think the access to knowledge and the access to information help us stay connected and make new connections, we are building up relationships with people. I am not sure if that has led to any business contracts as such. You know there are certain people that I have met who I think kind of said to me, you should have a look at this person because they might be a potential, they might lead us to this market sector that we are interested in and then because they are doing work in that area, they might be a good person to partner with.” (CO-E-15)*

The participant thought that Twitter is good for accessing much useful information. Also that it is across a whole sector of work. The interviewee thought that this helps create feelings of connectedness between people.

Another interviewee said:

*“Someone I know who is relatively new in her job, working for a local legal firm. And you know she rightfully used Twitter to try and gain some local credibility and make some connections. That is exactly what I would have recommended to anybody coming new to a community, business or otherwise. As a result of that, I started talking to her on a couple of occasions, and I met her at an event a few weeks ago, where she said ‘oh I see you do Apps and it is something we are thinking about’. I did not think much of it at the time. And then I think about two weeks ago I said ‘oh by the way we can meet for coffee’ and we did. When I got to the meeting she actually had her boss with her and she said ‘I hope you don’t mind but we want to talk to you about Apps’. They said ‘look you know we really want to do something, how much does this cost?’ [...] From that we have got another meeting set up to brainstorm and to do some business. So you know that has been very much and it has not come through hard selling at all. I did not even realise until I got there for the coffee that they had actually wanted to talk business. So that could only have happened because there was an introduction through Twitter and we connected on that. They picked up on the credibility via what I was saying and ultimately I did my job when we met and turned it into some business.” (IT-D-8)*

‘IT-D-8’ thought that Twitter is a good place for people to meet and to make new connections. He thought that gradually a connection forms through a series of interactions.

#### **4.4.2. Sharing or accessing information**

The majority of participants talked about using microblogging to share information with others and find information themselves. These uses were so frequently mentioned together by interviewees, that they needed to be treated as one category. Most participants talked about using microblogging, both Yammer and Twitter, to share or

access information. In regards to Yammer, interviewees who used it said that it helped people who were continuously working to meet deadlines to access all of the information and events which were taking place at work.

*“With Yammer it’s about spreading the communication and the ease of use of doing it. It’s very good. And there is nothing quite like it for a corporate. [...] With Yammer they have got all the information at their fingertips. They just have to look and they have got all the information and the right decisions and do the right thing all the time. Most of the time, you are less likely to have moments where you go, well that is not what we talked about.” (IT-M-2)*

Participants thought that everyone is able to quickly and easily search through the Yammer page and find all the information that they need. ‘IT-M-2’ thought that Yammer helped to ensure that everyone agrees with what was planned to be done. The participant also gave specific examples of the types of information they shared on Yammer.

*“We upload screenshots for example, we have only just started to upload screenshots, documents to share.” (IT-M-2)*

The interviewee thought that Yammer was useful for sharing all sorts of documents and artefacts. So for computing work this could be very useful.

As well as using internal microblogging for sharing or accessing information, the majority of interviewees talked about using Twitter to share or access information with those outside of the organisation. For example, ‘IT-D-6; said:

*“We found out more information and we are an information company. So that is critical to our business [...] Finding out about open microscope. We probably would not have found out about projects, not something that is core knowledge and we might have found out about that through other channels [...] We found the open microscope projects by using Twitter. We had never heard of it before. There’s a great big open source project for analysing images coming off microscopes. And we have got a customer who wants that. So by finding out that we are able to go to that customer and say we can install this for you, that has been a bit of a win for us. So one of the biggest benefits is using Twitter to find out about things that we previously did not even know existed.” (IT-D-6)*

The participant said that they found out about some projects which they may not have found out about as early as they did, or not at all, if it was not for Twitter. ‘IT-D-6’ thought that Twitter has improved the organisation’s chances and ability of finding work.



Another participant said:

*“We’ve been using Twitter for real time monitoring for about a year. So we monitor tweets, targeted towards specific things. For example, going through a protest idea, people would be aware of the march that was going to take place. So they know the specific location. Obviously in any protest, people are not going to necessarily follow the rules. There will be some activity which could happen. I don’t know, some people might divert from the main march and go somewhere else. People start violence perhaps, or more media attention. So people could be aware of some activity that they’re not happy with, people could be taking a photo of this. Or people will be just tweeting about that and you can monitor the scale, you can use things like sentiment analysis to see how happy or sad people are about certain things. You can obviously do more on natural language processing to get more than just happy or sad. You can get a wider range of things [...] So Twitter’s got a good geolocation facility which only I think it’s only one percent of tweets use that. However, if you know the contexts of what you’re looking for, you can get the idea of the location. And if people are posting photos for instance, you can find land marks from that. And because it’s just the largest social media platform available and everything is public, it’s a very valuable tool to see what’s going on in the emergency response situation. So yeah the outcomes would be used within our applications. So as I said it could be focuses on intelligence and data mining and management of data. So it’s used for, in that contexts, it’s for just general aggregation and providing instant feedback to whoever would be administrating such a tool. So they can see the developments of an emergency in a live situation. So that’s the advantage of using Twitter and the Twitter stream and everything’s live. So you’re getting instant information which is up to date and relevant. We were using this, so we’re using Twitter streams and Twitter monitoring in custom applications, which are generally for private use. So we’re not publishing these things publically. It’s generally used for one or two small number of administrators who will be monitoring the activities that will be there for specific emergency, usually planned, or if not planned it will be shortly after it’s happened. So we’ve not had a situation like this, but if there was a bomb you could quickly set up the means to monitor the activities around that location, around the word bomb and other things, to see how the crisis was developing [...] For instance if you were an emergency response team you could see how the crisis was developing and where to focus your attention and send help, or organise people.”*  
(IT-E-7)

The participant thought that Twitter is good for mining a stream of data and looking for certain types of information. The interviewee said that for certain types of projects, there is a need to study how people behave in certain situations. He thought that Twitter is useful for this, because people can access relevant and up-to-date information.

‘IT-E-1’ talked about organising webinars on Twitter.

*“Specifically we may look for people that write a message like ‘oh, I’m really frustrated with this feature of the software’. Even if we didn’t provide the software there is a con*

*with other people and the user depend on it from us, if they say that they're really frustrated, that's some feedback for us to say maybe we should have a webinar on it, and if we do we can just apply the messages and say 'hey, on Wednesday at two join'.*" (IT-E-1)

The participant thought that when people use Twitter to share their feelings about a particular service or product, organisations can use this information to identify where problems lie and introduce solutions. This interviewee said that they identified what services people were unhappy about and organised webinars through Twitter.

#### **4.4.3. Collaborating**

Some participants talked about using microblogging to collaborate with others. It was found that internal microblogging, such as Yammer, was used more for collaboration, in comparison to external microblogging, Twitter.

*"Yammer is probably safe because of the kind of walled garden environment within which you are working [...] that is the primary advantage of using something like Yammer, you can have those safe conversations, so it is the sort of the ability to remotely collaborate, to work with partners and partner organisations, without having to just send things round as email attachments and that kind of thing."* (CO-D-16)

This interviewee considered one of the main benefits of Yammer is that it provides a safe environment that makes collaboration easier.

*"If we were going to work with people and collaborate around a project involving documentation, we would also use Huddle [...] With Huddle you can think of it almost as a document store, so you can upload numerous documents and then collaborate around those documents."* (CO-D-16)

'CO-D-16' thought that using internal microblogging, Huddle, confidential information about projects will remain safe within the organisation.

Another interviewee said:

*"So there would be normal updates, but then also the uploading and working on documentation. That in my mind is what collaboration on a document is. Everyone gets a chance to have a look at it, update it, let people know that you have updated it and someone else can look at it and work on the same document."* (CO-D-17)

This participant expressed the view that collaborating through microblogging is about colleagues contributing to a piece of work, together making suggestions and changes to one document.

A few participants talked about using Twitter, for collaboration.

*“We do have employees that contribute to different open source projects; actually it doesn’t matter so much where they are for us, it just happens that some of them are, for example, all over Europe and in other parts. We do have some contributors, for example, in the Mexican Gulf area that essentially just wrote code for an open source project in the past, which we thought was valuable.” (IT-E-1)*

This participant said that Twitter enables colleagues to collaborate, even if they are not in the same place. This is linked to the point he made about building a community (see Section 4.4.6). The interviewee thought that by being present on Twitter, they can work together and this could develop into a community.

#### **4.4.4. Asking or responding to questions**

Many interviewees talked about using internal and external microblogs to ask or respond to questions. This was found to be one of the main uses of Yammer, within the organisation. The majority of participants, who used Yammer, talked about this use.

*“You have a problem and you actually do not know who to ask. You go around asking every single person or do you actually use a tool that communicates to every single person in the business. So I was just getting frustrated with the level of communication. It wasn’t that we don’t talk to each other because we do, but we’re a very fast paced business.” (IT-M-2)*

The participant thought that it is difficult to find the right person to ask questions of, so Yammer could be used to send a query to everyone.

Another interviewee said:

*“One of our project websites seems to be down, can anyone else see it? Or it might be, do we know the contact of this organisation; so it is kind of sharing knowledge and asking for knowledge, usually.” (CO-E-15)*

‘CO-E-15’ gave specific examples of the types of questions they asked on Yammer. The interviewee thought that microblogging is useful for getting staff to check whether something is working or if someone knows a contact in an organisation.

Several interviewees talked about using Twitter externally, to ask or respond to questions.

*“Somebody had a problem with his I-phone and somebody said you need to speak to (name of the organisation). So that is great. I believe passionately that if someone has taken the time to ask me something, or talk to me, that I respond and this always happens.” (IT-D-8)*

The interviewee thought that there is a culture of how to use microblogs i.e. you feel an obligation to respond to people's questions.

#### **4.4.5. Asking for opinions or feedback**

Some participants said that microblogging can be a useful way to ask others for their opinion or feedback. Interviewees thought that microblogs can be used not to ask others direct questions, but to consider people's suggestions and opinions, as a way to improve their work. For example, one of the IT participants said:

*“Our designers have uploaded images onto Yammer and asked for feedback, and they will get twenty comments within the space of an hour. You know people say I like this or I don't like this, it is better to change this, or that's good, I really love it [...] So that is another thing you do, you upload things for others to have a look at and to give you feedback.” (IT-M-2)*

The participant thought that Yammer was a useful way to ask colleagues for their feedback. He thought that individuals who share information on the platform have the advantage of being able to communicate quickly with many colleagues.

In regards to Twitter, another interviewee said:

*“It's a matter of, we've released this software version tool, have a look, it's free, play with it, come back and feedback. I'm sharing almost everything I do; I ask for feedback and engage people.” (IT-E-1)*

This IT participant thought that if other people had a go at using their software and provided their opinions and thoughts that could help the organisation make improvements to it.

Similarly, another interviewee said:

*“If we launched a website even if it was just a kind of one man band website, we'd launch it, get people's opinion. Actually it was quite useful because you'd launch it and all your mates that were in the same industry or appeared would then go and have a look at what you're doing and they would tell you if there were any problems with it as well.” (IT-D-5)*

#### **4.4.6. Building a community**

A few participants talked about using microblogging for building a community with others. Interviewees thought that collaborating with a wider group of people could develop into a community. For example, one of the IT interviewees said:

*“For my role in the open source project which is the most visible part of our work I think, there's no commercial interest in that, the interest is more in building a*

*community and to start building the community or engage with people you have to engage where they are.” (IT-E-1)*

The participant thought that by being present on Twitter, they can build a community with others. This is linked to the point he made about collaboration (see Section 4.4.3 above). The interviewee said that they were able to easily collaborate with others through Twitter, even if they were not in the same place. The participant expressed the view that this can develop into a community.

Another participant explained that one reason for deciding to use Twitter at work was to build a network and interact with people in their field of work.

*“For us now as a business, it is very much about building a network and maintaining a network. Something for us around kind of credibility, so if we are going to be talking about digital innovation and new ways of working, we need to be present on platforms where conversations about those things are taking place [...] You drop into conversations and you see other people who are joining the same conversation. If you do not follow them, you will send them a follow and that is how you build your community.” (CO-D-16)*

This participant talks about how to use microblogs and what they consider correct behaviour to be. The participant thought that on Twitter, one way to build your community as a business is to follow specific people. The interviewee expressed the view that the organisation needs to be where conversations are taking place.

#### **4.4.7. Referencing**

A few interviewees talked about using Yammer and Twitter for referencing, to store information for later use.

*“We have conversations and we also document meetings, so if I’m in a meeting I would document what I’m talking about. For example, I was in a conference this morning and I documented what the people in the conference were saying, so that everybody gets that information in real time, and it is used as a repository later on [...] My colleague was on the phone here, so he shared what the telephone call was about. We can come back to read that information any time [...] If I’m in a conference and I’m just posting some stuff, it may be completely irrelevant, or they are not interested. It does not matter. I’ll post it in there to highlight that this is what I’m doing, I’m talking to these people about this subject and it may be useful sometime in the future. It may not be useful today, but if it’s all being shared with everybody, then we all get more knowledge faster.” (IT-M-3)*

This participant talked about using Yammer for documenting information and keeping data for later use. He thought that this also helps colleagues to become more aware of

what others are working on within the organisation. ‘IT-M-3’ suggested that staff members can use that information to learn from each other.

In regards to Twitter, another interviewee said:

*“I suppose in my mind I do not especially know who is going to see it. Sometimes it is me that is going to see it because I am tweeting a link knowing that then I have got that in my stream, it is almost like a bookmark for me that I can then go back to and think oh we want to include that in. Because I will use the hashtag [...] What quite often happens is I am very easily distracted and if somebody posts a link to a news article or you know journal article or just something on the website, I will look at it and it will have a related thing or it might not even be related to work and yet my eye will just like see something about open access, open source technology and libraries. And that is interesting for my work and I will then tweet it from a work point of view [...] If something interesting comes up, it also benefits me because, if I am looking for content for a blog post, I would often favourite it and then I would go back through my favourites and find posts to write about in my blog posts.”* (CO-E-15)

‘CO-E-15’ said that using Twitter as a referencing platform is particularly useful because it enables her to refer back to useful information, which she may have otherwise not remembered.

Similarly, another Consultancy interviewee said that they use Twitter to refer back to useful information.

*“If we have got a conference on, we tend to tweet a lot about that [...] It is also a good way of logging what is happening in the conference as well. So if I want to talk about it later, I can go back to that and it is in that Twitter feed.”* (CO-D-17)

#### **4.4.8. Building personal reputation**

A few respondents talked about using microblogs for building their personal reputation.

In regards to Yammer, one of the Consultancy interviewees said:

*“Promoting myself; showing that I am in that space. But I am associated with the company account as well, so by doing that, I am promoting myself but also I am gaining information for personal use from my MSc but also for using within the business. So it is a two-way thing [...] In a very specific area and with specific people as well.”* (CO-D-17)

‘CO-D-17’ said that they also used Twitter within their organisation. This participant went on to say:

*“I think for me it is about building up my own profile as well as the company profile. Because we are such a small company, we need a decent reputation in the field we are in. So by tweeting things that are interesting within that field as myself, but tagging the*

*company name [...] So I am building up my own reputation in that particular arena, but also promoting the company.” (CO-D-17)*

From the company perspective, this interviewee said that they would share information to purely promote the organisations, to show what their business is about. From a personal view point, in terms of work, the participant thought that Twitter was about raising others’ awareness about their role, as a consultant within the organisation.

## **4.5. Internal Uses of microblogging**

This section discusses the specific uses that were only mentioned in relation to internal uses of microblogging. A few respondents talked about using microblogs for socialising, holding individuals accountable, organising work schedules, to use it as a training device and for releasing frustration.

### **4.5.1. Socialising**

One of the participants had strong view regarding using Twitter for social purposes.

*“Internally, Twitter has helped us organise a few nights out fairly well [...] so things like nights out need organising or [...] going out for a meal [...] Definitely more on internally I think we organised, which got cancelled in the end, but our last sort of blokes’ night out was for pizza or Italian or something like that. That’s easily organised on there. You’re not so bothered if that makes it into the public domain [...] I find that Twitter is a social media tool that is useful for organising a party with your friends, not for organising business on. So when you’re talking or collaborating on that, it should be for personal uses, not about the company and that’s my opinion of it. I get to sit in this chair and make that decision.” (IT-D-4)*

The interviewee said that they found Twitter to be a social tool and not that useful for business purposes. ‘IT-D-4’ thought that socialising and organising night outs with colleagues is easily done through Twitter. They were not too concerned if these types of information are shared with those outside of the organisation. However, he thought that if other types of information, such as confidential information are shared on it, there is a chance that people outside of the organisation can access that data. Later in the interviewee the participant reinforced the point that Twitter is not appropriate for organisational uses.

### **4.5.2. Holding individuals accountable**

One interviewee talked about being able to hold people accountable through Yammer.

*“Another thing about Yammer is you can hold people accountable. You can say ‘well, you said yesterday that you were going do this’, or ‘don’t forget that you have to do*



*this'. And they can say 'yes', and I say 'why have you not done it'? You know it's not a tool for beating people up with and that's a really critical point to get across."* (IT-M-2)

The participant thought that because individuals have committed a statement to text, Yammer helps to make sure everyone is accountable for their work and actions. The interviewee thought that individuals know that Yammer contains details about tasks which they are responsible for and information regarding deadlines.

#### **4.5.3. Organising work schedules**

One of the participants talked about using Yammer to organise work schedules. Whilst 'IT-M-3' was scrolling through their Yammer page, he provided examples to show how it was useful for organising work schedules.

*"Somebody has posted that they have some work to do within the next 30 days [...] I need to know that someone's working on that ok and that they're interested in it. So then I have some work to do, and it is just a prompt. So I will have a list of things to get through, and somebody will say I need this doing sharpish. So then I can go and do it straight away and everybody can start to use that data."* (IT-M-3)

This interviewee thought that Yammer helps to organise and schedule projects and events which are being worked on. The times and order of work can be planned and recorded on Yammer, for everyone to see and follow.

#### **4.5.4. Training**

According to one of the interviewees, Yammer was seen as a training device for the use of another platform, Twitter.

*"So in our company we have adopted Yammer, well there were a few of us using Twitter already and we were kind of trying to encourage our colleagues to use it as well but I think the nature of Twitter being very public made some of them nervous [...] We started to encourage people to use Twitter, and it became obvious that people did not feel confident about talking in a public arena [...] So we put in Yammer and it was a way of, I think what we were thinking was that we put Yammer in place and it operates as a walled garden, so you can sign in to our account and everybody has their own individual accounts and we can see each other's comments and things. And so it is a sort of a mini local version of Twitter basically that is completely screened off from the rest of the world. Basically it is very similar to Twitter, except you know only people within the company can see it."* (CO-E-15)

The participant said that their aim was to get people to share information through Yammer without worrying about making mistakes. It was hoped that Yammer would help individuals gain experience and confidence to then start using Twitter.



#### 4.5.5. Releasing frustration

One interviewee mentioned that Yammer is good for releasing one's frustration.

*"It is a support kind of function; you use it well people say 'oh I'm really frustrated with using this thing, you know I don't know why it is not better or something' and someone comes along and says something nice to them."* (IT-M-2)

According to this interviewee, individuals can use Yammer to release their stress and tension with their co-workers. 'IT-M-2' thought that this can be done through discussing their duties and tasks and their colleagues can listen to them and provide advice and suggestions.

#### 4.6. External Uses of microblogging

This section discusses the specific uses that were only mentioned in relation to external uses of microblogging, Twitter. Many interviewees talked about using Twitter for marketing purposes and for improving customer relations. It was found that a few people also used Twitter to look at competitors, to learn from mistakes and to smooth passage of greetings.

##### 4.6.1. Marketing

The commonest type of external use of microblogging mentioned by participants was to raise awareness, about what people are doing within the organisation. In relation to this, some interviewees talked more specifically about marketing uses of Twitter. For example, 'CO-D-16' thought that marketing on microblogging is about having a conversation, building a reputation and engaging with others.

*"We have got a lot of work through using this platform, we have won significant pieces of work directly through conversations on Twitter [...] So we have not paid a penny for marketing and we have been running as a company for sixteen months. And we have got significant pieces of work directly through conversations, mostly through Twitter. So there is no doubt in my mind that it does work [...] I can absolutely say hand on heart you know we have not spent a penny marketing anywhere."* (CO-D-16)

This interviewee particularly valued Twitter for marketing, because it is free.

Some respondents talked about specific types of information they share on Twitter, as a way to promote their business. For example, 'IT-D-5' said:

*"I guess we wanted to create awareness, not of sales but to say look at what we're doing. So it really was, if we wrote a blog article which we did a few times, if we went to a networking event, then we would tweet that we were going to that event, come and see*

*us if you're there. If we launched or won anything significant, so if we won a major part of a major European contract, we would want to tell people about it. If we had an article published in nature or something like that, we would want to tell people that we were doing these kinds of things, it's quite a prestigious place to be. If we launched a website even if it was just a kind of one man business, one man band website, we'd launch it."* (IT-D-5)

This participant thought that Twitter is a good place to show off their business and skills.

A few interviewees said that they share information about conferences or events organised by them.

*"The specific examples are the conferences that are happening this week and the next two weeks in different parts of the US and UK that we are organising [...] So for example we would tweet about things like this specific conference we host, but also just events in our company."* (IT-E-1)

Similarly, 'CO-D-17' said:

*"If we have got a conference on, we tend to tweet a lot about that, because that is a good way of marketing, of promoting the conference."* (CO-D-17)

According to one of the IT interviewees:

*"The drive to Tweet would be an event [...] or an opinion. So the company's Twitter account really is an event that is happening [...] So if we were at a meeting in London, we tweet this so you can come and see us."* (IT-D-5)

A few participants talked about sharing ideas and promoting other people through Twitter. For example, one of the Sports interviewee said:

*"It would predominantly be from the organisation's main account and like sharing ideas and promoting or cross-promoting each other's kind of business [...] when you produce a game, you then can attach that to the tweet, give brief introduction of what the game consists, which is easily shared with others."* (SP-M-21)

According to this participant, by tweeting about other people's business and services, they too would post information about the organisation. The interviewee thought that this could help strengthen their relationships with others, as well as making their followers become more aware of the business.

Another interviewee said:

*"If we are talking about the new games that we have released, talk about the software, talk about competitions, providing online codes, effectively giving people a reason to*

*want to log on and learn more. But providing that sort of information outside of the package, you are going to be telling people what you are doing inside the package, being reliant on them to find it.” (IT-D-13)*

This participant thought that by providing more information about the specific types of work they do within the organisation, more people will become interested to find out about their services.

One of the interviewees mentioned specific types of information they tweeted about, such as recommendation schemes.

*“We might post about our recommendations scheme, so we will have all of our customers recommend a friend and get a discount. We post about this regularly, so people will get involved in our company a bit more.” (IT-D-4)*

‘IT-D-4’ said that this was the method they adopted, to increase their business and to make more people become aware of their services.

#### **4.6.2. Improving customer relations**

Many participants specifically mentioned using Twitter to improve their customer relations; microblogs can help to meet new customers and maintain relationships with existing customers. Interviewees thought that this specific use was directly related to marketing, but it was so frequently mentioned by participants, that it needed to be treated as a different category to show its importance.

*“We are trying to promote our customer’s products, we are trying to promote our product and get people to know the benefits of it. So the key thing we have to do is engage with users and customer [...] We want to have good relationships with our end users and customers.” (IT-M-10)*

The participant thought that through Twitter, the organisation can reach their end users and customers. They can discuss their projects and the current stage of the work. It was found that microblogs can help maintain and improve relationships with people outside of the business.

Similarly, the main reasons why another organisation decided to use microblogs was to get the attention of potential customers.

*“I understand how it can be beneficial, it may not lead to a direct increase in people signing up to an event, but what it will do is generate interest and it can be used as more of a way to distribute information than actually bringing in cold sales.” (SP-M-18)*

According to this participant, if you are a business that is looking to run an event and you are looking to generate entries, Twitter is not going to necessarily get people directly but can generate interest by raising awareness of others and it helps to improve customer relations. ‘SP-M-18’ thought that the element of being able to easily offer people the opportunity to see information, is what makes Twitter beneficial.

One of the participants specifically said that Twitter enabled them to engage with people that they would not normally meet.

*“What we did for the running event by using it to engage with people that we would not normally be able to engage with was incredibly useful. So promoting that run, we were able to ask for retweets from people who ran a lot and who had a high profile and a lot of followers. We were able to use it to engage with people who were DJs with their own radio shows and that kind of stuff, who then went on to enter the event.”* (SP-D-19)

The participant thought that microblogging makes it possible for individuals to meet more people from outside of the business, such as potential customers.

#### **4.6.3. Monitoring competitors**

One of the interviewees said that Twitter can help organisations to monitor what their competitors are saying or doing.

*“We would look at what competitors were saying which is quite interesting [...] You can see what they are saying or what they are doing [...] We can look and see which media might be following them, and follow them as well.”* (IT-M-12)

According to this interviewee, through such activity, they can follow people their competitors follow. The participant thought that the followers of their competitors could turn out to be potential leads for the business to collaborate with.

#### **4.6.4. Learning from mistakes**

One of the participants said that one of the approaches they take to learn from their mistakes is to listen to what their customers are saying about their services and business.

*“People like to moan about faults [...] that are relevant to them [...] You will get a lot of people who will complain about things on Twitter, so it is a very good way for us to pick up on what people are thinking. That is kind of why we started using it.”* (IT-M-12)

The interviewee thought that one of the main reasons why they decided to use Twitter was so that they could identify where they were going wrong with their services. They wanted to be able to deal with their issues in a way that made their customers happy.

#### 4.6.5. Smoothing passage of greetings

One of the interviewees said that Twitter can smooth the passage of greetings: to help build networks.

*“Smoothing the passage of greeting, I guess. If you already follow someone on Twitter and vice versa, it’s so much easier [...] The ice is broken you know who I am because we met through Twitter, you like me because we’re communicated in some way [...] The early days that we used to do it, most people that I met, fifty percent, they were businesses, they were trying Twitter, trying to see what it did. And we all followed each other, that what a great way to try and break the ice.” (IT-D-5)*

This participant thought that Twitter helps to make connections between people. The interviewee thought that some people might never meet face-to-face but they are aware of each other through microblogging.

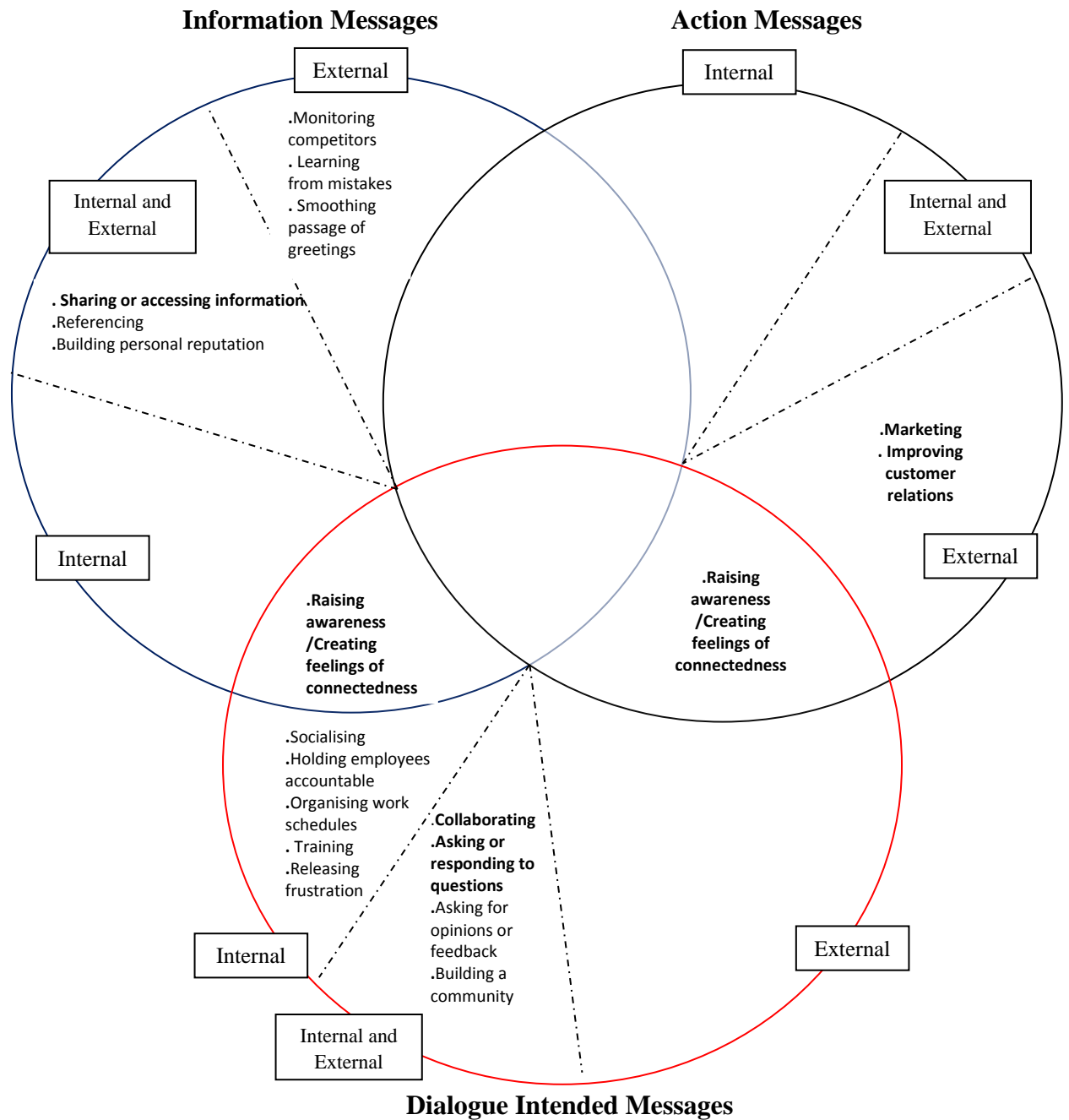
#### 4.7. Overview of the uses of microblogging in SMEs as perceived by participants

Most people in this research liked microblogging and they used it a lot for their business; only two organisations did not find microblogs useful. All of the organisations had used Twitter and it was regarded by many participants as the most suitable microblog for sharing information with a large number of people; with those outside of the business. Some participants also talked about using microblogging inside the organisation, in order to privately communicate with colleagues. The main internal microblogging platform interviewees talked about was Yammer. It was found that the commonest types of internal and external uses included microblogging to raise awareness and to create feelings of connectedness. Many participants also mentioned using the platforms to share or access information. Overall, respondents thought that internal and externally focused uses were different. Within the organisation, Yammer was mainly used to remotely collaborate with colleagues and to ask or respond to questions. Participants thought that colleagues could help each other and everyone would know what was happening within the organisation. Interviewees said that externally, Twitter was mainly used to raise awareness among those outside of the business and for marketing purposes. Many participants also talked about engaging with Twitter to improve customer relations.

The rest of this section explains Figure 4.2, a visual representation which differentiates between “information messages”, “dialogue intended messages” and “action messages”. Information messages provide one way communication; one to many messages.

Dialogue intended messages concerns uses of microblogs, mentioned by participants, which involved interactive responses between people. Action messages concerns marketing uses of microblogging. In this research the majority of uses of microblogging were grouped as part of dialogue intended messages. In regards to the dialogue intended messages, the diagram reads from left to right. Figure 4.2 shows that in this category, internally, microblogging was mainly used for raising awareness and creating feelings of connectedness between colleagues. This information is shown in bold, to indicate that interviewees highly valued this use of microblogging. Internally, participants thought that people also used microblogs for socialising, holding employees accountable, organising work schedules, to use it as a training device and for releasing frustration. Interviewees thought that internal and external microblogs were used for collaborating, asking or responding to questions, asking for opinions or feedback and for building a community. The dialogue intended messages category shows that external microblogging was also used for raising awareness and creating feelings of connectedness with those outside of the organisation.

Less common uses were information messages. Figure 4.2 shows that internally, microblogging was used to raise awareness and to create feelings of connectedness. It was found that some people did this by posting on-way messages. Internally and externally, some interviewees said that microblogs were used one-way for sharing or accessing information, referencing and building their personal reputation. Some participants said that externally, microblogs were used one-way for monitoring competitors, learning from mistakes and smoothing passage of greetings i.e. building networks. Based on the participants' views, it was found that external microblogging, Twitter, was also used for marketing purposes and for improving customer relations. In Figure 4.2 these uses are identified as action messages.



**Figure 4.2: Visual representation of uses of microblogging, differentiated between Information, Dialogue Intended and Action Messages**

## 4.8. Key features of microblogging that influenced the decision to use it

In the previous section, the uses of microblogging were discussed. The study also identified what participants saw as key features of the platforms that influenced the decision to use it. In this section, firstly, the features of microblogging that were most commonly mentioned as making it attractive to use are discussed, based on interviewees' views. Secondly, specific features of internal microblogs are given, before explaining what the participants identified as specific features of external microblogging.

### 4.8.1. Features of internal and external microblogs

The participants thought that the most significant features of microblogging were as follows: microblogging has limited functionality; it does not have many features and people can easily and quickly use it. Also, interviewees thought that microblogs are cheap to use and they can be used via mobile phones. As a result, employees can easily access them at any time and from any location. Participants said that they can easily communicate with their colleagues and with those outside of the business, such as with customers and clients. People can be constantly aware of what is happening at work and what information is made available. Participants also talked about being able to decide whether to access microblogging through their private or company account/s; this depends on how their organisation uses microblogging.

#### 4.8.1.1. Microblogging has limited functionality

The majority of participants thought about the limited functionality of microblogs as a main benefit. Some interviewees specifically said that the reason why they adopted microblogging was based on the fact that individuals could easily and quickly use it to send messages. For example, in regards to Yammer, 'IT-M-2' said:

*"It is not that we don't talk to each other because we do, but it's, we're a very fast pace business. We need to turn thing around very quickly. We can't do that in a traditional way of you know weekly meetings or monthly meetings as you know larger companies do. Months for us you know are years. You know that's a ridiculous time frame for us. And so we want something we want it now. And the best way to do that is, if you don't know who to talk to, or if you just want to engage with everybody, the best way to do that is software that everybody can use [...] The beauty of Yammer is that because there aren't that many features, it is easy to use [...] it makes its very few features worthwhile [...] It really encourages you to easily type something very quickly. The speed of thought is what the software aims for. Someone using it they should be able to operate the speed of thought and with something like a microblogging system, it has got to be so quick, so easy for you to use."* (IT-M-2)



'Speed of thought' seemed to express how the participant saw Yammer as a platform. The interviewee thought that Yammer is useful because the organisation works at such a fast pace. 'IT-M-2' said that Yammer is easy to use and everyone can communicate through it.

Interviewees talked about the limited functionality of Twitter and said that they could easily engage with it.

*"Essentially it is featureless. There is nothing you have to think about greatly. You see a thing, ignore it but you engage with it and engagement is essentially limited to replying. You can retweet, and you can mention it and talk about it, or favourite it."* (IT-E-1)

Another participant said:

*"It did not take a huge amount of time to learn how to use Twitter, but then I had used it on a personal level before. But I think it is a fairly simple system. I do not think it will take anyone too long. My dad can actually use it, so yeah I do not think it is very difficult."* (SP-M-18)

Participants thought that because Twitter does not have many features, not much time is required to learn how to use it. This interviewee had previous experience of using Twitter. This could have influenced his views towards microblogging and finding Twitter easy to use. The participant used an example, to say that microblogs are easy to use. He referred to his father using Twitter, as an indication that it was not difficult to use.

#### **4.8.1.2. Cheap to use**

Many participants talked about the limited costs involved in using microblogs. This was identified as one of the main benefits of microblogging. In regards to Yammer, one of the IT interviewees said:

*"It is more cost effective, i.e. this is free. If we want to start using our own internal tools and to improve them we would have to keep on building on them and that costs us money to develop."* (IT-M-3)

Another interviewee talked about the limited costs involved in using Twitter, as one of the main reasons why they started to use it in the first place.

*"Cheapness, ease of use, I guess that there is a natural selection to people joining your Twitter account. So you are almost by definition talking to people who are interested in what you have to say. And I think those would be the key reasons for us to get involved."* (SP-D-19)

#### 4.8.1.3. Using mobile phone

The majority of interviewees said that another of the most valued features of microblogging is that it can be used via mobile phones. Participants said that employees can easily access microblogs at any time and from any location, to communicate with their co-workers and with those outside of the business. The interviewees thought that people accessing microblogs through mobile phones, can be constantly aware of what is happening at work and what information is made available.

*“Everybody now uses mobile in ways that they never used them before [...] Yammer has this really nice mobile phone App. I am on the bus in the morning and I catch up with Yammer and when I go home. If I ever think ‘oh, I must tell people about this, I have got my phone and I do it.’” (IT-M-2)*

According to this participant, a key aspect related to the ease of communication is mobility. If people did not have a mobile App for microblogging, they could suddenly think of something on the go that needs saying, such as to their colleagues, but they may forget about it later on. However, through mobile phones, no matter where people may be, as soon as they have a thought they can write it on Yammer, quickly and without any delays.

In regards to Twitter, ‘SP-M-18’ said:

*“I see that as the main benefit, people being able to see what is going on or what is happening or find out information quickly, easily and regularly. It is always there; they do not have to log on to our website, they can go on their phone and they can just scroll through Twitter.” (SP-M-18)*

This interviewee thought that Twitter maximises opportunities. People can access microblogging on the go and stay aware of what others are working on.

*“So I’ve only just got myself a fancy phone that I can now read Twitter on and I make pretty good use of that. So when I’m standing in the queue in the supermarket or something, I can flick through and just see what’s going on. So I do make good use of that, so I guess the fact that it’s available on mobile phones is a useful feature. Well I guess the primary use is to find out information from other people. But it’s just a useful feature that you can see it on your phone [...] When I have got a moment I do flick through it on my phone and look for things and then I tag articles that I go back and read later on. And so tagging articles is something I definitely do.” (IT-D-6)*

The interviewee thought that it was useful to be able to access information on Twitter, via mobile phones. ‘IT-D-6’ particularly liked being able to tag articles on microblogging, using his phone, so that he never loses any potential useful information.

#### **4.8.1.4. Having different microblogging accounts**

Most participants said that they preferred to use their business account on microblogging. Fewer people showed to be using their personal account for business purposes. Some interviewees thought that having a choice makes people feel more comfortable about using microblogs for the business.

*“I just set up all the user accounts. I did not tell anybody I was doing it. I set up everybody’s accounts and I then used our group system and I told everybody look I am thinking of using Yammer.” (IT-M-2)*

The IT participant thought that it was a good idea for each staff member to use their own Yammer account within the business.

In regards to Twitter, another interviewee said:

*“I have four accounts at the moment, so for myself personally and then using some with other members of staff. One of the company ones has the image, the names. That one is for simple things like hey why visit our website you know come and follow our charity page, so we have a charity page that we like to try and promote to people to come and vote to give money to, it’s a selection of charities and we use that one to do that. Then I have a very personal account that nobody in this place knows about, so that’s for my private life. And then I have another account as well which I use and most of these guys have it and that one I use as a sort of, it’s mixed between my private life and business. So yeah things like organising nights out or why don’t we all go and have a company night out and go out for a meal. Or to ask have you seen this project, have you seen what that competitor is doing and that’s on a separate account as well. So I keep all three bits very separate.” (IT-D-4)*

The interviewee felt that within the organisation, it was appropriate to have separate Twitter accounts, based on the nature of the conversations. ‘IT-D-4’ talked about keeping one of the accounts for formal engagements, with those outside of the organisation. Thus, this account looked more professional, by containing the brand name. The participant said that for socialising with colleagues, they used another Twitter account.

Another interviewee felt differently. ‘CO-D-16’ said:

*“We have personal accounts and business accounts, and I tweet in both. But I quite often or predominantly tweet as myself about the business. But the boundaries between you as an individual and you as a representative of your organisation really do blur. And I am quite comfortable with that now. When I worked for a bigger organisation that was quite risky, I felt a little bit vulnerable about that because one of the attractions about it if I am honest is to be able to have a bit of a social interaction with people. You need to be really serious about some things when you need to be, but all the time to be*

*like that you know, sometimes you need to be a little bit outrageous and provocative and have a laugh and a joke.” (CO-D-16)*

This participant felt that some organisations prefer staff members to keep personal and organisational Twitter accounts separate, so that they are always perceived by others as acting formal and professional. However, this interviewee said that one of the uses of Twitter is to easily communicate with others. He thought that having a personal account can become particularly useful, because it helps take the edge off things and it makes people feel more comfortable when they engage through microblogging.

#### **4.8.2. Features of internal microblogs**

This section describes what interviewees said were distinct useful features of internal microblogging that make it worth using.

##### **4.8.2.1. Pop up alerts**

One of the participants specifically talked about valuing pop up alerts on Yammer.

*“The other thing that is nice about it is alerts [...] You know, what stuff is new. So if you have not been looking at Yammer for a couple of hours, you have a look and it tells you there are four new messages. So, there is new stuff for you to read and catch up with [...] With Yammer you can alert somebody specifically [...] Download the Yammer desktop notifier and use it, so people get an alert that this message is for them, when someone mentions them or sends them something [...] So in that sense we use it for personal messages, person to person messages. But it’s very open and transparent.” (IT-M-2)*

The interviewee thought that one of the useful features of Yammer is enabling users to direct a message to someone specific, within the organisation.

##### **4.8.2.2. Grouping feature**

One of the interviewees talked about the grouping feature on Yammer.

*“We have not really started to use grouping to be honest because the traffic there is not enough to overwhelm just yet, but I think as soon as it starts to get busy we might take some of these conversations and put them into other groups [...] So we would use it only if the traffic here gets too much, so if this becomes more and more popular or we take on more people and more information gets published into that environment, then obviously we’ll want to segment that and say actually let us separate conversations to do with sales and put them over here, and all the conversations to do with design over here. Then we can kind of say if you are interested in sales, you can jump in there [...] We will use it purely internal only. We would do that so everybody would have access to all groups. I wouldn’t want our clients talking to us in these types of environments though. They talk to us too much as it is already.” (IT-M-3)*

The participant thought that Yammer has the right features to enable them to organise their work and conversations between colleagues, if the organisation grows. He thought that individuals could easily decide which information to read, depending on their needs.

#### **4.8.2.3. Receive updates via email**

One of the participants talked about being able to receive updates on the Yammer group via email.

*“I do not use Yammer most days. I get an update on the Yammer group via email and then if there is something interesting on there, then I might pop in. And last time I went in was to let them know about this.” (CO-D-17)*

The interviewee thought that it was useful for users to be informed by email about updates and activities taking place in Yammer. ‘CO-D-17’ thought that individuals can identify whether a piece of information or post is related to them and it is useful. They can then log into Yammer and access that data; there is no need to be constantly checking Yammer.

#### **4.8.3. Features of external microblogs**

This section describes what participants said about Twitter’s best features that make it worth using.

##### **4.8.3.1. Character limit on posting messages**

One of the most talked about and valued feature of Twitter mentioned by interviewees was character limit on posting messages. Although a few participants said that they struggled to say everything that they wanted to in a short form, the majority of interviewees considered the messages as a positive feature of Twitter. Participants thought that users can share short messages and make their point in a straightforward way. Information can be read quickly and easily.

*“The constraint is very useful I think, of a short message [...] People just read in a second and then decide immediately whether they want to share it, or reply and talk about it [...] It is inherently much more shareable if you have an immediate decision, rather than oh I have to schedule time to read this you know 5000 word essay.” (IT-E-1)*

The participant thought that by sending short messages, people are more likely to spend time reading the posts, as they do not take long to read. According to ‘IT-E-1’, people can quickly read information and easily make use of the data.

Similarly, another interviewee valued the character limit on posting messages. However, they thought that it can take some time for people to get used to constructing short messages.

*“It takes a bit of getting used to, the restriction on characters, but that is a good thing as well because I tend to waffle a lot [...] It does make you really succinct about what you want to say.” (CO-D-17)*

#### **4.8.3.2. Tweet and re-tweet messages**

The majority of participants talked about sharing information on Twitter, by tweeting and re-tweeting messages. Interviewees thought that this helps to raise external awareness about the organisation. A few interviewees mentioned sending out large numbers of tweets.

*“I follow lots of people and some of them are Twitter experts who send out hundreds of tweets a day and obviously just use it to [...] draw attention to themselves.” (IT-D-6)*

Another interviewee said:

*“I found it easier to generate responses from potential clients by tweeting them than by emailing. People would not respond to an email but if you tweet them they seem to tweet you back straight away. So it allowed us to relate on a more personal level than just a normal cold email.” (SP-M-18)*

This interviewee thought that tweeting enabled individuals to connect more efficiently and it was a quicker way of reaching people.

According to a few interviewees, one reason why tweeting was so popular and effective is because it only takes seconds to do.

*“One of the key things is, it is so low cost you know actually sending a tweet takes seconds and if you said a minute per tweet, for that might be re-tweeted by you know you never know how far that will spread and it enables us to connect.” (CO-E-15)*

This participant thought that tweeting and sharing information through Twitter does not take much time.

A few interviewees also talked about re-tweeting messages. For example:

*“One of the local rugby teams is a premiership team and we have been a sponsor of theirs for about ten years now [...] They re-tweet our messages and they have around 12,000 followers now as well. And their following is probably even cleaner than mine in terms of legitimate followers. That is good cross promotion, it works really well.” (IT-D-8)*

According to this interviewee, by re-tweeting messages, information can be exposed to many people. The participant thought that this is one way that the organisation is promoted on Twitter; they are exposed to the public through posts that are re-tweeted by people they follow. Although re-tweeting messages was identified as a positive feature of Twitter, one of the interviewees said that you do not have any control over re-tweets.

*“One of the main risks in my head is that something you do not want in the public domain ends up in the public domain and gets retweeted and all of a sudden you have no control over it. So you have to be very quick if something is wrong, as if it gets out past your control, there’s no going back.” (IT-D-4)*

This interviewee was against the idea of using Twitter for business purposes. He thought that once a message is tweeted, it is then immediately out of the control of the organisation.

When interviewees were asked to talk about any features of Twitter that they highly valued, one of the respondents explained how they use Twitter Apps, which show instantly when they are re-tweeted or followed.

*“Nowadays with Apps existing, I have actually narrowed in down to two Apps that I use. One is the Twitter App itself, which I find fairly limited in functionality. It is a bit of a purist tool. But the beauty of it is that it shows me instantly when I have been re-tweeted or mentioned. And that is useful. Because I need to monitor, or I like to monitor activity and what works and what has not worked.” (IT-D-8)*

#### **4.8.3.3. Mass communication on Twitter**

The majority of interviewees talked about mass communication on Twitter. Participants said that using this platform, they can communicate with a large audience, outside of the organisation. This was found to be another main feature of external microblogging.

*“We wanted to go for something popular to attract a large audience. Because for instance I mentioned one of our projects, it’s quite a niche area [...] On Twitter because it is such a large service, there are actually quite a large number of researchers and related individuals and organisations that would be interested in this work. So really based on the large user base on Twitter, that was the main factor for using it.” (IT-E-7)*

Participants thought that the large number of people on Twitter has enabled organisations to find people in their area of work, no matter how specific this may be.

*“The ability to talk to a wider audience, that you are kind of effectively broadcasting to, I mean you do not really know who to because you have got all these followers and they might repeat it to their followers and then you are never really sure how far a message*



*has just gone [...] We were doing a local event here and we got a comment from someone in New Zealand so it opens up the whole world theoretically.” (CO-E-15)*

Similarly, another interviewee said:

*“I might never meet that person, but they might tell someone else about me, and that person then I follow him on Twitter and this conversation starts [...] the early days that we used to do it, most people that I meet, fifty percent, they were businesses, they were trying Twitter, try and see what it did. And we all followed each other, what a great way to try and break the ice.” (IT-D-5)*

Participant thought that you do not have to have necessarily met people in order to follow each other on Twitter. Individuals you may not know in person can follow the organisation and tell others about the business. Interviewees thought that this is what makes Twitter one of the best platforms available for mass communication and for meeting new people.

#### **4.8.3.4. Maintain lists**

A few interviewees talked about maintaining lists on Twitter. Participants said that they can create lists of contacts on Twitter and control who they want to communicate with. Participants thought that this feature becomes important when interacting with many people outside of the organisation.

*“I guess bringing lists in was quite useful, it allowed us to follow real people and create lists of people that we can talk to and communicate with, categorise if you like. It is interesting to see where I sit in other people’s lists as well.” (IT-D-5)*

‘IT-D-5’ thought that it could be difficult to trust the followers are real. The interviewee thought that some may be robots and not real individuals. The participant said that they need to identify people they trust and want to interact with and creating lists has allowed them to do that.

Another interviewee said:

*“I get I don’t know a dozen follows per hour and most of those would be automated and there will be follow backs. So they are literally looking to build numbers and probably and using some sort of software. So I would go and have a look at who is following and I look for certain things. If it is someone from the UK, so most of the time those are legitimate and I would follow them back. If they come from USA or Europe or Australia, then there is potential that they are using some sort of automated software. So I won’t rule them out, but I will quickly look to see what they are who they are. And if it’s someone promoting a stay at home mum business or you know they are a business advisor or something, then I know that it is automated and I do not bother with those. So I will look at them, half a dozen. I would look on Twitter App and I will see who has*



*followed me and then I would make a decision as to whether or not I am going to follow them back. And I would do that a couple of times a day. It has kind of become quite a religion for me. And then I would use a pay for App on the I-phone and the reason I use that is because with the Twitter App you can't you have to go through and jump a few hoops to view a list and I actually do not want to view my main stream because you know 13,500 thousand people are a lot and they are saying stuff which is of no relevance to me, it is of no value. So I use Tweetbot because you can replace the main stream with any of your lists and that is exactly what I do. So I have a list and it is essentially local businesses, and people that I am interested in. I also have one for my team. So any of my guys here that tweet, I read their tweets, you know just to keep an eye, to keep a check on to see if it is their birthday, or what they are doing at the weekend and that sort of thing. But I can do that with Tweetbot. It has got a nice interface as well, so I will use that prominently just for maintaining local communication. So Twitter is my utility tool that allows me to do my housekeeping with the account and Tweetbot is what I use to actually interact with people on my list.” (IT-D-8)*

The interviewee said that there are many people on Twitter who are sharing posts which are not useful for them. Instead of viewing too much information, the participant thought that Tweetbot can help you to control your list of contacts. The interviewee said that you can easily access useful information from people who you are interested in.

#### **4.8.3.5. Send direct messages**

A few participants talked about sending direct Twitter messages to individuals.

*“You can directly communicate with people, and so identify people and try to communicate with them by privately messaging them. We have done bits like this before where it involved someone we wanted to see. There was a guy who runs a company and I was at a presentation that he was doing and I thought oh I'll have a chat with that guy. I knew he was a local guy. So while he was standing there and he was talking about Twitter, he's got a Twitter account, I got my phone out and I tweeted him while I was there. He had his phone in his hand and I introduced myself, saying 'I am sitting third row from the back, can we meet afterwards?' And he went 'oh I just got, an invite, alright who is this person?' I put my hand up and so that was my opportunity for an in. I didn't want to talk to him for business, he was just a really fascinating guy and he had a similar background to me and I thought you know, we've exchanged a few tweets over the years. But that's all I wanted from him, I wanted to talk to him about one of his ideas.” (IT-D-5)*

The interviewee thought that sending direct Twitter messages to someone can be a useful way to approach them and to communicate with them.

*“With direct messages it is usually parents that follow us and then we communicate with them, using the sensitive nature of it involving children. We do not want to [...] publish this on the web.” (SP-M-21)*

The participant thought that direct messaging can be the best method for interactions between the organisation and their potential customers, without publically sharing sensitive information about children on Twitter.

#### **4.8.4. Overview of the main features of microblogs as perceived by participants**

Section 4.8.1 discussed the main features of both internal and external microblogging, based on interviewees' views. The findings showed that most participants valued Yammer and Twitter highly for having limited functionality. Neither have many features and interviewees said this meant they can be easily and quickly used. Participants thought that another main reason for using microblogs is because the platforms are cheap to use. Also, they can be used via mobile phones. As a result, participants said that employees can easily access information at any time and from any location. Also, they can quickly engage with colleagues and with those outside of the business, such as with customers and clients. Some interviewees talked about having different microblogging accounts, including their personal account. Participants thought that it was useful to have a choice. However, most of them said that they preferred to use their business account for business purposes.

Sections 4.8.2 discussed what the interviewees said were distinct useful features of internal microblogs. A few participants talked about Yammer for its pop up alerts, its grouping feature and being able to receive updates on Yammer group via email. Section 4.9.3 discussed what the participants said about Twitter's best features. As more SMEs used Twitter, more distinct features of this platform were identified, in comparison to Yammer. One of the most valued features of Twitter mentioned by interviewees was its restrictions on posting messages. The majority of participants also talked about sharing posts on Twitter, by tweeting and re-tweeting messages. Many participants mentioned mass communication on Twitter and this was also found to be another one of its main features. A few respondents also talked about maintaining lists on the platform and sending direct messages to others.

#### **4.9. Other methods of communication**

Although most participants in this research identified uses of microblogging and Twitter was seen as unique for mass communication, people saw microblogs as just another communication platform. This section discusses what the participants thought were the alternative methods of communication used within organisations. One of the main reasons why some individuals preferred to talk to colleagues by other means is because

the organisation was too small. For example, a few participants said that they communicated face to face, rather than microblogging.

*“The good old-fashioned way of standing in front of them to looking at them, you cannot beat that. One of the reasons I am not keen on all of this is because why would not you just go and stand in front of the guy?” (IT-D-4)*

‘IT-D-4’ said that they regarded face-to-face interactions as the most appropriate method of communication, instead of microblogging.

A few interviewees said that they simply used the phone to engage with co-workers and with their customers, rather than microblogging.

*“We speak to each other on the phone probably for two or three hours a day. Most things are done by phone. I mean we do not use Twitter to communicate ideas to each other [...] We do not use Twitter for internal communication.” (IT-D-6)*

‘IT-D-6’ thought that one of the best ways to hold private conversations with colleagues is having phone conversations. This participant thought that Twitter is good to reach many people outside of the organisation.

A few people also used other methods, such as Skype. For example, ‘CO-D-17’ said that they communicate with their colleague through Skype and they did not find microblogs appropriate.

*“We kind of stay away from using Yammer because there are only two of us, but we use Skype a lot, not just talking but texting as well. So we use other methods of communication online, between ourselves.” (CO-D-17)*

A couple of participants talked about using Youtube instead of microblogging. They used Youtube to promote the business, for example by posting videos, tutorials and demonstrations.

*“We put up videos, put up tutorials, customer demonstrations, that sort of thing. So people could view them. We had some [...] Customers linked to it who sent it on to their users, so you get a lot of viewers that can actually see the product in action, or a demonstration of it, so that is quite good”. (IT-M-9)*

This participant thought that Youtube helped them to come across as professional and it enabled them to raise external awareness among people, such as potential customers, about the work they performed.

One of the IT interviewees talked about the limited number of characters on Twitter as the reason why they used forums, rather than microblogging.

*“I tend to speak back internally on how someone said something. We do that an awful lot in our forum conversations, but not necessarily as much on Twitter [...] What you say is very condensed so it is very hard to spend a lot of time structuring a sentence to make it fit.” (IT-M-12)*

This participant thought that the character restrictions on Twitter means that users have to spend more time thinking about how to post messages with the maximum of 140 characters. However, when messages are posted on a forum, having no character restrictions means that they can be easily written.

Overall, while some people rejected the use of microblogging, mostly because the organisation was too small, the majority of participants valued and used microblogs for business purposes.

#### **4.10. Chapter overview**

This chapter first discussed the process of microblogging adoption. The participants showed that most organisations in this research liked microblogging and used it regularly in the organisation. Only two participants did not find microblogging useful. For some organisations microblogging was an important communication channel, especially for interacting with their customers and clients. In this study, all of the interviewees talked about uses of external microblogging, Twitter. It was regarded by respondents as the most suitable platform for sharing information with a large number of people external to their organisation. A few interviewees also talked about internal uses of Twitter, for example, using it to communicate with employees who were outside of the organisation. Some individuals also used Yammer inside the organisation, to privately communicate with colleagues. It was found that a small number of participants preferred to use other methods of communication, other than microblogging. Interviewees thought that this is mainly because the organisation was too small.

The chapter provided a summary of the findings, before discussing what the participants used microblogging for. Using internal microblogging, such as Yammer, and external microblogging, Twitter, the commonest types of uses mentioned by interviewees included microblogging to raise awareness and to create feelings of connectedness. Many respondents also said microblogs were used for sharing or accessing information. The interviewees thought that internal and external microblogging was useful for

collaborating, asking or responding to questions, asking for opinions or feedback, building a community, referencing and for building one's personal reputation. Internally, Yammer was mainly used to remotely collaborate with staff members and to ask or respond to questions. Colleagues could help each other and everyone would know what was happening at work. A few participants talked about other internal uses of microblogs. They said microblogging was valued for socialising, holding individuals accountable for their actions and organising work schedules. A few interviewees also said that it was used as a training device and for releasing frustration. Externally, Twitter was mostly used to raise awareness with those outside of the organisation and participants talked about marketing uses of Twitter, for example, to promote the organisation and to post about events. Many respondents also talked about using external microblogging for improving customer relations. Fewer participants mentioned other external uses. They talked about monitoring competitors, learning from mistakes and smoothing the passage of greetings i.e. building networks.

Participants also identified some of the most valued features of microblogging which prompted them to make use of them. They are as follows: microblogging has limited functionality, thus they are easy for people to use; microblogs are cheap to use and can be used via mobile phones.

Participants also identified potential risks of microblogging. They also talked about what smaller organisations did to manage and mitigate the potential risks, or what they thought organisations should do. The risks and types of actions identified by the participants are discussed in the next Chapter.

## CHAPTER 5: Perceived risks and actions taken to mitigate risk

### 5.1. Introduction

In the previous chapter, the uses of microblogging were discussed, based on the data which came from the interviews collected in 2012/2013. The main features which prompted individuals to make use of microblogs for their organisation were also discussed. Although participants were keen to use microblogs, they also perceived them to be risky. In this research risks have been defined as situations which involve exposing the organisation and employees to danger. This section takes up the issue of risk, specifically to answer the research questions as follows:

3. What risks were perceived with the use of microblogging?
4. What actions were taken to manage the perceived risks?

The chapter is organised as follows. The focus of Section 5.2 is to give a summary of the perceived risks of microblogging in SMEs. Section 5.3 discusses the potential external risks of microblogging and in Section 5.4 the internal risks of microblogging are discussed. The overview of the risks of microblogging in SMEs as perceived by participants is given (Section 5.5). In the next part of the chapter, what participants said about different ways to manage and mitigate risks is discussed (Section 5.6). Section 5.7 presents the chapter overview.

### 5.2. Summary of the perceived risks of microblogging in SMEs

Most participants in the research identified some risks of microblogging in SMEs. Although people from the field of Sports talked about the least number of potential risks, there is no real pattern in whether participants from the field of IT, Consultancy or Sports identified particular types of risk. A few people believed there were no limitations or risks associated with using microblogs. For example, one of the Sports participants said:

*“If I sat down and listed them and thought about it, then yes inevitably we would face risks. But I have never felt like that. I think probably from my point of view, it is down to the trust of the people who are putting out Twitter messages. It is not me, I do not have direct control, I have put it on my phone and I do read them, so I guess there is that trust there that people are not just going to put any old nonsense out there. But I have never seen that as a risk. It is not something that I have consciously thought through to be honest.” (SP-D-19)*

This participant said that he trusts his colleagues who use microblogging and does not see it as risky for that reason.

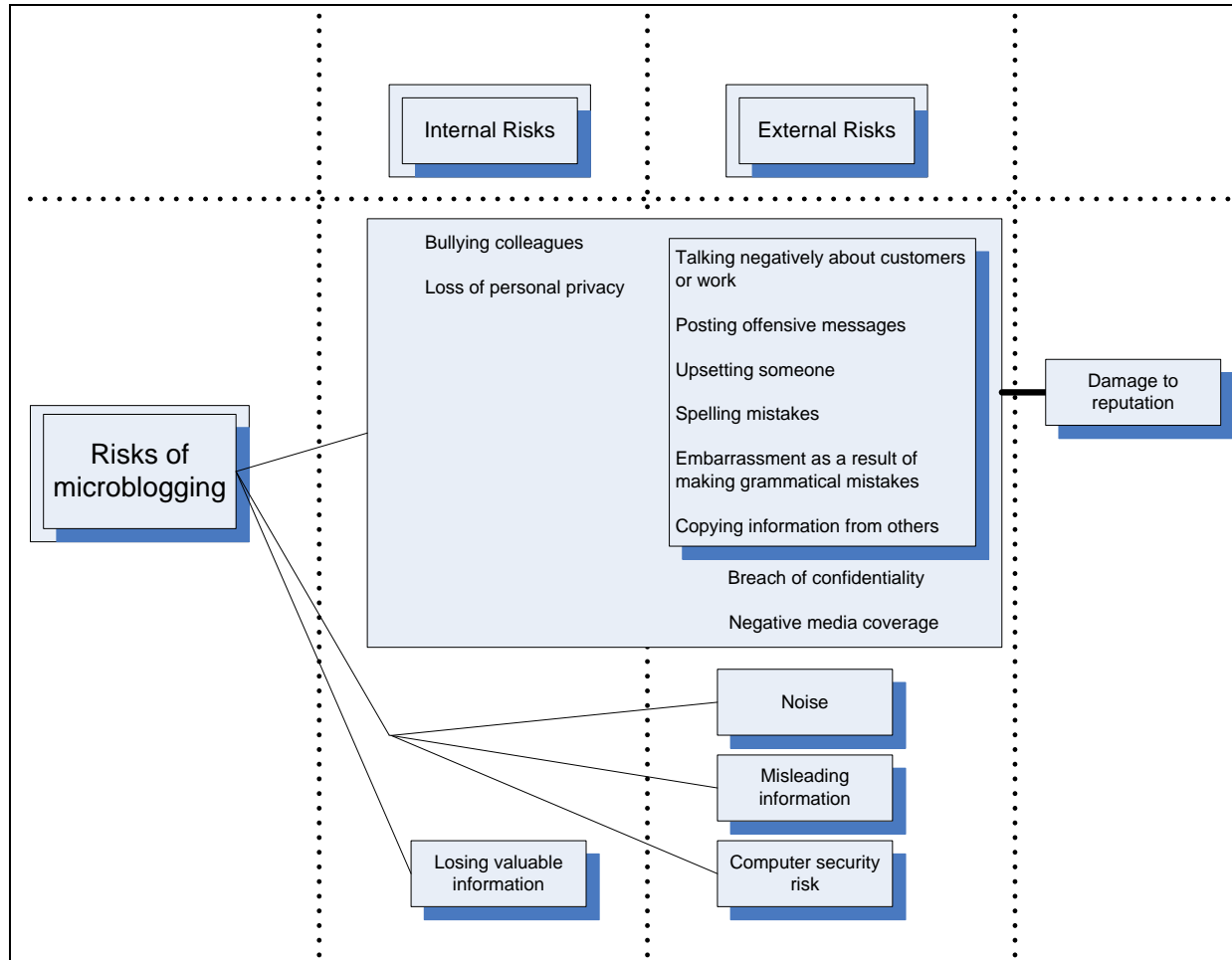
Another interviewee thought that users may sometimes try and blame microblogs, instead of focusing the problems on their own behaviour and how they make use of it.

*“I do not perceive many risks. I think the risks are more to do with the way they are used and the control or the amount of control that you have over the way that they are used [...] I think the biggest risk in an internal risk, how it is used and not a risk of the actual technology itself”.* (CO-D-17)

Most interviewees identified some risks of microblogging, and sections 5.3 and 5.4 explain what they thought they were. This section explains Figure 5.1, a visual representation of participants' views. The diagram is divided into two main sections, differentiating between internal and external risks of microblogging. They are separated by vertical, dotted lines. In this research internal risks have been defined as risks which can happen as a result of using microblogging within the organisation, to communicate with staff members. It was found that external risks can happen from using microblogs to engage with those outside of the organisation, such as customers, potential customers, clients and suppliers. Figure 5.1 shows that the internal risks are: bullying colleagues, loss of personal privacy and losing valuable information. They are all in the same section and they appear in the order of importance. The external risks are: damaging the reputation of the organisation, breach of confidentiality i.e. leaking confidential information about the business to the public, negative media coverage, noise, misleading information and computer security risk. They are placed in one section, shown by dotted lines and they appear in the order of importance. This research found that the risk most commonly mentioned was the external risk, of damaging the reputation of the organisation. Participants thought that this could happen through talking negatively about customers or work-related issues, posting offensive messages, upsetting someone, making spelling mistakes, writing in a poor style which could lead to embarrassment or copying data from others,. A box is placed around these examples, to show that this is how the interviewees thought the reputation of the organisation can be damaged. The participants thought of breach of confidentiality and negative media coverage as external risks, but also potentially affecting the reputation of the organisation. On the diagram these two risks are placed in one box, which is connected to damage to reputation. This is to clearly show that they can affect the reputation of the organisation. The interviewees thought that bullying colleagues and loss of personal

privacy, too affected the reputation of the business. The diagram shows a link between them and reputational damage. Participants identified losing valuable information, noise, misleading information and computer security risk as other distinct concerns. Interviewees thought that they were separate risks and on Figure 5.1, they are in separate boxes.





**Figure 5.1: Visual representation of participants' views of the risks of microblogging**

## 5.3. External Risks of microblogging

### 5.3.1. Damage to reputation

Damaging the reputation of the business was identified as the main risk of microblogging. The majority of interviewees talked about this external risk and this subsection identifies a number of ways interviewees thought the company's reputation could be damaged.

*“So one of the main pitfalls I'm concerned about is that something that somebody writes let's say that they're working on some paperwork or a project for a customer and they put it's a load of rubbish on Twitter. One of my concerns is that something like that does end up in the public domain. And whilst it's a small chance, there's a chance that the customer could see that. So we have to try and get around that and that's a quite a big concern for me [...] So people may have their own accounts as to their work account on Twitter and make a mistake and all of a sudden your dirty washing's on the internet with your name all over it and you think oh I can't physically keep an eye on all of it.”* (IT-D-4)

The interviewee thought that on Twitter, although the chance of some mistake going out is low, so many people will see it, including customers that it is a significant risk. 'IT-D-4' spoke passionately about this topic, showing that he was very serious about needing to mitigate the risk of damaging the reputation of the organisation. The participant said that he cannot keep track of all the different accounts and messages being posted. This is linked to the point he made about controlling who could microblog (see Section 5.6.2). The interviewee said that he is the only person within the organisation who interacts with others through Twitter. He said that he just cannot monitor everything, so there is always a risk.

Another participant said:

*“We've had someone who perhaps could not articulate things very well on Twitter. Like I've had a hell of a day at work, or I hate my job and all this kind of thing, and we're like 'Oh God. Our clients follow it you know'. Hate the job if you like, but you know but don't publicise it [...] In fact most people don't, most of the guys that work for us don't use Twitter at all anyway. Might use Facebook but, I don't care what they do on it on their private Facebook page. But on Twitter, it's a different ball game isn't it. No one ever puts that they love their job on Twitter you know.”* (IT-D-5)

'IT-D-5' expressed the view that people sometimes let off steam and moan about their job on Twitter and that reflects badly on the organisation. The interviewee thought that the underlying problem is that people are not good at articulating ideas on Twitter.

*“It might be seen differently by another member of staff or, you know, these guys have their joke and crack a joke about his shoes and he takes offence.” (IT-D-4)*

The interviewee was concerned that it is important to be aware of how messages come across to others, especially as people can interpret information differently.

When communicating, participants thought that it is important to be cautious and not to sound rude, sarcastic or to take jokes too far.

*“It is a habit of mine anyway that whenever I communicate digitally, whether it is by email or in any other form, I will read and re-read what I have written. So because I think that there is a danger in the sort of informality of digital communication, that you can, your message can be misconstrued and that is dangerous in business as it is in any walk of life. You know if you say something sarcastically that was meant in a humorous way, if the humour goes unnoticed then it can cause damage. So I am very careful about what I write, particularly with tweeting.” (IT-D-8)*

This interviewee felt that when people post information on platforms such as Twitter, it may be difficult for them to express their thoughts and feelings and show what their true intentions are. Through microblogs, it is more likely for misunderstandings to occur and someone could end up feeling insulted by what they have read. People who microblog on behalf of their organisation can affect the reputation of the business. ‘CO-D-16’ said:

*“I mean I am aware of the risk that I mentioned to you before, after a spectacular case that happened here when somebody tweeted something which he thought was fairly neutral but it was about religion and the weight of the church kind of fell upon him by the end of the day. On reflection that has actually ruined his political career.” (CO-D-16)*

This participant thought that certain topics are very sensitive to talk about on Twitter.

Another interviewee works with children and sometimes directly interacts through Twitter with their parents. He said that the nature of messages being shared and the language used was very important. Users needed to be careful not to sound offensive with the type of messages they publish on Twitter. This is with both their personal Twitter accounts and the company account.

*“Probably the language used in the tweets. You also need to be aware of any possible links from our personal accounts to the business accounts. So if we in the reference put that we work for the company, we need to make sure that your personal account does not cause any offence, in case any parents found your own personal one and started tweeting you directly through that.” (SP-M-21)*

‘SP-M-21’ again expressed a concern with the difficulty of using the appropriate language when microblogging. This participant thought that even indirectly through personal accounts, reputation damage can occur, because the accounts are linked. This suggests that it is difficult to manage the nature of the risk.

*“Because you use it at the speed of thought, you can sometimes say what first comes to your mind without thinking about it and, you know, if I was having [...] An awkward conversation with somebody in real life, if I was talking my brain would tell me to just consider what I’m saying. But sometimes you just blurt something out that you didn’t mean to. But at least when talking to somebody face to face you’ve got body language, you’ve got facial expressions, and with the written words it can be very blunt. And it’s not necessarily intended, so you have to be more careful because it’s very easy to upset somebody if you just write this thing and I’m the type of person that doesn’t like thinking too much about what I say, I’d rather just say it and apologise [...] I wouldn’t say it always happens but you know frequently it does and again it just comes down to you training yourself. You either train yourself or you accept that it’s going to happen. I’m in between there. I’ll train myself to an extent where if it happens I’d just apologise if I have to [...] It really doesn’t happen that much, but that is one of the risks and it has happened. It doesn’t happen every day, it doesn’t happen every week or every month, but it has happened.” (IT-M-2)*

The interviewee thought people tend to use microblogging in the same way as they talk, with little consideration “*at the speed of thought*”, but because there is a lack of facial expression and body language, people can be misunderstood.

Typos and grammatical mistakes in microblog messages were considered by interviewees a further problem which can affect the reputation of the organisation.

*“Spelling mistakes are a big risk. People just aren’t careful enough with things like that, but if something goes out with a spelling or grammar error on it, people think it doesn’t matter, but it does. People’s impressions of your organisation drop dramatically if they think you can’t spell. How are you going to carry out their work or do your job properly if you can’t tell the difference between ‘your’ and ‘you are’?” (IT-D-4)*

According to this IT director, spelling mistakes can influence how knowledgeable, reliable and professional the business is perceived to be. Another interviewee said:

*“I think the only thing that I would change is if I noticed a typo in it. Because I don’t really put things out that don’t read right. And the other thing is we are talking to people around the world, so you need to get the English right. But I don’t think that there is any, we ourselves have not had any negative effects on anything, I don’t think, hopefully.” (IT-M-9)*

This participant was also aware of the need for messages to sound, look and to read correctly. As a result of making spelling mistakes and typing errors on microblogging, there is the potential risk of negatively affecting the reputation of the organisation.

One of the IT managers used the phrase “*foot-in-mouth syndrome*” to refer to the possibility of sharing inaccurate or wrong contents on microblogging.

*“The biggest risk is foot-in-mouth syndrome basically saying something you did not mean to or coming across the wrong way. I mean, companies need to have a policy on what people can and cannot say online and you know that can be as strict as the company needs it to be.” (IT-M-12)*

*“The safest example I can give you is, you know, we had a blog go out that was badly written, very badly written and we tweeted it to our followers. And it was just embarrassing, the grammar was poor, the context was poor. It was just embarrassing that we did that.” (IT-M-2)*

According to ‘IT-M-2’ these errors can portray the organisation as unprofessional and cause embarrassment.

Another interviewee said:

*“I know this person who let’s just say he was doing wrong in the double glazing business for a while and he got caught out and BBC watchdog got hold of him. Everything he tries to do now, the moment he sets up anything, everybody tweets about him that they got ripped off by him. Your behaviour follows you. It’s a very open world.” (IT-D-5)*

Interviewees talked about how once an individual has gained a bad name and reputation online, their past mistakes can quickly catch up with them and affect their future business plans and relationships with others. If these individuals are associated with a business, their bad reputation can also affect its reputation. As a result, less people may want to work with the organisation. For example, interviewees thought that if you constantly try to copy information from others or you try too hard to engage with your competitor’s contacts, you can come across as someone who lacks confidence and is unprofessional. It is important to be seen as someone who knows what they are doing online.

*“I think there are probably a few things to think about with Twitter. The key one is your reputation. You can make or break your reputation on Twitter very quickly and everyone will see it. I had, in fact I wrote a blog article about it to stop it happening. But I had a competitor shall we say. Someone who thought he was my competitor. I am not sure why because we worked in completely different areas. But what I was doing in social media and blogging and that kind of thing, I found that he was trying to communicate with all the people that I was. He is a really nice guy, it is just that he got it all wrong. And he went around I mean we work with professors and doctors and all the time you know sometimes some of my partners, my clients would say to me who is this guy trying to follow me on Twitter and asking to be a friend and all those kinds of things. And I’d see what he was doing and he would re-tweet stuff that I had done, his website ended up looking like mine in content because our search engine marketing was a lot more successful than his, so his website started to go that way. His Twitter and blog articles were in a similar way and that kind of thing. So I actually wrote an article, quite an extensive article about social stalking and I put that on Twitter and he very quickly stopped. Everybody knew it was him I was talking about. But it saved me approaching the matter in any great detail, I don’t know if he still speaks to me or not I don’t know, I haven’t seen him for years. But it’s quite important I think to get what you do right on Twitter, it can make or break your reputation.” (IT-D-5)*

This participant thought that there are a few ways you can damage your reputation online, using microblogs. The interviewee expressed the view that reputation is about behaviour as a whole, including the types of contents which are shared, but also how you network and whether you understand the conventions of the medium. ‘IT-D-5’ said that even though this individual is not a bad person, he did not really understand how to network on Twitter. He ended up looking unprofessional and that negatively affected his reputation.

Another interviewee gave an example of how the reputation of the organisation can be damaged.

*“There was one, where a colleague picked up some information to put into a piece around training and did not realise the source of information because it was passed onto us. And it actually was a quote from someone else’s website and they picked up on it and tweeted back to the company [...] Saying that is bad form. Straight away apologies were sent out and an explanation given for damaged reputation. That is the only time this happened.” (CO-D-17)*

The interviewee thought that through microblogging, it is easy to make a small mistake and to accidentally offend people. The participant is concerned that one person’s actions can affect the reputation of the whole organisation. There is a particular concern about copying others’ work, which seems to be connected with using Twitter.

In this section, reputational damage was identified as the most commonly mentioned and external risk of microblogging. Interviewees thought that this could happen through talking negatively about customers or work-related issues, posting offensive information, upsetting someone, making spelling mistakes, writing in a poor style or copying data from others. Many people talked about damage to the reputation of the organisation based on their own experiences or hypothetical risks. A few respondents spoke about having directly interacted with someone who had faced this risk, or cases mentioned in the media, such as in newspapers, which they were aware of.

### **5.3.2. Breach of confidentiality**

Another type of risk that people talked about was leaking confidential data about the business to the public. This was seen to be an external risk in itself, but it also influenced the reputation of the organisation. The majority of interviewees talked about this risk. For example, 'IT-D-4' considered breach of confidentiality to be one of the main reasons why he found microblogging was unsuitable for business purposes. This interviewee was one of the main participants who found Twitter was inappropriate for organisational uses. Due to the public nature of Twitter he said that confidential information, such as software code, could leak into the public domain. Not only was there direct damage from the loss of information, there was also an impact on reputation.

*“So some the IT staff use microblogging sites to challenge each other about what they're doing at work and some of our code ended up on the internet, in the public domain for maybe a week. I don't know how many times that's been repeated or taken or copied or used [...] I wouldn't have minded had he changed some of the important details, he hadn't. So there were little bits and pieces about our software that were given away. Not that you know if you went onto the internet and saw it; you personally wouldn't have a clue, because you're not a programmer. But it only takes one wrong person to have a look and go, haha, I've got that bit of information and they would be able to do something, like causing some damage or look through something.” (IT-D-4)*

Another interviewee talked about being aware of this risk of microblogging. 'IT-E-1' suggested that no matter how many rules or guidelines are put in place, this risk can happen and employees could potentially share confidential information about the organisation with the public.

*“In general it's a risk and it can happen. That can happen by the way even if the company never allowed people to use Twitter. They may use it in their own time and accidentally just mention something [...] If it happens and something is published, we will deal with the individual.” (IT-E-1)*

### 5.3.3. Negative media coverage

Negative media coverage was seen to be an external risk in itself, but it also influenced the reputation of the organisation. In the category: damage to reputation, most participants spoke about their experiences of things going wrong or they were talking hypothetically. However, a few respondents also talked about cases mentioned in the media, such as in newspapers, which they were aware of. Negative media coverage needed to be treated as a different category to show that there were different types of responses given by participants.

*“I think that my opinion of Twitter is going down quite a lot. It’s had a lot of negative media coverage. There have been people who’ve got jail time because of what they’ve written on Twitter. I think all that has a negative impact on the Twitter branding and what it’s used for. I seriously doubt anybody in here would put something so silly as they’re going to blow Doncaster airport up on there. Even if it is just a joke any kind of flipping comment like that can lead to a policeman turning up at your door. If that kind of thing ends up being associated with your business that is not a smart idea. You know you don’t get splashed all over, well maybe you do; any exposure is good exposure, but if you do end up on the front of the Daily Mail because of one of your employees saying they’re going to blow up Doncaster airport, it’s not good, absolutely not good.” (IT-D-4)*

This participant’s idea about Twitter’s risk was influenced by the media. ‘IT-D-4’ thought that a comment or statement which may be intended as a joke on Twitter could be easily blown out of proportion and end up being associated with the organisation in a negative way. He found that one member of staff could essentially ruin the company name and harm the business, as well as their own reputation.

### 5.3.4. Noise

Most of the participants talked about there being too much irrelevant information on Twitter: i.e. noise. All communication contains noise, but some of the interviewees thought that there is just too much in microblogging. Some mentioned that this can lead people to waste a lot of their working hours on microblogs, looking for the right information. According to ‘IT-D-5’:

*“The community on Twitter has been the biggest killer of it for us to be honest. [...] When we first adopted Twitter there wasn’t very much to it. Now it is slightly classier than it used to be but there is more noise on it which is bad [...] It is so noisy with people that do not really exist. That is the biggest change to Twitter. That has really changed my views of how we would use it [...] I cannot look through my followers, you know I cannot look through five thousand people and find out something interesting. There’s nothing interesting in five thousand people, I have to focus it right down.” (IT-D-5)*



The interviewee thought that if you have a lot of followers, you cannot find useful information from them. Also, it could be difficult to trust the followers are real i.e. they may be robots and not real people. This is one reason why ‘IT-D-5’ explained that a lot of time and effort is required to look for useful information on Twitter. *“You find that you get a lot of rubbish on there”*.

Similarly, another participant said:

*“There’s a lot of noise on Twitter. So I follow very few people. There are probably six people I follow, and a couple of hundred people are following me [...] So people share things like I have had this for breakfast or I am taking my kids swimming. It has no relevance in my life whatsoever. I don’t want to hear it.”* (IT-M-2)

Another interviewee thought that Twitter was a more business based platform before celebrities and people from different professions started to microblog.

*“It involved lots of people in the industry before celebrities took it up. So it was a great way of getting information very quickly. Of course, after that, it had people like Lady Gaga and Jonathon Ross who helped to popularise it in various territories”*. (IT-D-8)

‘IT-D-4’ viewed microblogs as a waste of time and not suitable for business purposes.

*“If another company director came up to us and said ‘Do you think we should be on Twitter?’ I’d say ‘Get an account just so nobody else can get it and then leave it alone, forget it, waste of time’ [...] If your intended audience are genuine business people, I would say forget it you’re wasting your time, leave it alone it’s not all worth having [...] It contains too much useless information.”* (IT-D-4)

According to this participant, Twitter is not useful for organisations, because there is a lot of noise on it and it wastes people’s time in trying to appropriately use the platform: i.e. finding the right information takes too much time and effort.

### **5.3.5. Misleading information**

A few interviewees talked about giving out misleading information as an external risk of microblogging.

*“Yeah, so coupled with that I guess is if you’re sending out a tweet which was inappropriate, or had some kind of mistake or mislead people in some way, just even accidentally. That’s not happened so far but I guess it is a risk because there’s no real quality control. Once you publish something, it’s done in seconds and it’s out there in public. So if you make a mistake, then that could be a problem I guess.”* (IT-E-7)

Participants thought that sending out incorrect or misleading data can place the organisation at risk, where people can judge members of staff and suggest that they are

not working accurately or correctly. Especially with platforms such as Twitter, which are public, and all of the messages are sent out and distributed very quickly among users, this issue becomes more important.

Misleading or confusing information can place the organisation at the risk of a law suit. According to one of the IT directors:

*“The other risk is that they put something out there or between staff that’s incorrect. So maybe a special offer that we might not do or, or telling the customers that there’s a deal on at the moment. Or maybe tell the customers an incorrect piece of legislation, so with say consultants here, if they were to do that it’s very difficult to retract once two or three hundred people have seen it; or even just internally, if the guys have all seen [...] Something like a new piece of legislation released in 2012 to say A, B, C, and D. You can’t do this, customers pick it up, internal staff pick it up and then all of a sudden before you know it very quickly internal staff are telling all the other customers and if it’s incorrect we’ve left ourselves wide open to a law suit or given out incorrect or bad advice.” (IT-D-4)*

Through microblogging, inaccurate or wrong information may be shared with a large number of customers or potential customers. It would therefore become difficult to try and replace those details with correct information, particularly as it would not be obvious who had seen them. As a result of providing inaccurate or wrong information, the company may be faced with the risk of law suit. This is one of the potential risks of microblogging which ‘IT-D-4’ felt existed.

#### **5.3.6. Computer security risk**

Issues related to the security of computer systems were considered by interviewees as an external, potential risk of microblogging in organisations. People outside of the organisation may be able to hack the system or send spam messages and get hold of the organisation’s sensitive data. A few interviewees talked about hacking.

*“Other risks are, I suppose, you get your account hacked. It’s less likely to happen to us because working in IT, we can carry out basic security checks. Our passwords are very strong, you know, it’s not like the regular set of passwords like you get at some companies, the password’s their company name and how people do that I’ll never know. But you know there’s always a risk that something like that could get taken over by hackers. Now we’re at a fairly low risk in our industry, I’ve not seen Health and Safety and Employment Laws as they’re going to get hacked by the anonymous lads so they can you know blitz us over the internet. But the potential’s there, especially in larger, more famous organisations. If you are a company like Microsoft, you make yourself a target and then you allow these people a variety of avenues to attack you, take over accounts, cause media problems, etc.” (IT-D-4)*

This participant perceived a potential security problem existing for organisations that use microblogging. It is possible for those outside of the organisation to hack into the organisation's computer systems. Thus, sensitive data could get into the wrong hands. Although larger and better known organisations face a higher risk, there is a need for every organisation to be aware of this issue and to protect their accounts and private details.

*“People get their accounts hacked don't they. I do not know how they get their accounts hacked actually. So I guess there is a security side of things maybe that they could tighten up somehow. But at the same time you do not want to make it too hard for the people who are actually trying to use it. Just to keep out people who are trying to cause havoc.”* (IT-M-10)

The participants saw it as important to make sure that the business accounts are safe and secure, making it difficult for those outside of the organisation to have access, i.e. to hack into their accounts and get the organisations private data. However, at the same time, participants thought that it was important to keep a balance between how the systems are handled and how they are kept safe; the systems should not be too difficult for actual members of staff to use and people should easily have access to the materials they need.

One of the participants talked about receiving unwanted messages on Twitter.

*“I have had spam before [...] So I have had to delete or re-set my accounts, so that is the only thing that is a bit annoying. So I have had to re-set my password on my personal account, I had somebody sent me a message in my inbox, so I opened it and it blocked my account. So I had to re-set my account. But that is with people sending spam messages. If someone sends you a message, you open it instantly and you could be blocked. I am not sure how to avoid this unless there was a bug-fix or something on Twitter. This is a problem every business can face, but if they had the same as Facebook where you can report someone for spam or something [...] On Twitter, the tool would work probably be even better. I am not too sure they have that on Twitter.”* (SP-E-20)

This participant shows a general fear of computer risk, but also they are quite uncertain about the actual situation with Twitter. By providing specific examples, 'SP-E-20' shows how unwanted messages can affect people's Twitter accounts and work. Therefore, in order to sustain relationships with those outside of the organisation, companies have to pay attention to what data they receive and how they handle that information.

## 5.4. Internal Risks of microblogging

As well as the external risks of microblogging in SMEs, a few participants also talked about internal risks of microblogs. In this research internal risks are defined as risks which can happen from using microblogging within the organisation, to engage with colleagues. The perceived internal risks will be discussed in this section. These are: bullying colleagues, loss of personal privacy and losing valuable information.

### 5.4.1. Bullying colleagues

One of the participants identified bullying colleagues as an internal risk of microblogging.

*“Let’s pick on these two here, Nigel here reports Tim for Facebook bullying or Twitter bullying because he has called him names [...] You cannot do that and that is another risk, if you do not make it clear to your staff that it is unacceptable to talk about the firm and each other, something goes wrong and you lose a good person.” (IT-D-4)*

The interviewee thought that there is a risk of employees talking negatively about each other when using microblogging. Casual reports of bullying or accusations can reach others because they are online. Employees could potentially lose their jobs as a result of reported complaints or accusations. This was seen as a separate type of risk, but also to have a potential impact on the reputation of the organisation.

### 5.4.2. Loss of personal privacy

Related to the issue of bullying, one interviewee said:

*“People say things to each other and you can get them over and nobody finds out about it, bang their heads together and say get on with it; this is unacceptable. Once it’s in the public domain and everybody else in here knows about it, then it’s more serious; it can cause more embarrassment. You know, if somebody makes a complaint about someone else’s behaviour, you can sort it a bit quietly and make sure everybody’s happy with the outcome and nobody’s embarrassed. Somebody gets a telling off and somebody gets told it’s ok, sorted, and that’s the end of the matter. If it ends up on the internet and somebody reads it online and every member of staff have seen it, the offence caused and therefore the embarrassment can be much higher. And as a company you have to do a lot more about that. You know it’s a lot harder to try and convince somebody he was only joking, he didn’t mean it.” (IT-D-4)*

‘IT-D-4’ expressed the view that as more people within the organisation find out about an accusation or disagreement between employees, due to the details leaking into the public domain through Twitter, the loss of personal privacy and feelings of discomfort are likely to be higher for that individual. Earlier in the interview the participant reinforced the point about information leaking into the public domain and how the

reputation of the organisation can be damaged (see Section 5.3.1). Here, the participant is mainly worried about people within the organisation finding out about disagreements and accusations.

#### **5.4.3. Losing valuable information**

One of the interviewees commented about the possibility of losing valuable information when using internal microblogging.

*“The biggest risk that I could foresee with using something like Yammer is if the system goes and you have got information held in there, you will lose that information and the potential to use information. So in terms of changing that, I am not sure whether there would be any risk of it disappearing. I am not sure.” (CO-D-17)*

‘CO-D-17’ expressed a fear about the possibility of losing access to useful materials. This was a hypothetical concern, not based on specific experiences. This interviewee thought that if Yammer is taken down and the organisation depends on it for information, they face losing information. ‘CO-D-17’ also shared her doubts about whether it would be possible to reduce the chances of losing information on Yammer, i.e. showing signs of not being completely certain about how the platform operates. The fact that one participant mentioned this kind of risk suggests that microblogs are not really used to store information very commonly.

### **5.5. Overview of the risks of microblogging in SMEs as perceived by participants**

Sections 5.3 and 5.4 discussed the perceived risks of microblogging in smaller organisations. The findings showed that participants from the field of IT generally identified more risks with microblogging than those from the Consultancy or Sports sector. According to some of the IT participants, their extensive knowledge and experience in using microblogging and similar technologies, led them to adopt these platforms and know how to engage with them appropriately and effectively. Consequently, it was found that IT interviewees talked more about potential risks of microblogging in smaller organisations. In this research, most respondents were fairly confident in their opinions, probably because they work in IT. For example, some participants expressed the view that because of their background in IT, they are aware of technologies and understand how they work. They thought that this helps them to easily use microblogs. A few IT interviewees also referred to themselves as being sensible people, also indicating that because of their background, they understand how

to use microblogging. However, other respondents, from the field of Sports and Consultancy were not very confident about some of their views.

Most participants were concerned about the external risk of damage to the reputation of the business. This issue could occur as a result of talking negatively about customers or work-related topics, posting offensive messages, upsetting someone, making spelling mistakes or writing in a poor style or copying information from others. Leaking confidential information about the organisation to people outside was considered to be a risk in itself, but could also influence the reputation of the business. These were the key issues which most interviewees were concerned about for their organisation. Negative media coverage, too much noise, misleading information and computer security risk were also identified by interviewees as external risks of microblogging. A few participants also perceived internal risks to be associated with using microblogs for business purposes. They talked about bullying of colleagues, loss of personal privacy and losing valuable information.

## 5.6. Risk mitigation in SMEs

The aim of this section is to discuss what the interviewees suggested their organisation did, or thought organisations should do to mitigate risk of microblogging. As most interviewees identified potential risks of microblogs, mainly associated with external microblogging, it was natural that many said that they took specific types of action to deal with the issues; mainly related to their reputation. Perhaps surprisingly, some said, however, the organisation had decided not to take action, for a number of reasons. Generally this was because the business was too small.

*“There are only eight of us in there. We know each other. I don’t think you need a policy to communicate something like that [...] We are sensible people.” (IT-M-3)*

Similarly, another Consultancy interviewee said:

*“In terms of its day to day usage, because there are only two of us, it is very easy to monitor how often it has been used and how it has been used. Should we expand, and again if we had other employees and we were using that same Twitter account, then I think we would need something in place. Just some very basic ground rules around it, but nothing too off-putting.” (CO-D-17)*

This director explained that if the organisation was to expand and the number of microblogging users was to potentially increase, they would consider formally establishing some policies for using Twitter. However, they would keep a balance

between introducing some ground rules and being too formal, so that they would not come across as uninviting; as a result of having too many rules, they could turn people away from microblogging. ‘CO-D-17’ also said:

*“There is a risk that too many guidelines are overkill and it stops people from using it because it scares them. So I think it is a fine balancing act between overkill and letting people to just have a voice. So I think there needs to be a realistic standpoint on it. For example, if you are happy for all your workers to stand at the front desk and talk to people, then you should be equally happy for them to talk to people using social technology. If you have to give them a specific training course telling them how to talk to people and the language to use face-to-face, then they need training. But if not, then it would be unnecessary. So I think there is a fine line because you carry a risk in trying to reduce the risk [...] The risk of them not using it. So I think some basic guidelines aimed at providing them with confidence to use the tool is much better than providing them with a long list of dos and don’ts.”* (CO-D-17)

The participant thought that employees need to feel that they are treated as capable of working independently. Care needs to be given not to overprotect members of staff, and to allow them to feel relaxed and self-reliant to use microblogging. There is also the need to trust employees with microblogs.

Another interviewee also talked about being part of a small organisation and so there was no need for them to have formal microblogging policies. ‘CO-D-16’ had in fact educated people about using microblogs and he was aware of the required rules involved with using the platforms.

*“No not in the company. When I worked for the council, as part of the innovation group, I actually wrote strategy and then some policy and some guidance for the staff on the use of social media. And we have actually shared some of that across the public sector with other organisations. Within our company itself, because we are so small, we haven’t really had a need to do that, and because we have been involved in authoring guidance for others, I think we are pretty familiar with the do’s and don’ts.”* (CO-D-16)

According to another participant, too many rules could make people feel uncomfortable because they would have to constantly worry about whether they were allowed to post messages. People needed to feel relaxed when microblogging.

*“Say what you like, say everything. In fact the only rule is to say everything. You know, don’t not say something. The more rules you put in place the more likely you are to stop people from using something. So the worst that can happen is that they say something wrong and then you just have to have a word and say just be careful you don’t say that kind of stuff next time. Putting lengthy best practices in place and that kind of stuff just, it marginalises thoughts. Am I allowed to say this? Start typing and go ‘Oh, maybe I’m*

*not allowed to say that' and then they don't type at all. So just get on with it and do it and don't worry about it."* (IT-M-2)

According to this interviewee, within their organisation they felt flexible and comfortable about their employees' using microblogging freely.

*"I trust my business partner implicitly and if she does something wrong it is still our problem. And we have another person who is fairly accurate with grammar and appropriate in the sort of things that would be posted."* (IT-D-5)

In this context, some organisations were happy to allow their employees to use microblogging and to trust that they were capable of making appropriate decisions, in terms of what messages should be shared. Similarly, 'CO-E-15' said:

*"We have monthly company meetings and at one of these John basically presented the social media's we could be using, how we could use them and, you know, let's go for it, you know, let's just have a play. There has never been a specific sort of training course as such [...] With the other technologies, Twitter and Yammer, we have just taught ourselves and come to our own way of using it, I think."* (CO-E-15)

The interviewee thought that employees were trusted and the organisation had confidence in their ability to use microblogging appropriately. Users were allowed to make their own decisions and to use their own initiative to learn how to use microblogs for business purposes.

Another reason why some people perhaps did not act to mitigate risks through guidelines is because they thought they do not work.

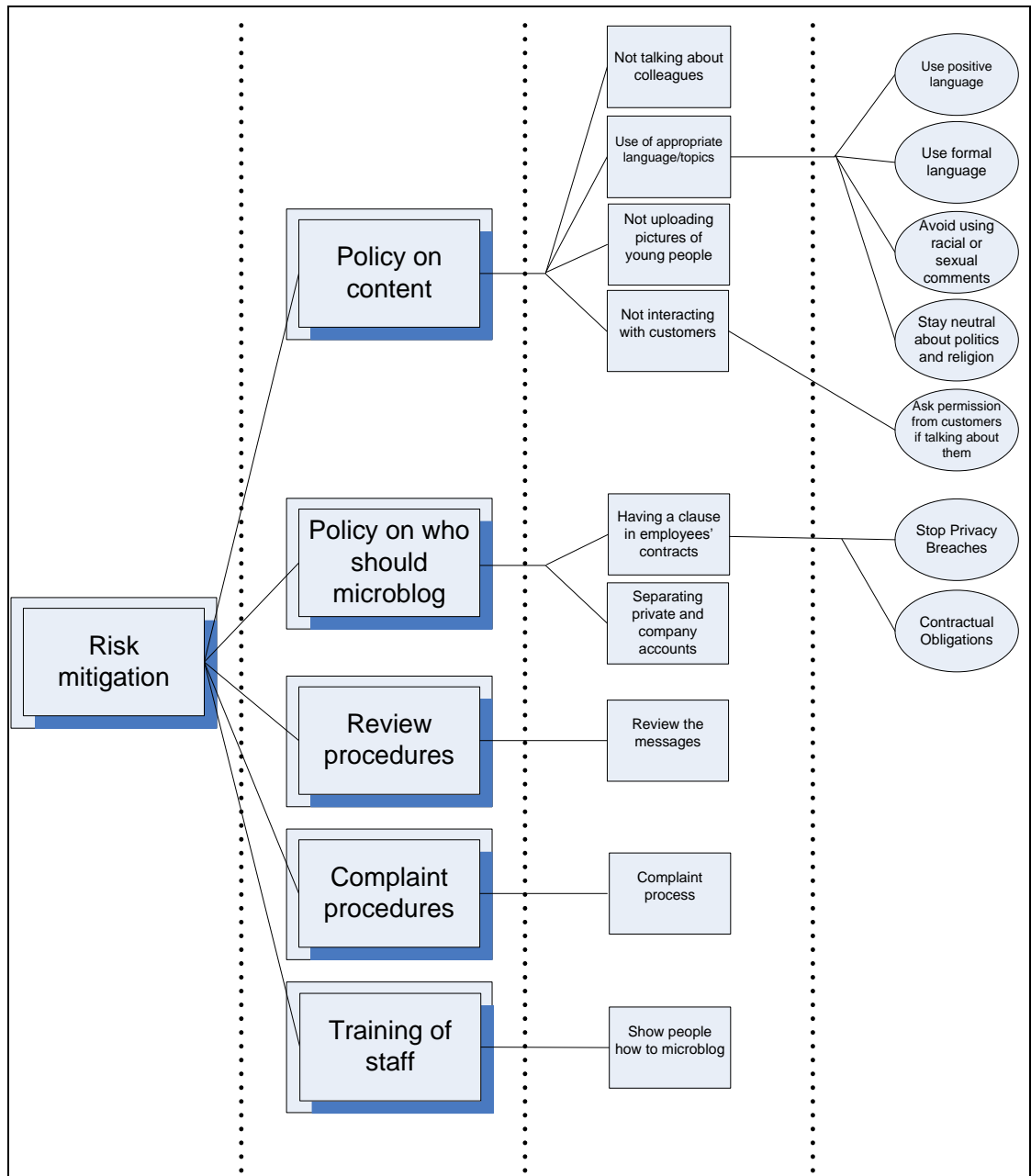
*"Although obviously policies are great but do not necessarily stop people from doing something. It gives you some comeback on that individual, but it does not stop them actually doing it."* (IT-M-11)

This participant thought that having policies does not really work i.e. guidelines may not be enough to stop employees from acting inappropriately, sharing unnecessary or unsuitable messages. Nevertheless, in this organisation policies were in place, for example, about not communicating in a racial or sexual manner through Twitter.

However, although some people saw microblogging as risky, but did nothing, most people did talk about things they did to mitigate the risk they identified. The actions taken to mitigate risk are presented in Figure 5.2. The diagram is divided into three main sections, separated by vertical, dotted lines. The lines differentiate between the themes and its sub-themes. The diagram reads from left to right and it shows



information in the order of importance. In the first section, it shows, the types of actions taken by organisations are: having policy on content, policy on who should microblog, review procedures, complaint procedures and training of staff. The second section identifies the sub-themes and examples of each type of approach. The interviewees thought that the commonest type of approach was to have policy on content i.e. to have rules or guidelines related to what people should microblog. The second column on the diagram shows that these could be about a number of different types of content. A few participants explained how important it was not to talk about colleagues when making use of microblogs. Most interviewees referred to the need to use appropriate language and to select suitable topics. One of the participants talked about another specific rule, which was that what people should tweet is related to not uploading pictures of young people. Also, a few people referred to a policy about not interacting with customers. The third section on Figure 5.2 shows specific things they told people to do, to mitigate risk. For example, regarding the need to use appropriate language and to select suitable topics when using microblogs, people were told to use positive and formal language, to avoid using racial or sexual comments, to stay neutral about politics and religion and to ask permission from customers if talking about them.



**Figure 5.2: Visual representation of participants' views of the types of actions taken to mitigate risk**

### 5.6.1. Policy on content

The commonest type of approach mentioned by interviewees was to have rules or guidelines related to what people should or should not write in microblog posts. These could be about a number of different types of content, as elaborated in the sections that follow. Typically most people who were worried about the reputation of the organisation, tended to have policy on content. This was seen as one of the best approaches to manage and mitigate this risk.

#### 5.6.1.1. Not talking about colleagues

A few interviewees explained how important it was not to talk about colleagues when using microblogging.

*“It is another risk, that if you don’t make it clear to your staff that it is unacceptable to be talking about the firm and each other, something goes wrong and you lose a good person because they couldn’t keep quiet on the internet.” (IT-D-4)*

Interviewees thought that for an organisation, it is important to formally and clearly state that employees are not to mention co-workers or to talk about the organisation, whilst using microblogging. People who felt the key issue is damage to the reputation of the organisation tended to see the best way to mitigate risk to be having written guidelines, which make it clear to employees that they were not to talk about their co-workers in a negative way. As a result, chances of someone feeling like they are being mistreated or bullied are reduced. This is linked to the point the participant made about controlling who could microblog (see Section 5.6.2). The interviewee said that he was the only person who communicated with others through microblogging, for business purposes. Therefore, employees were not to use microblogs and talk about the organisation on Twitter.

This interviewee went on to say:

*“You are not allowed to talk about other members of staff. By that, I mean no naming of other members of staff because it’s not particularly private who works here and we have an ‘about us’ page where we prefer to keep names out of it.” (IT-D-4)*

By prohibiting the mention of specific names of members of staff on microblogs, no work is directly linked to individuals. Also, no details about people are shared with the public and their privacy is maintained.

### 5.6.1.2. Use of appropriate language/topics

The majority of interviewees referred to the need to use appropriate language and to select suitable topics when using microblogging.

*“So we have no negative language; that is very important. If you are talking about the company, it is always a positive line.” (IT-D-4)*

According to this participant, if employees are to talk about the organisation on microblogs, they have to come across as optimistic and confident at all times. ‘IT-D-4’ said that a formal guideline was put in place, emphasising the use of positive language. Otherwise, there is a chance that the reputation of the organisation will be undermined; sounding pessimistic about the organisation and work-related subjects can turn existing customers or potential customers away from working with the organisation.

Some interviewees talked about using formal language when microblogging.

*“The only thing that has happened was that I was writing, where I had done this synthesis role before on a project, and it was very kind of informal language and I was again doing it for a new project and I had not realised that it needed to be slightly more formal. Two people from the project team had just come back and said just tweak this language because it look like we do not know what we are doing, that we do not know what this information should look like.” (CO-E-15)*

‘CO-E-15’ explained that they needed to use formal language when posting information on microblogging, in order to reduce the risk of damaging the reputation of the organisation; this was not a formal policy that was put in place, but it was a suggestion. Similarly, another Consultancy interviewee said:

*“So using the company account, we use a more formal language. There are not personal opinions as such on the company account. It is mainly sticking to the fact that that is the information that, if it is personal opinions, they have to tweet as themselves”. (CO-D-17)*

This director revealed that when using microblogging through their business account, people have to use positive and formal language. Similarly, ‘SP-E-20’ explained:

*“When I use my personal account it is just me and my friends, so it is easier to just talk like how me and my friends talk but where I use it as a business, I have to just be not like I am when I am with my friends. So it is more like business talk and not using slang words and stuff like that.” (SP-E-20)*

Another participant had a more relaxed approach towards the types of language to be used on Twitter, compared to the latter participants. Some people thought that one

should be more formal when using microblogging and this interviewee thought that you should fit Twitter's general tone. 'SP-D-19' was aware of the risks associated with using informal language on Twitter, but considered making the tone of communication "Twitter friendly" i.e. being slightly informal and relaxed. Therefore, people would feel more comfortable when engaging with them.

*"We are just about to launch an event where we are mindful of the sort of hashtag that we might use, which does impact on the name we might give to the event and some of the terminology we might use. We might make the language more Twitter friendly right from the outset."* (SP-D-19)

Another interviewee said:

*"It could be just playing horrible [...] Whether that is you know someone that is holding a grudge against another colleague or somebody who is one of our customers. It could be someone who has not put any thought behind their reply to somebody who has a problem and the way that they come across demonises or makes the person look like they are an idiot and does not portray the customer care that we would expect them to. It could be racially or sexually negative posts [...] But it is very easy for someone to type 140 characters that somebody finds offensive. So these are all risks that we potentially face [...] One person I know posted kind of racial comments and for that reason we have these rules, you know don't post messages like that."* (IT-M-11)

According to 'IT-M-11', in this organisation policies were in place about not interacting in a racial or sexual manner through microblogging.

*"I am mindful of things; you have to be very careful because, with essentially with the size of the business and with 13,500 thousand followers, I have to be quite careful about staying relatively neutral on politics and religion and anything that might reflect badly on the business. So you know with that volume of tweeting comes a huge amount of responsibility as well."* (IT-D-8)

Twitter is a public platform and thousands of people outside of the organisation may view messages and information that is being shared. Therefore, it is important for colleagues to be careful about sensitive topics which may cause offence to people around issues such as politics and religion.

#### **5.6.1.3. Not uploading pictures of young people**

One of the participants said that another specific rule about what people should tweet is related to not uploading pictures of young people.

*"I think the only thing that I suppose that we have to bear in mind, although I do not remember there being a specific meeting or an email, is that, because a lot of the work that we do is with young people, you know we cannot take a photo and upload it to*

*Twitter and we cannot upload it to Facebook if there are identifiable children in it. [...] You see these stories all the time don't you, about how Twitter can be misused with photos and that and I suppose that is a risk. But I think all of us are very sensible and understand the risks [...] So we have to be very careful that the photos we use are only views from behind or [...] Only have their hands or whatever [...] This has just come about in email conversation; you know, I have asked for some emails to be used on the UTC Twitter account or on Facebook, and I have had loads sent back and I have kind of gone back and clarified have we got a consent form saying that we can use this image. Because if we have not we are not able to use them [...] As part of our research around technology and education, safeguarding is a massive part of e-safety. So we kind of I think we have absorbed it through that anyway.” (CO-E-15)*

This Consultancy interviewee explained that, if customers or clients witnessed that the privacy of children was not being respected, they could be perceived as unprofessional. For example, if children's faces were shown clearly or directly. The participant thought that this could affect the reputation of the organisation and reduce the chances of people ever working with them.

#### **5.6.1.4. Not interacting with customers**

A few interviewees referred to a formal policy about not interacting with customers.

*“We have a policy where people are not allowed to interact with customers on any of these sites. You know people look around and they get email addresses, you end up in somebody's Facebook or you know customers log into Twitter and create a brand new account, and it goes to their phone book and their address book and on their computer and they start adding people in, sending them emails. So we have a no interacting with customer's policy, so staff are not allowed to add customers into their Twitter accounts or whatever all these other ones are [...] The Twitter stuff tends to be, we're very strict with all of that because I find that Twitter's not a business tool.” (IT-D-4)*

'IT-D-4' thought that employees should not engage with customers because there is a chance that employees will share their personal thoughts and opinions on Twitter, which could end up being associated with the business. Therefore, the reputation of the organisation and relationships with customers could be negatively affected; i.e. if people dislike particular comments, they may feel disrespected and lose trust in the organisation.

Another participant said:

*“The only guidelines really are if we are going to talk about something concerning our customers, we obviously have to get permission from them. You know, we ask the individual customers, ‘Can we say this, is that going to be ok? Can we publicize this, is that alright? You know, we're sensible guys.” (IT-M-2)*

The interviewee explained that they trusted members of staff to use microblogging sensibly. The only thing expected of employees was to make sure that they checked with the customers for their approval, before mentioning them, or topics connected to them; the organisation strove to maintain their reputation in front of their customers by showing that they respected and cared for customers' feelings and privacy.

#### 5.6.2. Policy on who should microblog

The second type of action that some organisations took to manage risk was controlling who could microblog. The majority of interviewees talked about the need to determine who should communicate through microblogging, for business purposes. Typically people who were concerned about the reputation of the organisation and breach of confidentiality, tended to formally control who should use microblogging, to communicate with those outside of the organisation. This was seen as one of the best ways to solve these problems.

*“Who actually accesses our accounts? Only the marketing team send things out from our accounts. Other people within the company like the MD have an account, and our Sales director and our CEO. I think there are a couple of developers who do as well, and they will retweet things we say. So probably yeah around half of the employees, and maybe not even that many use it at all [...] We don't let just anybody send the messages out because we try and control how they are said.” (IT-M-9)*

Similarly, another interviewee said:

*“You know with that volume of tweeting comes a huge amount of responsibility as well. And I don't know that I would be comfortable with anyone else in the business tweeting to that level because I think the potential to let slip something that may have a detrimental effect on the business is high.” (IT-D-8)*

One of the Consultancy participants explained that they had multiple Twitter accounts and she went on to describe why it would be a good idea to allocate specific individuals to handle particular Twitter accounts.

*“I think it helps having an individual person in control of the accounts, because for Twitter there was a point where myself and my colleague were going to watch two accounts and it just became a bit like you did not know whether the other person was about to tweet the same thing, so we decided right we are going to separate we will each take control of one. That made it much easier.” (CO-E-15)*

The participant thought that by identifying specifically whose duty it is to be in charge of each Twitter account, employees could be prevented from posting the same messages, thus saving time in terms of looking over the same accounts and details.

Unlike those interviewees who were in favour of assigning specific people to control certain microblogs or accounts, ‘IT-E-7’ had a different approach. This was because some of their partners, who were outside their immediate organisation with whom they collaborated on projects, wanted to add contents and contribute to posting material.

*“The only change that we may be thinking about doing soon is we get emails from some other partners, some other people external to the company who would like to publish tweets [...] Or that we should tweet about this related to this project. So we’re thinking of opening up access to allow other people to post within our Twitter account as well, but that’s not something we’ve done yet.”* (IT-E-7)

Many interviewees were saying they already controlled who microblogged; others thought it was a good idea to do so but were not doing it yet. For example, an IT manager clearly stated that they would like to identify specific individuals to be in charge of microblogging.

*“I think the organisation needs to change slightly as well with regards to how we manage Twitter. I would like to see a dedicated communications resource, looking after our Twitter, our Forums, our ‘get satisfaction’, all of those tools and those outlets that we have currently, being under the control of somebody whose job and responsibility it is to look after that, rather than it being generic.”* (IT-M-11)

The participant thought that identifying who is in charge of microblogs would make it easier for the organisation to make sure the platforms were being used appropriately, and it would thus be more likely that the reputation of the business would be maintained.

Another interviewee emphasised that they are the only person within the organisation who communicates with customers through microblogging.

*“Me, at the moment just me yeah, if there is anything that goes on and interacting with the customers through any social media, it’s all done through me.”* (IT-D-4)

The participant expressed the view that this is another type of way of managing microblogging i.e. to restrict who has access. This is linked to the point he made earlier about damaging the reputation of the organisation (see Section 5.3.1 above). The interviewee said that using Twitter, although the chance of some mistake going out is low, so many people will see it, including customers. Instead of worrying about what employees say on Twitter and how they say it, ‘IT-D-4’ said that only he communicates with customers through microblogging. This is also linked to the point the participant



made about employees are not to talk about colleagues or the organisation through Twitter (see Section 5.6.1.1 above). He said that he was the only person using Twitter, so employees should not be talking about each other or the business on microblogging.

#### **5.6.2.1. Having a clause in employees' contracts**

One of the participants suggested that it would be more appropriate for organisations to make clear to what extent information can be shared through microblogging. The best way to do so would be by adding a specific clause about microblogs in their contract. As a result, the possibility of private information, such as software code, getting into the public domain would be reduced.

*“What concerned us was that whilst most of it was supposed to be private, there were slips where it had come in and ended up in the public domain and I had to get some things removed. So we added bits to the employment contract about social media and blogging and things like that [...] Saying you don't put that on the internet or you don't put this in the public domain.” (IT-D-4)*

This interviewee went on to say:

*“Using it you would've thought this is a great idea. We had it, we still do have it, we still do use it but it's got its place and it definitely made me think 'Hang on a minute this could go way more wrong than it could go well for the business' [...] What it actually did was show me that we needed to be very careful with these tools. So it gave me a negative opinion of things that ended up in the public domain [...] I'd love to say we started on Twitter and it made it easier to do projects, but I can't. What it actually did was show me that we need to be very careful with these tools. It gave me a negative opinion when things ended up in the public domain; so yeah, it meant we made changes to our company computer policy, employment contracts, and the way I monitor members of staff. I wouldn't have dreamed of looking up members of staff's accounts before. Now I do it quite regularly [...] Because it's so public, if you are going to use it you have to then also make the investment of time to monitor it.” (IT-D-4)*

In this case the leaking of confidential company code had caused concern for the organisation to such an extent that they changed their account policies and employee contracts, and were careful about who was allowed to microblog on behalf of the business. 'IT-D-4' was observed to be uncomfortable when talking about this issue, suggesting that it was a big concern for their organisation. The participant explained that the organisation faced a loss of commercially valuable intellectual property rights. 'IT-D-4' went on to provide another reason for this, as follows:

*“We started by letting people have a free run. Since then we've put into employment contracts that people are to A. ask permission for the use of any tools for company*

*business so that we know about every entry and when somebody's collaborating on one of these things, or working on it; and we also have in our contract that people aren't allowed to add negative things.” (IT-D-4)*

‘IT-D-4’ referred to the need to control the use of Twitter and to maintain the reputation of the organisation through the contractual obligations. By stopping people from adding negative messages on Twitter or posting in the wrong form or style, the organisation prevented reputational damage.

#### **5.6.2.2. Separating private and company accounts**

Several interviewees referred to the need to clearly separate private and organisational accounts, when using microblogging.

*“Sometimes people may use their own personal accounts right? Which is another part of the problem, that some of their private lives are linked to their business lives very easily. This may mean that they need to have a sensible policy, something like if you are going to use it for business purposes or talk about work at all, it has to be on a separate account completely.” (IT-D-4)*

The participant thought that the contents shared on microblogging by employees can be associated with their organisation, regardless of whether they use their personal or organisational account. According to this interviewee, they can affect the reputation of the business, thus, there is a need to have accounts policies within organisations.

One of the participants said that this is not something they are yet doing within the organisation. It is an idea for a policy to separate private and company accounts.

*“I think they need to be a little bit more robust with our policies [...] One of the things that I have asked to be included in the policies is something to do with peoples own personal Twitter and Facebook accounts, etc., which automatically people put in their profile stats where they work and it is very easy for people to make a judgement rightly or wrongly that when they tweet, that they automatically put into the box of well it is that individual he works for this company [...] So I work for the company but these are my personal thoughts, these are my personal accounts and they have nothing to do with my employer. It is something that needs to be in that policy; something that I would like everybody to adhere to.” (IT-M-11)*

According to this IT manager, there is a need to clearly differentiate between personal and organisational microblogging accounts. Employees using their own accounts need to explicitly indicate that the information they are sharing on Twitter is based on their personal thoughts and are not related to the business. Otherwise, the reputation of the

organisation can be damaged. One solution is for members of staff not to talk about the organisation or on behalf of the business when using their personal account.

### 5.6.3. Review procedures

A few interviewees talked about having work reviewed by others, before sharing them on microblogs; though this was not a formal policy. Therefore, they can prevent mistakes from happening and help maintain the reputation of the organisation.

*“I talk about rules and stuff. We don’t like having too many rules, but we do have processes where people say, you know, the first thing you do is this, and then you do this, and then before you can do that [...] As an example, with microblogs or blogs, if it’s somebody who has never blogged before, then its best practice to say go get your blog reviewed by somebody else. It is best practice rather than rules.” (IT-M-2)*

Another interviewee, a Sports participant mentioned that she would have her colleagues review the messages before sharing them on Twitter. This is a process put in place to ensure employees post sensible information; people also learn how to appropriately use Twitter, based on the organisation’s expectations. The chances of sharing any misleading information would be reduced, and the reputation of the organisation would be maintained.

*“I have only just started using Twitter. Say that I want to put a blog on or retweet something [...] I would normally just say to one of the colleagues that I have a blog, I would send it to them and say this is what I want is this alright. And then they would read it through and say ‘Yeah, I will put in on the website for you’, or ‘Yeah, you can put a link on Twitter or something’. So I get it checked first before I put anything on.” (SP-E-20)*

### 5.6.4. Complaint procedures

One approach to mitigating the risky nature of microblogging was having a complaint process. One of the participants talked about this approach. According to ‘CO-E-15’, this is what to do if the wrong information is shared with the public, as opposed to how to prevent it happening in the first place.

*“We are credited by customer first and we do have our policies, complaint policies, and things like that which would kick in if something went wrong.” (CO-E-15)*

This organisation valued their reputation highly but considered that if any issues arose, such as if people were provided with misleading or incorrect information, they had the chance to express their dissatisfaction with the service or employees through complaint procedures.

### 5.6.5. Training of Staff

A few participants explained that the best approach is to show people face to face how to use microblogging. Thus, their confidence would be enhanced, particularly older people, who may be less comfortable with it.

*“Some people are sort of digital natives who are already using these things at home and just naturally take to this sort of stuff, they do not actually need a great deal of support. But we’ve got people in the middle who do not quite have the confidence. And then you have got lots of people at the other end who we keep hearing about, they may be in ways fed up of hearing about social media and Twitter this and Twitter that. But if they are honest about it, they would like someone to actually sit down and show them what it is. And some of those people actually have got a bit of a phobia about it. So to give you some examples, we have done some work with elected members. They tend to be older and they are very nervous about the use of these things. They are very concerned about their own reputation, making mistakes. The only way you can overcome this with that group of people is to actually sit down and show them some stuff, set accounts up for them and show them how it works [...] In my experience actually showing people some stuff is the best way.” (CO-D-16)*

‘CO-D-17’ said that she often meets with another director of the organisation, to discuss uses of microblogging. According to this interviewee, the colleagues show each other how the platforms best work and they learn from each other’s experiences.

*“We do not have any documentation in place. But we did sit down and have a session where Ken showed me how he was using it. He actually set me up with it and explained the differences with the accounts because we have got our own accounts and we both have access to the company account. So we did need a few ground rules just so that we were both aware of how we were actually using the account, as opposed to our own accounts.” (CO-D-17)*

### 5.6.6. Overview of risk mitigation in SMEs as perceived by participants

Section 5.6 discussed the different types of actions interviewees talked about taking to mitigate risk. A few interviewees did see it as risky, but did not do anything about it, usually because there were so few employees. Given that the majority of participants associated risks with microblogging, it was natural that they took specific types of action to manage and mitigate it. Mostly it was reputational risk that produced actual action. These actions could be broadly divided into five types: firstly, setting guidelines about what type of contents can be shared on microblogging; secondly, specifying who should microblog on behalf of the organisation; having review procedures; complaint procedures to deal with the consequences of mistakes; and training staff. The commonest types of approach were to have formal rules or guidelines related to what people should microblog and who should microblog.

## 5.7. Chapter overview

The aim of this chapter was to answer the third and fourth research questions. A visual representation of the potential risks of microblogs was developed, based on the interview data. In relation to perceptions of risk, most participants talked about their own experience of things going wrong or they were speaking hypothetically. Fewer respondents had directly communicated with someone who had experienced a problem. Also, a few participants were responding to cases mentioned in the media, such as in newspapers, which they were aware of. Thus responses were usually based on actual experience and were not simply generalised concerns created by the media. Most interviewees saw microblogging as risky; though a few did not. Some interviewees associated many risks with microblogs, others thought there were fewer. Overall, internal and external microblogging was regarded as having different kinds of potential risks. More risks were associated with external microblogging, Twitter, and so SMEs took more control over it. As participants from the field of Sports identified the least number of potential risks of microblogs, consequently, they took fewer actions to mitigate risk.

It was found that external microblogging, Twitter, was seen as more risky than internal microblogging. The commonest type of risk, which most participants were worried about was the external risk of damaging the reputation of the organisation. Leaking confidential information about the organisation to those outside, such as competitors was identified to be a risk in itself, but also potentially had an impact on reputation. These two potential risks were the main ones which most participants were concerned about for their business. Negative media coverage, noise, misleading information, computer security, bullying, loss of personal privacy and losing valuable information were also identified by the participants as potential risks.

The last part of the chapter explains a visual representation of participants' views of what SMEs did to mitigate potential risks of microblogging, or what they thought SMEs should do. Most SMEs actively took action to mitigate risks; though some did not. These actions were broadly divided into guidelines about contents shared on the platforms; specifying who should microblog; having review procedures; complaint procedures to deal with the consequences of mistakes, such as giving people misleading or incorrect information; and training staff. Typically people who were worried about the reputation of the organisation and breach of confidentiality, tended to have policy on

content and control who should microblog, to communicate with those outside of the organisation. These approaches were identified by the participants as the best ways to manage and mitigate the main risks of microblogging.

## **CHAPTER 6: Discussion**

### **6.1. Introduction**

The aim of the current research was to study the uses and potential risks of microblogging within SMEs in the area of South Yorkshire, UK. Chapters four and five discussed the research findings and in this chapter, the significance of these findings is drawn out by relating them to the existing literature on microblogging in large organisations and SMEs. The similarities and differences will be identified and discussed. This chapter is ordered based on the research questions. An overall summary of the findings is initially given (Section 6.2), before the chapter goes on to compare the findings to the existing literature on microblogging in large organisations (Section 6.3). Section 6.4 critically analyses the findings of this research and how they relate to previous studies on microblogging in SMEs. Section 6.5 develops an understanding of the findings in the context of the nature of SMEs as organisations. Section 6.6 presents the chapter overview.

### **6.2. Summary of the findings**

In this research, all of the participants talked about using Twitter externally, to communicate with those outside of the organisation, such as customers, potential customers and clients. A few interviewees also talked about using Twitter internally, to communicate with colleagues. For example, one participant said that colleagues used it to collaborate on project, even if they were not in the same place. Another respondent said that staff members used Twitter to socialise with each other and organise nights out. Six interviewees also talked about internal microblogging, Yammer. More specifically, three IT participants and three Consultancy interviewees said that they used Yammer for business purposes. One participant also talked about using Huddle internally, for business purposes. Huddle is a secure platform used within organisations, for file sharing, project management and collaboration.

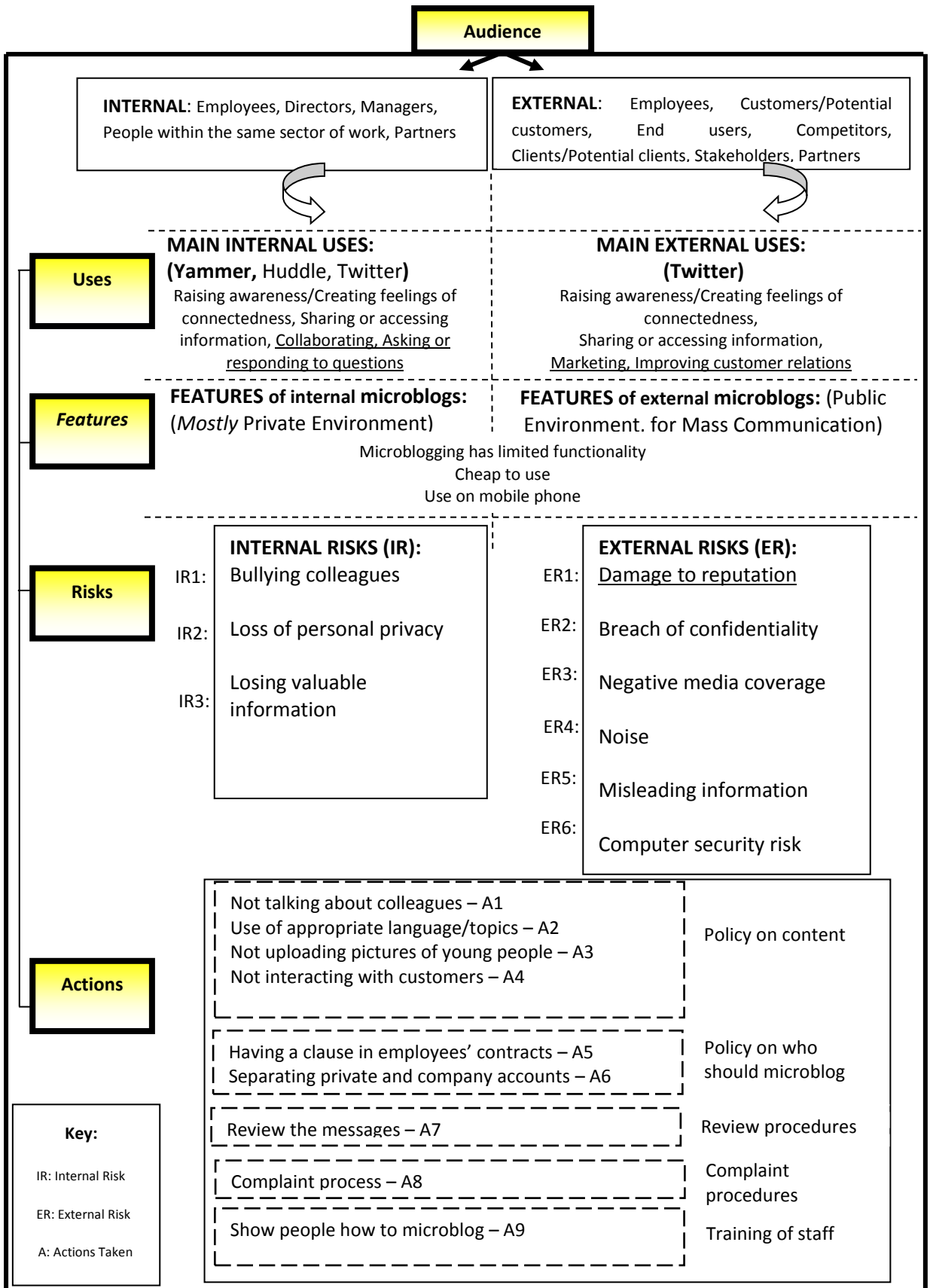
The majority of participants in this study liked microblogging and they used it a lot for their business. Only two of the interviewees did not find the platforms useful for their needs. Most research participants talked about microblogs making the business less hierarchical, by flattening the organisation and enabling more staff members to share information and to voice their thoughts and opinion. The organisational culture improved as a result of microblogging, by increasing transparency, collaboration and

communications among co-workers. According to some interviewees, the platforms helped to reduce emails within the organisation. Yet in this research microblogs did not transform businesses. Although individuals engaged with each other through microblogs and Twitter was considered as unique for mass communication, participants considered microblogging as just another way to communicate with others. Some people either interacted face to face rather than using microblogs and email, or they simply used the phone to engage with staff members and/or with those outside of the organisation, such as customers and clients. Also, a few individuals used other technologies such as Skype, instead of microblogging. One of the main reasons why participants preferred to engage with their co-workers by other means is because the organisations were small.

Initially, most organisations adopted the platforms by a process of trial and error, rather than in a particularly formalised process of evaluation and adoption. The main people who used microblogs were the manager or director. This was more so with Twitter, which was mainly used as an external platform to communicate with those outside of the business. On Yammer some organisations did sign up a wider group of staff members, so that more individuals could make use of microblogging within the organisation.

The rest of this section explains Figure 6.1, a visual representation summarising the findings, based on the themes arising from the analysis of interview data. The diagram is divided into four sections. It shows the main internal and external uses of microblogging, the main features of the platforms which make them attractive for participants to use, the risks of microblogs and what the interviewees suggested their organisation did, or thought SMEs should do to mitigate risk. Figure 6.1 shows the internal audience are people who use or view microblog content inside an organisation. They are: employees, directors, managers, people within the same sector of work and business partners. The external audience are treated as people who use or see information on microblogs and are outside of the organisation. They are: employees, customers and potential customers, end users, competitors, clients and potential clients, stakeholders and partners.





**Figure 6.1: Visual representation of findings, based on the qualitative data**

The study revealed what participants used microblogs for. The main platform participants talked about using internally was Yammer. On the diagram Yammer is shown in bold, to represent its importance. A few interviewees said that they used Huddle and sometimes Twitter, internally for business purposes. The only platform respondents talked about using externally was Twitter and on the diagram it is shown in bold. It was found that for both internal microblogs, Yammer, and external microblogs, Twitter, the commonest types of uses included using microblogging to raise awareness between staff members and/or with individuals outside of the business, such as customers, potential customers, business partners and clients. The aim was to enable others to understand more about what is happening in the organisation. Overall, interviewees thought that internal and externally focused uses were different. Many participants who talked about internal microblogging said that they use it for remotely collaborating with colleagues and for asking or responding to questions. Employees could help each other and everyone would know what was happening in the business. On the diagram these internal uses are underlined, to show that they were valued by many participants. Externally, Twitter was mainly used for raising awareness among those outside of the business and for marketing. Many interviewees also mentioned using Twitter for improving customer relations. On the diagram these external uses are underlined, to show that they were valued by many interviewees. Although much research into corporate use of microblogging focuses on its use for advertising i.e. selling products to other people through microblogs, here microblogging was not used that much for direct advertising.

The research identified what individuals considered to be the key features of microblogging that influenced their decision to use it. These were: its limited functionality; it has few features and individuals can easily make use of microblogs to share information at a fast rate, it is cost effective and it could be used via mobile phones. Therefore, staff members were able to easily access microblogs, without having restrictions such as time and location. They could easily engage with their colleagues and with those outside of the organisation. Individuals could be constantly informed about what is happening within the organisation, as well as being able to access posted information. In general, organisations frequently used microblogging for awareness despite having recognised some drawbacks to be associated with it. Most uses of microblogging were grouped by the researcher as part of the “dialogue intended

messages” category, which provides interactive responses between individuals, as well as strengthening relationships.

Although participants were keen to make use of microblogs, they also identified them to be risky i.e. to expose the organisation and staff members to danger. Some people had experience of things going wrong, others were taking hypothetically; a few had direct contact with someone who had experienced a problem; or were responding to cases reported, for instance in newspapers. Some found microblogs highly risky, others less so. Overall, different types of risk were associated with internal and external microblogs. Regarding internal microblogging, more people could make use of them and organisations were not too worried about who could use microblogs i.e. they did not control usage much. External microblogging, Twitter, was regarded as more risky and so organisations attempted to control it more. The literature identified that large organisations are more concerned about implementing or filtering information; this is how risk was perceived in that context. Concerns about waste of time, too much noise and who to follow were big issues. In the context of smaller organisation, this research found that those issues were not so relevant. Regarding the risks of microblogs, the participants talked about internal risks (shown as IR) and external risks (shown as ER). Figure 6.1 shows risks in the order of importance that interviewees gave them. The participants said that they experienced three types of internal risks: bullying of colleagues (IR1), loss of personal privacy (IR2), and loss of valuable information (IR3). In this study, the commonest type of external risk was identified as the risk of damaging the reputation of the organisation (ER1). This issue could arise from commenting negatively about customers or work, posting offensive messages, upsetting someone, making spelling mistakes, writing in a poor style or copying information from others. Breach of confidentiality (ER2) i.e. leaking confidential information about the organisation to those outside of the business was viewed as a risk in itself; yet it was said to potentially affect the reputation of the organisation. For smaller organisations, these risks were the main ones which most participants were concerned about. The participants recognised negative media coverage (ER3), noise (ER4), misleading information (ER5) and computer security risk (ER6) as other external risks of microblogs in smaller organisations.

Despite it having a risk element, the majority of SMEs used microblogging and they were aware of the risk factors. Most organisations took specific action to manage and mitigate risk (shown as A). On Figure 6.1 these actions appear in the order of

importance that participants gave them. According to them, they knew how to make effective use of microblogs. Many participants mentioned the need to control the types of data being shared on microblogging. They spoke about having in place policy on content. For example, advising not to talk about colleagues, to use appropriate language, in addition to not uploading pictures of young people on microblogs; this recommendation should be considered for SMEs which work closely with young people. Some smaller organisations were more worried about risks than others. Thus, they took extra action. For example they controlled who should engage with microblogging for the business. They were more attentive in terms of who should use the platforms; if everyone could use microblogging or if only specific people should share information, such as the organisation's manager. The interviewees also identified that some organisations rely on review procedures and complaint procedures, as the way to deal with risk. According to some participants, risks of microblogging can be mitigated by providing staff training. This included directly showing individuals how to appropriately use microblogs.

### **6.3. Comparison between the findings and the literature**

This section compares the findings of this research with the previous literature on microblogging in large organisations. Firstly, the chapter critically analyses how SMEs, as identified in the current study and large organisation make use of microblogs. Risks of microblogging in these organisations are then compared, followed by the types of actions SMEs and large organisations take to mitigate perceived risk of microblogs.

#### **6.3.1. Uses of microblogging in SMEs and large organisations**

SMEs are often found to lag behind larger organisations regarding the adoption of innovative technologies (Derham et al., 2011; Meske & Stieglitz, 2013). Survey results have showed that smaller organisations mostly identify issues related to costs as the biggest barrier to ICT adoption (Harindranath et al., 2008). Nonetheless, the current study found that most interviewees were positive about how organisations make use of microblogs. Comparison of the findings with those of other studies confirms that SMEs and larger organisations use microblogs in similar ways. The cost effectiveness of microblogging has enabled smaller organisations to also use these platforms and to embrace their business needs (Michaelidou et al., 2011). One interesting finding is that even SMEs with very small numbers of employees used microblogs. It is surprising that they even need such a tool. Mainly the manager or director of smaller organisations

engaged with microblogging and controlled how it was used. This was more so with Twitter. The literature on large organisations however, showed that some businesses encouraged all of their employees to use microblogging, even during early adoption stages. For example, in the study by Müller and Stocker (2011), in order to raise awareness in the workplace, all staff members were requested to make use of microblogs and post information. This happened soon after microblogging was adopted. A possible explanation for this might be that compared to large organisations, small businesses have limited resources resulting from financial constraints (Ale Ebrahim et al., 2010; Gray et al., 2003; Kimwele, 2014; Meske & Stieglitz, 2013; Sarosa & Zowghi, 2003). They also lack professional expertise, and material and human resources. As a result SMEs have smaller management teams (Gray et al., 2003) and less people engage with microblogs.

One of the key differences between this study and some of the literature on microblogging in large organisations is that most SMEs adopted microblogging and they wanted to give it a try. However, some researchers on microblogging in large organisations had pre-conceived ideas about how to use microblogging. For example, the exploratory research by Zhao and Rosson (2009) was one of the earliest studies conducted about microblogging and it aimed to understand how and why people use Twitter. They wanted to investigate Twitter's potential impacts on informal communication in the workplace. Similarly, Riemer et al. focused in a number of studies on how microblogging could particularly influence communications at work. For example, Riemer et al. (2011a) investigated how microblogging was adopted for collaboration and communication by a team of University researchers. Riemer et al. (2011b) had the aim of investigating communication practices using Yammer, within a large organisation. Riemer and Richter (2010) explored communication patterns in a team that has adopted microblogs. They concluded that the main benefit of microblogging was its use for creating awareness.

Regarding the key features of microblogging that help organisations to make use of them, smaller organisations mainly valued microblogs for having limited functionality; its simplicity and not having many features, thus it can be easily used. Also, the fact that microblogs are cost effective and they can be used on the go via mobile phones. Based on the comparison, the existing literature on large organisations valued similar features of microblogs. Other researchers identified its limited functionality and ease of use.

Riemer et al. (2011c) confirmed that tools such as Yammer enable people to easily share updates and notifications, to attach files and links etc. However, large organisations do not emphasise as much as SMEs, the cost effectiveness of microblogging, as a perceived feature which makes them useful to use. The explanation for this could be that larger organisations do not have limited financial resources as much as SMEs and are not as worried about having high costs. Overall, more SMEs emphasised the need to easily and quickly mass communicate. Smaller organisations need to get known in their field of work and so this may be one reason why they talked more about the features of microblogging which help them to engage with those outside of the business.

### **6.3.2. Risks of microblogging in SMEs and large organisations**

Regarding the risks of microblogs, many differences were found between how SMEs and large organisations perceived risk. In this research the participants identified more potential risks and the most common one was identified as damaging the reputation of the business. In contrast, studies of large organisations mostly focus on implementing or filtering information (Ehrlich & Shami, 2010; Zhang et al., 2010b); this is how risk is perceived in that context. Issues to do with too much noise: getting flooded with information, waste of time and who to follow were identified as the main concerns (Günther et al., 2009; Zhang et al., 2010a; Zhang et al., 2010b). There are some likely causes for these differences. One possible explanation for this is that large organisations have more financial and human resources, with which to bear the risks associated with the use of these platforms (Bordonaba-Juste et al., 2012). The needs of large organisations are different from SMEs and they have more expertise to manage risk. There is another possible explanation. The participants of the current study were from different sectors of work i.e. IT, Consultancy and Sports and this could be one reason why they identified different types of potential risks. However, most research on microblogging in large organisations has been often based on IT consultancies and it has been single case studies. Examples include studies conducted by Riemer et al. (2011c) and Zhang et al. (2010a).

### **6.3.3. Actions taken to mitigate risks of microblogging in SMEs and large organisations**

As identified in the previous section, the participants of this study identified more risks of microblogs than large organisations. The main risk was to do with reputation damage. Most SMEs took specific action to manage and mitigate risk. The previous literature mostly focused on minimising risks of privacy and security. According to

Case and King (2010) rules and guidelines may be needed in order to balance uses of platforms such as Twitter, with the risk of leaking private information. Gibbs et al. (2013) found that risks concerning confidential information deterred some individuals from using platforms such as Twitter for external communication. Mostly as a result of a perception of the risks of privacy and security, some researchers proposed that there is a need to train and educate people to make better use of microblogs. However, large organisations did not have a strong sense of risk. As a result, they have not developed clear ideas about how to mitigate risk. The literature has mainly suggested how to manage risk, rather than what actions large organisations actually took. A possible explanation for this might be that at the time of the research, most large organisations were at the early adoption stages of microblogging. Therefore, they were not as familiar as the participants of this study about ways of managing risk. Hence, they identified fewer policies and fewer details were given in regards to how to mitigate risks; also how to train employees to make better use of microblogs. Another possible explanation for this is that most research on microblogging in large organisations has been based on single case studies. Therefore, it is not surprising that they have identified fewer details about managing risk. Overall, the findings of the current study have showed that some aspects mainly related to the risks of microblogging and management strategies remain under-explored in large organisations and require further inquiry. In the next section the findings will be compared to the existing literature on microblogging in small organisations.

## **6.4 Comparison between the findings and literature on SMEs**

This section compares the findings of this research with the limited literature on microblogs in SMEs. Firstly, the chapter critically analyses how smaller organisations, as identified in the current study and SMEs discussed in the literature make use of microblogging. Risks of microblogs in these organisations are then compared, followed by the types of actions taken by organisations to mitigate perceived risk of microblogs.

### **6.4.1. Uses of microblogging in SMEs**

Smaller organisations in this study mostly adopted microblogging by a process of trial and error. They wanted to give it a go and to see whether it could be beneficial for business purposes. Comparably, the participants of the study by Carter (2014) were also using platforms such as Twitter in UK based SMEs. They also showed that some degree of experimentation with new platforms would often help to determine which worked

best for business needs. Thus SMEs seem to have similar processes of technology adoption.

The current study found that the main people who used microblogs within the business and controlled its uses were the manager or director. This was more so with Twitter, which was mainly used to communicate with those outside of the business. On Yammer some organisations encourage usage among employees, by signing individuals up and allowing them to communicate through microblogs. In the current study the people responsible are different from those identified in the previous literature because they are working in very small companies. Also, the majority of organisations are IT based where the more senior figures are comfortable with computers. In the study by Carter (2014), half of the businesses interviewed identified that platforms such as Twitter were run by the marketing manager. Having specific people to control the use of microblogs may be explained by the fact that an investment of time and resources is required (Carter, 2014) to train and appoint other individuals to use the tools on behalf of the business. Time and resources are something which are limited in SMEs. Carter (2014) mentioned that due to an investment of time, only one organisation was able to assign a full-time individual to engage with social media.

Comparison of the findings with those of other studies confirms that other SMEs use microblogging in similar ways. However, this research offers a richer account of how microblogging is used, compared to other studies. The participants of this study and those from other studies revealed that internal and externally focused uses were different. This finding is not surprising, as other researchers investigating social software systems have previously mentioned that intranet and Internet uses can vary (Zhang et al., 2010b). In this study, microblogging such as Yammer was found to be used to raise awareness between co-workers and it enabled people to easily connect with each other. People were able to remotely collaborate with colleagues and to ask or respond to questions. People could quickly respond to other's queries and every individual would know what was occurring at work. Similarly, Meske and Stieglitz (2013) demonstrated that SMEs used internal platforms so that people could connect with each other. They also talked about tools such as Yammer supporting collaboration between members of staff.



Nonetheless, the current study offers a richer account of how microblogs are used internally. This may be explained by the fact that the current research is the first qualitative study based on in-depth interviews. The participants talked about the types of questions people ask on Yammer, such as issues to do with projects and events, details about a website, information about particular organisations or individuals they are planning to build relationships with. Other examples of internal uses of microblogs include using the tools for referencing i.e. documenting information and keeping data for later use. For instance, one of the participants of this study mentioned that when the organisation receives a telephone call, they would post detailed information about that conversation on Yammer. Some individuals in this study also talked about building their personal reputation on microblogging, as well as being able to hold people accountable. One of the participants explained that employees are well aware of the fact that Yammer contains detailed information about tasks which they are responsible for. They will pay more attention to get the work done in time and to high standards. Other participants talked about organising work schedules on Yammer and releasing frustration on microblogs. The current study has identified and discussed many ways in which smaller organisations can make use of microblogging. This information can help to better understand the uses of microblogs. The study by Meske and Stieglitz (2013) were based on conducting a survey among decision-makers in German SMEs. Although they received feedback from 190 participants, surveys alone cannot provide in-depth and rich details in the same way that semi-structured face-to-face interviews can (Hove & Anda, 2005). By combining the findings of the current research with the uses identified by Meske and Stieglitz (2013), both studies offer a fuller understanding of how microblogging is used within SMEs. As Meske and Stieglitz (2013) found the same types of uses as were found in the current study, it is likely that the findings can be generalised. Therefore, the studies are complementary.

In this study microblogging was found to be used to raise awareness with those outside of the business; between customers, potential customers, end users, clients and partners. McLaughlin (2014) reaches similar conclusions. Having conducted in-depth interviews and surveys, he found that one of the important uses of such platforms is that they are a promotional tool. As a result, organisations are able to generate increased awareness and communication of products or services between the business and their customers. In the current study, Twitter mainly enabled people to share or access information with others and to listen to and improve customer relations. Similarly, having conducted pilot in-

depth interviews with participants from a British SME, Bulearca and Bulearca (2010) also found Twitter to be an important tool for organisations to use, particularly if they want to be able to interact with their consumers. Microblogging was also used to build relationships with others. Overall, the current study produced results about the main external uses of microblogs which is in agreement with the findings of a great deal of the previous work in this field. Michaelidou et al. (2011) found that many SMEs in the UK are using tools such as Twitter to interact with their customers, to maintain customer relationships and to attract new potential customers. Similarly, Wamba and Carter (2013) found that Twitter allows organisations to reach their customers, suppliers and other stakeholders. Carter (2014) showed that people engage with platforms such as Twitter to provide knowledge to clients, as well as to interact with their customers. Also, they use them to make people aware of issues such as postal delays. They also identified other important uses such as marketing and networking with other businesses. Although other researchers have provided some details regarding the external uses of microblogs, the current study provided more rich examples of uses, because it was based on interviews rather than mainly surveys. For instance, the participants talked about posting information about the types of projects the organisation was working on, arranging conferences and meetings, as well as sharing information which could lead to organise meetings and webinars. The findings of the current study are in line with the findings of a great deal of the previous work. For example, this study confirms the findings of the study by Wamba and Carter (2013), which were based on distributed surveys to 453 managers of SMEs in the United States, United Kingdom, Australia and India. Therefore, the findings of this study would probably apply more widely to SMEs, in different locations.

The study also identified what people saw as key features of microblogs that affected smaller organisations to make use of them. The main features were that microblogging has limited functionality; it does not have many features and so it can be used fast and easily. In addition, most participants valued microblogging for being cost effective and because it could be accessed using their mobile phones. As a result, individuals can easily use microblogs at any time and from any location. They can be in contact with staff members and with people outside of the organisation, such as clients. Derham et al. (2011), McLaughlin (2014) and Michaelidou et al. (2011) have also confirmed that microblogging is highly valued because it requires low costs and minimum level of IT skills (Derham et al., 2011) to make use of them. This is not surprising because smaller

businesses usually have limited material and human resources (Gray et al., 2003), resulting from financial constraints (Ale Ebrahim et al., 2010; Gray et al., 2003) and insufficient professional expertise (Gray et al., 2003). However, it is interesting that the literature mostly refers to low costs and minimum IT skills, yet in this research, many other perceived features of internal and external microblogs were identified as making them attractive to use. Examples include the grouping feature and the ability to receive updates via email, restrictions on posting messages, being able to tweet and re-tweet messages, mass communication, maintaining lists and sending direct messages are some of the examples given. Hu et al. (2012) also talked about being able to follow people on microblogging. This helps organisations gain more recognition from those outside of the business. They claimed that the more the number of followers, the broader the information will spread and the effects of microblogging marketing will be much greater.

#### **6.4.2. Risks of microblogging in SMEs**

In comparison to the previous literature, the participants of this study seemed to be much more aware of a wider range of potential risks associated with microblogs in SMEs. They provided more specific examples of risks. Different types of risks were identified for internal and external microblogging. In contrast in the literature, risks tend to be identified more broadly. In the current study, the most typical kind of risk was found to be one associated with using Twitter. This was the risk of damaging the reputation of the business. Carter (2014) showed that some participants were worried about inappropriate content about the organisation being mentioned on microblogging. For example, people such as the customers or clients could post information on these platforms and potentially damage the reputation of the business. Likewise, McLaughlin (2014) also confirmed that damage to the reputation of the business is a risk for SMEs. McLaughlin (2014) concluded that one of the risks of engaging with social media at work is being aware of negative comments which could be seen by others; these messages would be beyond the control of the organisation. The fear of acquiring negative responses from people such as the customers, were also barriers to making use of these platforms. In this study, leaking confidential information about the organisation to the public was identified as a risk, but also potentially affected the reputation of the organisation. McLaughlin (2014) also indicated that issues such as online security and privacy can influence the decision to use platforms such as Twitter.

Although other researchers have identified some risks of microblogging, yet they have not discussed in detail how risk is perceived. This may be because of the reliance on survey data, or conducting fewer interviews in comparison to this study. Another possible explanation for this is to do with the types of people who participated in the study. Although gender or level of education were said not to significantly impact the use of tools such as Twitter (Wamba & Carter, 2013), Bordonaba-Juste et al. (2012) pointed out that IT knowledge can influence the use of new technologies and can positively affect the levels of an organisations technology adoption. The majority of participants in this research were the managers or directors and they were mostly from the field of IT. Therefore, their professional expertise and knowledge about technologies could have affected their responses. They may have been more aware of the potential risks of microblogs in comparison to other participants. In the study by McLaughlin (2014), six professionals from academia, SME advisors and researchers were interviewed. It is possible that they had less experience of things going wrong, or that they had less direct contact with individuals who had experienced a problem; less chances of talking hypothetically or responding to cases from the media, like on news channels.

In addition to the risks mentioned above, the participants talked about negative media coverage, bullying colleagues and loss of personal privacy which too affected the reputation of the business. Losing valuable information was recognised as an internal risk and too much noise, misleading information and computer security risk as external risks. These are other perceived risks of microblogging which have not been identified by other researchers. While other researchers have found risks, this study has pointed towards the need for more understanding of the potential risks for SMEs. Due to having limited financial and human resources (Derham et al., 2011; Meske & Stieglitz, 2013; Wamba & Carter, 2013), SMEs may face significant challenges to overcome risk; more resources may be required, as well as having to spend a lot of time to overcome issues.

#### **6.4.3. Actions taken to mitigate risks of microblogging in SMEs**

Despite microblogging having a risk element, in this research most SMEs used them and they felt they could deal with these risks. Most organisations actively took action to deal with the risks; mainly to their reputation. Most interviewees talked about controlling what types of information should be shared on microblogging. They spoke about having in place policy on content. This includes not talking about colleagues, controlling the types of topics which could be discussed, as well as not uploading

pictures of young people. Some participants in the study by Carter (2014) also referred to the need to monitor their reputation. One action to take would be to respond to negative posts politely and in a timely manner. In the current research there were some organisations which were more concerned about risks than others and so talked more about taking action. For example they controlled who should engage with microblogging on behalf of the business. They paid more attention to whether everyone could have access to microblogging or if only specific people should share information. The latter point is confirmed by Hu et al. (2012) who talked about the need to appoint particular people in SMEs to monitor the use of the platforms and to ensure appropriate responses are given. They added that this will help to maintain the reputation of the business. Similarly, Carter (2014) found that in half of the businesses interviewed, managing platforms such as Twitter was the responsibility of a specific person; the marketing manager.

Participants in this research also showed that some organisations rely on review procedures and complaint procedures, as a way to deal with risk. A few interviewees talked about mitigating risks of microblogging by training members of staff. This included directly showing people how to properly use microblogging. Michaelidou et al. (2011) and Meske and Stieglitz (2013) established that a lack of support and training by organisations were significant barriers to using social media within organisations. Similarly, Carter (2014) found that some individuals were reluctant to use social media because of a lack of familiarity with the tools. This again emphasises that SMEs should support the use of these technologies by providing awareness and support (McLaughlin, 2014); in the form of training.

The current study identified more perceptions of risk and more about how people thought about combatting risk. There are two likely causes for the differences; using quantitative methods or conducting fewer interviews. Meske and Stieglitz (2013) relied on survey responses and they were unable to receive in-depth feedback (Hove & Anda, 2005) about potential risks and actions to mitigate risk. Carter (2014) had fewer participants than the current study and this could have also affected the results. Although Carter (2014) found ways to monitor the reputation of the business, the responses were only based on six semi-structured interviews.

Some SMEs chose not to take action about the risks they perceived. Generally this was because the business was very small. Another viewpoint was that too many rules could

make people feel uncomfortable because they would have to constantly worry about whether they are allowed to post messages. People needed to feel relaxed when engaging with these platforms. Meske and Stieglitz (2013) confirmed these findings and recommended that strict policies should be avoided because individuals need to feel “free” to make use of the tools. They added that instead of having policies in place, SMEs best provide trainings and develop specific guidelines to help individuals to use these platforms. Overall, this study has pointed towards the need for a much deeper understanding of the types of actions to be taken by organisations to mitigate risk. SMEs have limited financial and human resources (Derham et al., 2011; Meske & Stieglitz, 2013; Wamba & Carter, 2013) and so they should avoid facing risks. Otherwise, they may face challenges to overcome risk; financial challenges, as well as having to spend much time dealing with risk.

## **6.5. Exploring the context of the study**

The aim of this section is to develop an understanding of the results in the context of the nature of SMEs as organisations and to answer the last research question of the study:

5. How does the nature of SMEs as organisations help explain the adoption of microblogging?

A number of characteristics that distinguishes SMEs from large organisations are reviewed. This will help explain how small organisations adopt and use technology. This section discusses that smaller organisations lack specialist expertise and they have smaller management teams and less formal structures. SMEs also have a stronger culture, flatter communication structures and supportive environments. These characteristics help explain how SMEs make use of microblogging.

### **6.5.1. SMEs lack specialist expertise**

The low level of specialisation of roles is typical of SMEs (Brown & Lockett, 2004; Devos et al., 2012; Ghobakhloo et al., 2011; Gray et al., 2003; Nguyen, 2009; Nwankwo & Gbadamosi, 2010). Thus there are not specialists in the role of a marketing or legal expert. Small organisations also lack IT advice services (Devos et al., 2012) and that could be a barrier to adopting technology (Sarosa & Zowghi, 2003; Steyn & Leonard, 2012). SMEs lack the essential resources required to create specialist expertise (Nwankwo & Gbadamosi, 2010). These organisations also do not have lots of time to

build up expertise on specific areas. Rather people tend to do quite a lot of things, so may not do everything professionally (Nwankwo & Gbadamosi, 2010).

In the current study, based on the participants' responses it can be seen how their answers reflect a lack of specialisation of roles. There was no formal process of evaluation or attempt to measure the success of the use of the technology that might have occurred if there was a specialist responsible for technology adoption. It was usually the manager or director who constantly monitored and controlled microblogs. A few participants explained that some of their co-workers were not using Twitter because it made them feel nervous. They were not confident enough to share information publically. For them nervousness derived from not having specialist support to train or guide the use of technology. The majority of participants valued microblogging's limited functionality; they were able to easily and quickly engage with the platforms without needing much IT knowledge. The current study found participants were more preoccupied with potential risks. This could be because SMEs do not have someone in particular to take an expert view of risk and to set up formal processes and policies to manage it. For example, a marketing expert who could say how technology should be used for marketing, or a legal expert to guide people to better understand the true risks. SMEs had different types of ways to deal with risk, including policies on content and policies on who should microblog.

#### **6.5.2. SMEs have smaller management teams**

Small businesses have a short-range of management perspectives. The team is often made up of one or two people and they are strongly affected by the owner of the business (Levy & Powell, 2004; Ongori & Migiro, 2010; Pratyush, 2010). The reason for having a smaller management team can be explained by the fact SMEs often lack IT or communication experts (Ghobakhloo et al., 2011; Nguyen, 2009).

The participants of the current study revealed that the IT adoption process was directly affected by top management. All decisions from the planning phase to implementing technology and later maintaining and monitoring microblogging were made by them (Ghobakhloo et al., 2011; Nguyen, 2009) and not IT or communication experts. An example of smaller management teams was that one of the participants talked about controlling the use of Twitter himself, which was used to engage with people outside of the business. This participant mentioned that previously some of their private software code had ended up in the public domain. The participant was unsure how many times it

was re-tweeted or used. This small organisation wanted to avoid risks such as breach of confidentiality, which could ultimately cause reputation damage. Thus he managed the use of technology, to ensure the right types of information were being shared. The current study found people were more preoccupied with potential risks. SMEs took different types of action to mitigate risk. People understood expectations and work was simpler as there was a smaller management team that supervised members of staff and departments (Burley, 2015). These actions include setting up policy on content and policy on who should microblog i.e. having employee contracts and setting accounts policy. A few participants referred to the policy on not interacting with customers; in these organisations it was mainly the small management team which communicated with people outside of the business.

### **6.5.3. SMEs are less formal**

SMEs tend to exhibit less formality than large organisations (Ale Ebrahim et al., 2010; Blackburn, 2012; Gray et al., 2003; Storey et al., 2008). They are mainly dominated by custom and practice, with a lack of written procedures, rules and policies to design (Storey et al., 2008). They also do not measure or regulate employment relationships. According to Storey et al. (2008), formality increases with the size of the organisation. In large organisations appointing an HR manager is one example of having more formality. The role of an HR manager is associated with performance management such as appraisal, educating and employee development, as well as developing procedures of handling engagements with members of staff (Storey et al., 2008).

In the current study, the informality of an SME shows up in the process of technology adoption. Most participating organisations adopted Yammer and Twitter by a process of trial and error. There was no formalised process of evaluation or attempt to measure the success of the use of the technology. SMEs have informal communication cultures and Yammer and Twitter fit the culture of these organisations. Another example of informality was that some managers signed employees up to Yammer and encouraged the use of microblogging. Thus, no one was directly instructed, forced or expected to engage with it. Specific examples were given of people such as software programmers who were not interested in other parts of the organisation. Therefore, they decided not to use the technology. If people also wanted to use alternative methods of communication, they had a choice. For example, a few employees communicated face to face, on the phone, or using alternative methods such as Skype. Some of the participants perceived email to be a formal channel of communication, whereas Yammer was seen as more



informal. The informal character of microblogging fits the culture of SMEs. In the current research a few participants revealed that they had no concerns about employees making mistakes on Yammer. However, if this platform was formal, people would be worried about how information was shared and whether they were making mistakes. One of the participating SMEs specifically mentioned that if people get something wrong, they learn from it and move on. This manager added that Yammer can be used by co-workers to openly share their opinions and thoughts inside the business and to learn from each other's experiences.

Another example of informality was that some participants referred to the use of microblogging on mobile phones. If SMEs had strict and formalised ways of using technology, employees would not be able to benefit from the easy access of microblogging at any time and from any location. Moreover, some participants preferred to use their personal accounts when engaging with microblogging. Having a choice could make employees feel more comfortable to use technology. According to one of the participants, if people use their company account, there is an expectation of them to be serious and formal. Smaller organisations tend to have fewer problems of communication and some businesses do not promote the need for standard rules and policies across the business (Storey et al., 2008). In this study, some organisations had less systematic ways to deal with risk. A few SMEs found that the best approach is to show people how to use microblogging. A few businesses decided the best method is to have review procedures. For example, employees who are not as experienced in posting messages on behalf of the company, they would be encouraged to initially have their work checked by other members of staff.

#### **6.5.4. SMEs have stronger cultures**

Culture in small organisations is influenced by the management team's attitude, personality and values. The management team make all decisions and their choices are based on their knowledge, personal judgement and engagement skills (Nguyen, 2009). The culture of SMEs impacts the process of IT adoption. The culture in small organisations is known to be more open and flexible to accept new technology (Nguyen, 2009; Ghobakhloo et al., 2011). Knowledge required for adoption of technology needs to be merged within the business through a process of networking and information sharing, while the effectiveness of this procedure is affected by the culture of the business (Ghobakhloo et al., 2011).

In the current study, microblogging helped strengthen the organisational culture, by enhancing transparency, collaboration and interactions between people. An example of stronger cultures was that technology adoption enabled people to share information with each other, regardless of where they were working from. That could lead to more integration of staff; having more common knowledge would strengthen the common culture. One of the participants talked about coming into the office once in a while. They were operating in a dispersed organisation and Yammer enabled members of staff to have a “central point” to interact with their co-workers without having to rely on emails that get longer and more difficult to handle. If it was not for Yammer, this participant would have only seen some of her co-workers at the company meetings. Using microblogging helped employees to build and maintain their working relationship. Colleagues felt more connected with each other, even if they did not always meet face to face. Another example of stronger cultures was that some people collaborated for open source projects through Twitter. For one of the participating SMEs, employees contributed to different open source projects and it was not important for the business where people were situated. For instance, some of them were in different parts of Europe and others were in the Mexican Gulf area. Twitter enhanced transparency between people and helped strengthen the organisational culture. The current study found people were more preoccupied with potential risks. This could be because employees and the management team closely communicated with each other and people shared more concerns, thoughts and opinions. The participants also identified different types of actions to take to mitigate risk.

#### **6.5.5. SMEs have flatter communication structures**

The flat structure of SMEs and less hierarchy (Burley, 2015; Kiril, 2014; Wamba & Carter, 2013) enables them to have a more flexible work environment. It allows top managers to build a strong relationship with employees (Burley, 2015; Kiril, 2014). The fewer levels of management between managers, executives, and employees result in greatly increasing communication accuracy (Burley, 2015). Flat communication facilitates teamwork and collaboration, as people from different parts of the business could communicate and share ideas (Grimsley, 2014).

In the current study, some of the participants said that Yammer allowed employees within the business to share information and to voice their opinion. People at the “top” and “bottom” of the organisation communicated privately, safely and as equals “within

that walled garden”. One of the participants gave specific examples. The cleaners who have always been the listeners and observers can share their thoughts. The decision makers, such as the chief executives could read their messages and respond. Thus, the technology fits the culture of the organisation. For horizontal businesses speed of communication is a big advantage and it increases with fewer levels of management (Burley, 2015). The participants of this study valued specific features of microblogging which enabled speed of communication, such as microblogging’s limited functionality, the technology can be used on mobile phones, in addition to restrictions on posting messages which allow messages to be sent easily and quickly. Horizontal communication can however, create conflict between people who are constantly exposed to one another through the communication process (Grimsley, 2014). In the current study, the participants identified potential risks such as employees talking about their co-workers when using technology. Casual reports of bullying or accusations can reach others because they are online. Another identified risk was the loss of personal privacy. SMEs actively took action to minimise potential risks. One policy is where individuals are not allowed to talk about other employees. Also, by assigning specific people within the organisation to engage with technology, the risk of picking on people or bullying colleagues is reduced. The majority of participants also identified the need to use appropriate language and to select suitable topics.

#### **6.5.6. SMEs have supportive environments**

The following characteristics imply that small organisations provide supportive environments. A smaller management team, less formality (Blackburn, 2012; Kiril, 2014), flatter communication structures and less hierarchy enables SMEs to have a more flexible work environment. Therefore, top management can build strong relationships with employees (Gray et al., 2003; Kiril, 2014) and provide an opportunity for easier and more direct leadership which can facilitate the permeation of stronger cultures. Hence a more supportive environment is created (Gray et al., 2003). In the current study, based on the participants’ responses it can be seen how their answers reflect a supportive environment. For example, one of the directors said that the only way you can help older groups of people to feel comfortable and relaxed with using technology is to actually sit down with them and show them how to use it. These employees were set up with microblogging accounts and they were shown how it works. Another example of supportive environments was that some SMEs used microblogging because it enabled people to help and encourage each other. For example one of the participants

said that on Yammer, they were able to find information and the right individuals to refer to at a fast pace, for example to ask questions from. If it was not for Yammer, they would not easily be able to share information and everyone would not have access to what people were doing. In the current study, some organisations had less systematic ways to deal with risk. Instead of having formal rules and policies, some SMEs preferred to support their employees by having various kinds of procedures. Some organisations supported members of staff by providing training, such as showing people how to use technology.

## 6.6. Chapter Overview

This chapter has discussed the importance of the findings of the current study compared to previous research. By taking into account the research questions, the chapter began by comparing the findings with research on microblogging in large organisations. No major differences were found between how SMEs and large organisations use microblogs. However, some key differences were identified in how they adopted the platforms. Overall, most SMEs adopted microblogging to see how it would benefit their business. However, some researchers carried out their research having had particular uses of microblogs in mind; for example to investigate the potential impacts of Twitter on informal communication at work (Zhao & Rosson, 2009). Regarding the potential key features of microblogging that help organisations to use them, smaller organisations mainly value microblogs for having limited functionality; it does not have many features and it can be easily used. Also, the fact that microblogs are cost effective and they can be used via mobile phones was highly valued. The existing literature on microblogging in large organisations does talk as much about its limited functionality and ease of use. They do not particularly emphasise the cost effectiveness of microblogging. They do not have limited financial resources and are not as worried about having high costs. Unlike the current study, large organisations did not provide detailed responses about the potential risks of microblogging and actions required to mitigate risk. This could be as a result of large organisations having more financial and human resources, with which to bear the risks associated with the use of microblogs.

The current research was then compared with the limited existing literature on microblogging in SMEs. Firstly, the main process through which SMEs adopted microblogging was discussed. How microblogging was used was also analysed. What then followed was highlighting what potential risks were perceived with the use of

microblogging and what actions were taken by organisations to manage the perceived risks. The findings showed that overall, most SMEs adopted microblogging by a process of trial and error. They used microblogging in similar ways and identified between internal and external uses. However, the participants of this study provided more detailed examples of uses; this is as a result of the selected research methodology. Other research on microblogging in smaller organisations either used surveys which provided less in-depth responses, or they conducted less semi-structured interviews than the current study. By combining the findings of the current research with the uses identified in the literature, they both offer a richer understanding of how microblogging is used within SMEs. The findings offer more generalisability.

The research also identified what people saw as potential key features of microblogs that influenced SMEs to adopt them. One of the key features was the cost effectiveness of microblogs. It is not surprising that SMEs would value microblogging for being cost effective, because they usually have limited material and human resources, resulting from financial constraints and insufficient professional expertise. However, it was surprising that among the potential key features identified in the current study, the existing literature mainly focused on microblog's cost effectiveness. Having compared the risks of microblogging and actions taken to mitigate risk, the current study found participants more preoccupied with risks. This might be because this research is the first qualitative study based on in-depth interviews and the participants provided more detailed responses.

In the third part of this chapter, the aim was to develop an understanding of the results in the context of the nature of SMEs as organisations. A number of characteristics that distinguishes SMEs from large organisations were examined and this helped explain how small organisations adopt and use microblogging. SMEs were found to lack specialist expertise. In these organisations it was usually the manager or director who constantly controlled and used external microblogs such as Twitter. Small organisations also had a smaller management team and they were found to be less formal. They had flatter communication structures and less hierarchy which enabled them to have a more flexible work environment. As a result, top management could communicate more with employees, build strong relationships with them and provide an opportunity for easier and more direct leadership which could help build stronger cultures. Hence in SMEs a more supportive environment was created.

Overall, most existing literature on microblogging has mainly focused on how to encourage better uses of microblogs. Yet, this research has equally studies the potential risks of microblogging and ways to manage and mitigate risk. This is the first study based on UK organisations, which has critically analysed uses of microblogging in the workplace, features which help make use of them, in addition to the potential risks of microblogging and types of action taken to mitigate risk. The findings have showed that both SMEs and large organisations need to further explore how microblogs are used within organisations, particularly focusing on aspects related to the risks of microblogging and ways to manage and mitigate risk.

## **CHAPTER 7: Conclusion**

### **7.1. Introduction**

The previous chapter discussed the findings of this research compared to the existing literature. In this chapter a summary of the whole thesis is given and the design of the study is explained, before presenting the answers to the research questions (Section 7.2). Next, a discussion of the contributions to the existing knowledge of information science and theory is provided (Section 7.3). The implications for practice are then explored in Section 7.4. The final parts of the chapter present possible directions for further research (Section 7.5) and the closing remarks (Section 7.6).

### **7.2. Research summary and response to research questions**

Chapter 1 introduced microblogging as an example of social media and it was discussed that microblogs enable people to share posts about personal activities and thoughts and to receive quick notifications. The term social media and Web2.0 are often used interchangeably (Stockdale et al., 2012). Specifically in the organisational context, claims have been made by certain authors that social media is radically transforming organisations (McAfee, 2009). The term Enterprise2.0 (McAfee, 2006) is used to describe how changes in the way individuals can interact through Web2.0 technologies can lead to radical transformation of the organisation (McAfee, 2006; McAfee, 2009). It was suggested that Web2.0 technologies could influence collaboration and communication in organisations, allowing more employees to contribute their perspective to a dialogue (McAfee, 2009). In addition, Web2.0 technologies would allow people to communicate more easily with those outside of the business, such as customers (McAfee, 2009). In this chapter it was discussed that there is a lack of empirical research that investigates to see whether the claimed effects have happened. In addition, it was explained that less research has been devoted to the adoption and use of microblogs in SMEs. Specific issues were identified to require further exploration, such as how microblogging tools are selected, who decides to adopt them and how organisations go about adopting the platforms. It was explained that although other researchers have identified potential risks of microblogging in the context of SMEs, they have chiefly taken the stance of trying to encourage better uses of microblogs. Thus, they have neglected to give full weight to studying risk. Overall, it was discussed

that more research needs to be conducted within SMEs to gain a better understanding of the uses and risks of microblogging and how to manage and mitigate risk.

The focus of this thesis was to investigate the uses and risks of microblogging in UK based SMEs. It was explained that the study sought to explore five research questions: what the process was through which SMEs adopted microblogging, how microblogging was used, what risks were perceived with the use of microblogging, what actions were taken to mitigate the perceived risks and how the nature of SMEs as organisations help explain their adoption of this new technology.

Chapter 2 provided a review of the relevant literature about the uses of Web2.0 technologies and social media in the context of SMEs, as well as the uses and risks of microblogging in larger organisations and SMEs. Firstly, it was discussed that although there is a growing body of literature on Web2.0 technologies and social media, not much research has focused on their use in smaller organisations (Meske & Stieglitz, 2013). In regards to Web2.0 technologies, it was explained that the literature shows that some employees chose not to use them (Antunes & Isaias, 2014). Reasons that have been found include considering Web2.0 technologies as a waste of time and having difficulty adapting Enterprise2.0 practices to organisational culture (Antunes & Isaias, 2014). In regards to social media, SMEs valued them for collaboration (Zeiller & Schauer, 2011) and a rapid increase in knowledge and access to internal experts (Meske & Stieglitz, 2013). Smaller organisations also used social media for marketing (Ainin et al., 2015; Derham et al., 2011; Nakara et al., 2012) and customer relationship management (Ainin et al., 2015; Derham et al., 2011; Stockdale et al., 2012). This chapter also found that the literature shows risks to be associated with social media in SMEs. Smaller organisations were worried about reputation damage, receiving bad customer evaluations and negative comments from competitors (Nakara et al., 2012). Social media was also considered by some users to be a waste of time (Nakara et al., 2012). It was discussed that as a result of using social media, there is a need for security measures and to control confidential organisational information (Nakara et al., 2012). Also, SMEs should give training to their employees and develop social media guidelines (Meske & Stieglitz, 2013).

In this chapter it was explained that most research to date about microblogging has been published about the USA and mainland Europe. Not much has been based on its use by UK organisations. It was discussed that the commonest types of methods used by other



researchers, in the context of microblogging in organisations is surveys, along with a few qualitative interviews. Thus, there is a need for more qualitative research to be conducted.

The chapter then reviewed the literature on how large organisations make use of microblogging. Firstly, the marketing uses of microblogs were discussed (Hutchings, 2012). For example, the tools were said to be used to communicate with those outside of the organisation (Leonardi et al., 2013), such as customers (Curran et al., 2011; Gu & Wang, 2012; Leonardi et al., 2013). The literature suggests that large organisations use microblogs in many ways, such as creating awareness and feelings of connectedness (Günther et al., 2009; Müller & Stocker, 2011; Riemer et al., 2010a; Zhao et al., 2011). Within large organisations, microblogs were also used for sharing knowledge or information (Riemer & Tavakoli, 2013; Schöndienst et al., 2011), collaboration (Honeycutt & Herring, 2009) and asking or responding to questions (Ehrlich & Shami, 2010). The platforms were also used for providing feedback on ideas (Riemer et al., 2011a; Slee, 2011; Zhao et al., 2011) for clarifying various matters of interest (Riemer & Richter, 2010; Riemer et al., 2010b; Riemer et al., 2011c) and for learning (Yap & Robben, 2010; Zhao et al., 2011). The literature suggests that people used microblogs in large organisations to praise co-workers (Riemer & Tavakoli, 2013), share social information (Ehrlich & Shami, 2010; Zhang et al., 2010b; Zhao & Rosson, 2009) and for reputation management (Ehrlich & Shami, 2010; Schöndienst et al., 2011). Microblogging was also said to be useful for recording information for future reference (Riemer & Richter, 2010; Riemer et al., 2010b; Riemer et al., 2011a) and releasing emotional stress (Zhao & Rosson, 2009). The chapter reviewed features of microblogging that influenced large organisations to use them, such as posting messages on Twitter limited to 140 characters (Zhao & Rosson, 2009) and sharing posts in 'real-time' (Günther et al., 2009).

The main literature on microblogging in SMEs was then reviewed. This showed that smaller organisations used microblogging for marketing (Bulearca & Bulearca, 2010; Carter, 2014; McLaughlin, 2014). Platforms such as Twitter were used externally, to communicate with those outside of the business (Bulearca & Bulearca, 2010). SMEs use microblogs to communicate with their customers (Carter, 2014; McLaughlin, 2014; Michaelidou et al., 2011), for sales (Carter, 2014) and to give information to clients. SMEs also make use of microblogs such as Yammer to better connect members of staff internally and with reduced communication costs (Meske & Stieglitz, 2013). The

literature suggests smaller organisations use microblogs to share knowledge or information (Carter, 2014) and for collaboration (Meske & Stieglitz, 2013). The chapter reviewed features of microblogs that influenced SMEs to use them, such as its cost effectiveness and minimum level of IT skills required (McLaughlin, 2014; Michaelidou et al., 2011). Compared to the literature on microblogging in SMEs, more uses were identified for larger organisations.

In regards to the risks of microblogging in larger organisations, it was found that people were mostly concerned about the privacy of employees, security of the organisation, difficulty of using the system and distraction i.e. because of too much noise on platforms such as Twitter, employees could waste a lot of time using microblogs. The chapter also discussed how large organisations could manage risk. The literature identified that rules and guidelines may be need (Case & King, 2010; Schöndienst et al., 2011), to balance the benefits of using microblogs, with the risk of spreading private data (Case & King, 2010). It was discussed that training could be also given (Raeth et al., 2009), to educate employees about security concerns (Lee & Warren, 2010). Overall, it was evident that issues to do with the risks of microblogging and the types of actions taken by large organisations to manage and mitigate risk have not been much investigated.

In regards to the risks of microblogging in smaller organisations, it was discussed that the literature shows that SMEs were mainly worried about their reputation and receiving negative feedback, for example from customers or clients (Carter, 2014; McLaughlin, 2014). The existing literature on microblogging in large organisations showed that they mostly focused on implementing or filtering data; this was how risk was recognised in that context. Issues to do with waste of time, noise and who to follow were big concerns. Some people in SMEs were also worried about spending too much time on microblogging (McLaughlin, 2014; Michaelidou et al., 2011). The issue of time was explained to be one factor which could prevent users from engaging with microblogs over time (McLaughlin, 2014). The chapter also explored the types of actions taken by SMEs to mitigate risk. SMEs need to monitor information being posted on microblogging (Hu et al., 2012). They should also consider giving training and management or technical support to using the platforms within organisations (McLaughlin, 2014; Michaelidou et al., 2011). SMEs could allocate guidelines, so that members of staff can effectively use the platforms (Meske & Stieglitz, 2013). At the

end of this section it was evident that based on the literature, most studies have focused on how to encourage better uses of microblogs. Issues to do with the risks of the tools and types of actions taken by SMEs to mitigate risk have not been much studied. The aim of this thesis was thus to study the uses and risks of microblogging in SMEs in the UK, and to answer the identified research questions.

Chapter 3 provided a detailed description of the methodological approach of the research. Firstly, different research paradigms were discussed; the positivistic, critical, ecological, emerging social network and interpretive paradigm. The ontology, epistemology and methodologies of the interpretivist approach were discussed for this research. The deductive and inductive approaches to research were then described, before the quantitative, qualitative and mixed methods approaches to research were discussed. Given the research questions and wanting to explore people's actual experiences and their perceptions of the uses and risks of microblogs in smaller organisations, a qualitative, interpretive, exploratory methodology was adopted. Face-to-face interviews were identified as the most suitable type of data collection. It was discussed that using this method, in-depth responses can be gained from the participants, to increase understanding of how SMEs make use of microblogging. Using any other methods, for example questionnaires would give an incomplete picture of people's attitudes, experiences and perceptions of the uses and risks of microblogs, in addition to how they made decisions to adopt the tools.

A preliminary interview plan was devised, before conducting two pilot face-to-face interviews with participants from IT SMEs. The interviews yielded initial insights on possible questions and areas for additional exploration during the second part of the study. In the second stage, 21 interviews were carried out with nine managers, eight directors and four employees from 19 different SMEs in the area of South Yorkshire, UK; comprising of four phone interviews and the remaining were face-to-face interviews. The final analysis includes the two pilot interviews. Overall, 14 individuals participated from the field of IT/software, four interviewees were from the Sports sector and three were from Consultancy. During each interview, unstructured observation notes were also taken. Notes were collected related to the office setting and how participants were situated around the room, whether the environment could help with identifying the roles and responsibilities of certain individuals, how easy it was for the

participant to use the platform and how capable they were to look for information and provide examples.

The next part of this chapter provided detailed information about the analysis of qualitative data. The '6-phase guide to performing thematic analysis' was followed (Braun & Clarke, 2006). At first the researcher familiarised herself with the data, before creating initial codes. She then started to search for themes, before reviewing themes, defining and naming themes and lastly producing the report. Iteratively the investigator moved back and forth throughout the phases and across the empirical data as necessary (Braun & Clarke, 2006, p. 16). The methods used to ensure quality in data interpretation was then discussed. The chapter also described the ethical considerations for this research.

Chapters 4 and 5 presented the research findings. In chapter 4 the analysis and findings about perceptions of use and actual uses of microblogging was given. What participants saw as key features of microblogging that influenced the decision to use it were also identified. The aim of chapter 5 was to provide the analysis and findings based on the risks of microblogging, in addition to what actions organisation took to mitigate risk. The findings for the research questions posed in the study are summarised below.

1. What was the process through which SMEs adopted microblogging?

The study demonstrated that at the time of data collection in 2012/2013, the majority of SMEs adopted microblogging by a process of trial and error, rather than in a particularly formalised process of evaluation and adoption. SMEs wanted to give the technology a go and to see how it would be useful for their organisation. The main people within the business who engaged with microblogging were the manager or director. This was more so with Twitter, which was mainly used as an external tool to engage with the customers, clients, supplier etc. On Yammer some businesses did sign a wider group of employees up; more people engaged with internal microblogs.

2. How was microblogging used?

The findings identified what SMEs used microblogs for. The commonest types of uses included microblogging to raise awareness within the workplace and with people outside of the business, such as the customers and clients. This was so that other people could understand more about what was happening within the business. Internally, members of staff engaged with microblogs in order to easily connect with their co-

workers, to remotely collaborate with their colleagues and to ask or respond to questions. Employees could quickly provide help and everyone would know what was happening at work. Externally, smaller organisations did not make much use of microblogging for direct advertising i.e. selling products to others through the platforms. The participants focused more on other types of marketing uses. Twitter enabled individuals such as customers and clients to find out about the latest work and events through updates, for example information regarding the types of projects the business was working on. Twitter was mainly used to allow people to share or access data with others, to improve customer relations and to build relationships.

The findings also showed what people saw as key features of the technology that affected decisions to engage with it. The majority of participants valued its limited functionality; it does not have many features and users could easily and quickly engage with the technology to share data; most participants related the ease of use to the restrictions on posting messages on Twitter. In addition, microblogging was viewed as cost effective. It was used by many interviewees on mobile phones, thus they could easily access the tool at any time and from any location. They were able to easily interact with their co-workers and with those outside of the organisation, such as with the customers and clients. People were constantly made aware of what was happening at work and they had access to the information and news being shared.

### 3. What risks were perceived with the use of microblogging?

The research findings reported in this thesis showed that although participants were keen to use microblogging, they also perceived it to be risky i.e. to expose the business and employees to danger. Some individuals had experience of things going wrong; others were talking hypothetically; others had direct contact with individuals who had experienced an issue or they were responding to cases broadcasted on the news. A number of participants found microblogs highly risky, others less so. In regards to internal microblogs, more individuals engaged with them and not as much control was in place over who could use the technology. External microblogging, Twitter, was considered to be more risky. Therefore, organisations tried to take more control over it. The existing literature on microblogging showed that large organisations focused more on implementing or filtering data; this was how risk was perceived in that context. Issues to do with waste of time, too much noise and who to follow were big issues. In the SMEs context, in this study those concerns were less relevant. This research found

that the commonest type of risk was an external one and it was seen to be the risk of damaging the reputation of the organisation. This could happen through talking negatively about customers or work-related issues, posting offensive information, upsetting someone, making spelling mistakes, writing in a poor style which could lead to embarrassment or copying information from others. Breach of confidentiality was seen to be a risk in itself, but also potentially affecting the reputation of the organisation. These were the main risks which most individuals were worried about. Negative media coverage, bullying colleagues and loss of personal privacy were also recognised as concerns. They too affected the reputation of the business. A number of other risks were also associated with using microblogging in SMEs: losing valuable information as an internal risk and noise, misleading information and computer security as external risks.

#### 4. What actions were taken to manage the perceived risks?

Given that the participants perceived a range of potential risks in microblogging, it was natural that they took actions to counteract them; mainly to protect their reputation. Most interviewees talked about controlling what kinds of information should be posted when using the technology. They mentioned having in place policy on content. This included recommending not mentioning colleagues, using appropriate language and limiting the kinds of topics which were discussed. Also, not uploading pictures of young individuals on microblogs; this becomes important for organisations which work closely with young people. There were some organisations which were more concerned about risks than the others and so they took extra action. For instance they controlled who should use technology on behalf of the business. They paid more attention to whether everyone could use microblogs or if only certain people should access and post data, such as the manager or director. People specifically talked about having a clause in employees' contracts and separating private and company accounts. The findings also showed that some individuals relied on review procedures and complaint procedures, as the way to deal with risk. A few participants identified training members of staff, as the way to mitigate risk. This consisted of directly showing employees how to use microblogs appropriately. Perhaps surprisingly, some SMEs chose not to take action about the risks. This was mostly because the organisation was very small.

#### 5. How does the nature of SMEs as organisations help explain the adoption of microblogging?

Smaller businesses have been found to have limited resources, such as financial constraints (Ale Ebrahim et al., 2010; Gray et al., 2003; Kimwele, 2014). Consistent with this, that the majority of the organisations participating in the study valued the use of cost-effective communication technologies, such as microblogging. Based on the participants' responses it was found that some of their answers reflect a lack of specialisation of roles i.e. some SMEs had limited IT knowledge and that could be a barrier in adopting technology. There was no formal process of evaluation or attempt to measure the success of the adoption and use of the technology that might have occurred if there was a specialist responsible for microblogging adoption in SMEs. In addition, in the study SMEs had a small management team, often made up of one or two individuals. The participants showed that the IT adoption process was directly influenced by top management. All decisions from the planning stage to implementing microblogging and later maintaining and monitoring the tools were made by them and not IT experts.

Moreover, SMEs have been found to have less formal structures (Ale Ebrahim et al., 2010; Gray et al., 2003). As a result, members of staff rely more on personal contact networks. In this study, the informality of small organisations showed up in the process of adopting microblogs. Most businesses adopted internal and external microblogging by a process of trial and error. There was no formalised process of evaluation or attempt to measure the success of the use of the tools. SMEs had informal communication cultures and Yammer and Twitter fit the culture of their business. The participants of this study identified that microblogging helped improve the organisational culture, by enhancing transparency, collaboration and interactions between people. SMEs are less hierarchical i.e. they have flatter structures in comparison to larger organisations (Wamba & Carter, 2013). The close communication between managers and members of staff provided an opportunity for direct leadership and it enabled creation of a strong culture in the workplace. This was reflected in the study findings. For example, some of the participants said that Yammer allowed members of staff to share information at work and to voice their opinion. People such as the managers, as well as individuals at the "bottom" of the organisation, such as the cleaners were able to communicate privately, safely and as equals; microblogs fit the culture of the business. Overall, SMEs offered their employees a supportive environment; this made the adoption process and uses of microblogs much easier.

Chapter 6 discussed the significance of the research findings by relating them to the existing literature on microblogging in SMEs and large organisations. The chapter discussed the findings according to the research questions. The following parts of this chapter explain the contribution to knowledge, practical recommendations and how this study could be extended by future research.

### **7.3. Contribution to knowledge**

The present study makes several noteworthy contributions to the existing knowledge of information science, and particularly to the study of microblogging in organisations. The research filled a gap identified in the existing literature relating to the uses and risks of microblogging in SMEs. This research is certainly the first to carry out an in-depth study based on semi-structured interviews, about the uses of microblogging in UK based SMEs. Microblogging in smaller organisations is a neglected area of research. The following part of this section discusses the theoretical contributions that add knowledge to, and enhance understanding of microblogging in SMEs. More specifically the risks of the technology and actions taken by organisations to mitigate risk are discussed. This is in contrast to the existing literature on microblogging which usually focuses on the process of adoption and uses of the technology.

#### **7.3.1. Theoretical contribution**

Microblogging is an example of social media and specifically in the organisational context, it has been claimed that businesses can change radically by using new social media (McAfee, 2009). It has been suggested that Web2.0 technologies allow for a new type of collaboration practice to be created at work (Boughzala, 2011; Cook, 2008; Soriano et al., 2007). This study has contributed to that debate by showing that microblogging does not transform businesses. The focus of the current study was not on simply promoting the advantages of microblogging in organisations and claims made regarding Enterprise2.0 (McAfee, 2006; McAfee, 2009). Instead, it took a more balanced and critical approach to evaluate how technology is actually used in the workplace. In this research, although microblogging was revealed to be useful for organisations, it was just another communication technology, alongside the phone, email and face to face communication.

The current study can be positioned in a wider context of other research. The existing literature shows that there is interest in social media, in the context of organisations and



this thesis about microblogging is participating in that wider interest. The study has contributed to the understanding of the uses and risks of social media in SMEs. Although there is academic literature on organisational uses of social media, most of them focus on larger organisations (Zeiller & Schauer, 2011). Fewer studies are devoted to the use of social media in smaller organisations, which have high social and economic importance (Kietzmann et al., 2012; Stockdale et al., 2012; Meske & Stieglitz, 2013; Zeiller & Schauer, 2011). The existing literature showed that one of the reasons why people like to use social media for business purposes is because they are free and easy to use (Nakara et al., 2012). The participants in this research also valued microblogs because they are cheap and easy to use. This study also showed that people had quite a lot of concerns about using microblogging. As part of this research it has been considered that exactly the same issues may exist around other social media. These claims need to be tested by further research, but there is a strong sense of similarity in the types of risks perceived by the participants of this research and the few identified in other studies. Overall, the findings of this study can contribute to other research. The results can be a guide for social media researchers to further investigate the uses of communication technologies in SMEs, and to give equal weight to studying the uses and risks of the platforms.

Also, this is the first study which has systematically examined existing literature on Web2.0 technologies and social media in smaller organisations, and the uses of microblogging in SMEs and large organisations. The extensive literature review is one of the contributions of this research. This is one of the first systematic attempts to review what is known about microblogging in organisations. In this research two visual representations have also been developed (see Figure 2.1 and 2.2), comparing the uses and risks of microblogging in SMEs and large organisations. Figure 2.2 shows that the literature on smaller organisations is mostly concerned about the reputation of the organisation and receiving negative feedback. However, larger organisations are mainly worried about the privacy of employees, security of the organisation, difficulty of using the system and distraction i.e. there is a lot of noise on microblogging and employees could waste a lot of time using the platforms.

The findings of this study, the ones mainly to do with the uses of microblogging in organisations complement those of earlier studies, but in new context of the UK; most research on microblogging in organisations was mainly based on the participants'

responses in the United States and Europe. This study extends the knowledge of the uses of microblogging by offering a richer account of how it is used. For example, the participants talked in detail about the types of questions people ask and respond to on microblogging, such as issues to do with projects, information about a website, details about specific businesses or people they are planning to communicate with. These findings may be explained by the fact that this is the first qualitative research, based on in-depth interviews about the uses of microblogging in SMEs. Although some researchers have also used interview methods (Bulearca & Bulearca, 2010; McLaughlin, 2014), previous literature on microblogging was mainly based on survey responses. McLaughlin (2014) conducted in-depth interviews and surveys (however less interviews than this study), and compared to the current research, he also found that organisations can make use of microblogs to generate increased awareness and communication of products or services between with those outside of the business, such as with their customers. In addition, Bulearca and Bulearca (2010) also conducted pilot, in-depth interviews with participants from one British SME. Their results are in agreement with the findings of this research. They also found Twitter to be an important platform for organisations to use, particularly if they want to be able to listen to and influence their consumers' opinions. Although other researchers have provided some details regarding the uses of microblogs, the current study provided rich examples of use, such as details about posting information about the types of projects the organisation was working on, arranging conferences and meetings, as well as sharing information which could lead to organise meetings and webinars.

This is the first study on microblogging in SMEs which has developed a diagram (see Figure 4.3), to represent the uses of microblogging in smaller organisations. The diagram has differentiated between information, dialogue intended and action messages. In this study, the majority of uses of microblogs were found to be part of the second category i.e. dialogue intended messages. This category is about two way interactions and strengthening relationships between people. The participants identified fewer information messages. This is about one way communication, as well as one to many, for instance informing others about actions and news. The findings also showed that microblogs can be used for marketing purposes and are part of the action messages category. Examples of marketing uses include promoting events, asking for donations and asking people to join programs. The diagram may be beneficial for other researchers in this area of work to follow; it will serve as a base for future studies.

This research is an initial attempt to give equal weight to developing an account of the uses and risk of microblogging in organisations. In terms of the third research question, this study has extended previous research by providing a wider range of perceived risks, associated with microblogging in SMEs. Previous studies have tended to identify risks of microblogging more broadly and they perceive them differently. For example, large organisations focus more on implementation issues or filtering data; this is how risk was seen in that context. For them, issues to do with the wasting of time, too much noise and who to follow were big concerns. In the current study, those issues were less relevant. This research found that the commonest type of risk was an external one, the risk of damaging the reputation of the organisation. The participants gave many specific examples of how the reputation of the organisation can be damaged. Talking negatively about the customers or work, posting offensive messages, upsetting someone, copying information from others, making spelling mistakes, causing embarrassment due to writing something inappropriately or badly can all damage the reputation of the organisation. There is no specific theoretical framework currently in use which explains the potential risks of microblogging in organisations. However, the current study developed a visual representation, describing concepts of risk, differentiating between internal and external risks and explaining how they relate to and affect each other. This diagram should prove to be particularly valuable to guiding other researchers who want to further study the risk factors related to microblogging in organisations. Overall, the empirical findings in this study provide a new understanding of how SMEs should perceive potential risks of microblogging.

Another contribution of this study for other researchers is in terms of examining how organisations take action to deal with risk. There seems to have been little done in previous research on how to combat risk of microblogging in the context of SMEs. The current study is certainly the first to develop a visual representation to clearly show with examples, the types of actions smaller organisations take to mitigate risk. In summary, the findings of this study contribute to previous knowledge by opening up a new direction of research that investigates the uses and risks of microblogging in SMEs.

#### **7.4. Practical Recommendations**

The findings of this study have several significant implications for the future practices of SME managers, policy makers and for designers of software. This section explores these implications.

#### 7.4.1. Implications for SME managers

As regards practical implications, something could be done to address the trial and error approach to using microblogging found to be typical of SMEs. For example, the directors or managers of organisations could be given training courses and guidance on how to best adopt and use microblogs.

In this study a range of uses have been recognised which is wider than what SME managers previously thought about for their business. Thus, the findings of this research can be useful for raising awareness among managers, about the different types of uses of microblogs in organisations. More specifically, the literature shows that smaller organisations make use of microblogging for marketing (Bulearca & Bulearca, 2010; Carter, 2014; McLaughlin, 2014; Michaelidou et al., 2011) and raising awareness and creating feelings of connectedness (McLaughlin, 2014; Meske & Stieglitz, 2013). They also use microblogs for sharing knowledge or information (Carter, 2014) and collaboration (Meske & Stieglitz, 2013). Although the current study found the same types of uses, the participants of this research also talked about using microblogging within the organisation for socialising, holding individuals accountable for their actions, organising work schedules, training and releasing frustration. More external uses of microblogs were also found in this research, such as using the platforms for looking at competitors, learning from mistakes and smoothing passage of greetings. Also, the participants showed that internal and external microblogs can be used for asking for opinion or feedback, for referencing and building one's personal reputation. The existing literature did not bring out fully the range of potential uses. The findings of this research could be useful to articulate this for SMEs managers. In this study, a range of risks have also been identified that participants perceive they have, as a result of using microblogs in SMEs. Having produced a somewhat comprehensive list of risks in the study, this could be used to help to teach SME managers systematically about risks, along with methods to deal with the issues. However, in regards to risks, the participants of this study did not perceive concerns about compliance (Marais, 2015). Accidental violation of political regulations, such as trading with sanctioned people or states (Coleman, 2012, p.10) could lead to financial penalties (Marais, 2015). Managers of SMEs need to be aware of these potential risks and familiarise their employees with them as well, for example through monthly meetings or presentations.

The findings of this study can be beneficial for informing SME managers' actions. Best practices have been identified in dealing with the risks of microblogs that could be used

more widely. Some participants identified that rather than having policies or guidelines to support the use of microblogs in organisations, the best approach is to show employees how to use the platforms. This could be useful for new employees or older ones who may be worried about making mistakes and are less comfortable with using microblogs. This practice was also identified to be useful for very small SMEs. For example, one of the Consultancy participants said that although there were only two directors working together within the organisation, nonetheless one of them set up a company account for his colleague and they discussed how Twitter should be used for the business. Overall, SME managers can consider minimising written policies or guidelines at work, in regards to using new technology and provide more training for employees on how to best use the platforms.

The management team could consider organising activities or informal sessions through which employees can talk about their experiences of microblogging, including difficulties and challenges involved with using new technologies at work. For example, the findings showed that some employees were operating in a dispersed organisation. Yammer enabled employees to share information with each other, regardless of where they were working from. One of the participants specifically mentioned that they come into the office once a week, or every two weeks, or sometimes less. Therefore, if it was not for Yammer, employees may have only met their co-workers at company meetings. Yammer provided a way for colleagues to feel connected, even if they did not meet face to face that often. SME managers can organise activities and informal sessions, in order to raise awareness and suggest how risks could be managed. This can be done by having clearer guidelines about what channel is best for sharing specific types of information. It is also important for managers and directors to take part in such sessions to motivate employees and influence them to share their experiences and knowledge with their co-workers. The management team can also use people's feedback to change policies, procedures and to better understand how microblogs are used for work. All this can be done in a less structured and formal manner, at the start of each month, for example. Meeting in a social context, can also give employees time to understand how people perceive technology. Hence individuals will feel closer to their co-workers and they will discover the similarities they have in common; people would then be able to help each other more easily, by knowing who the right people are to turn to at times of need.

Moreover, the manager or director could also have a crucial role in providing some workshops that join managers with staff from different SMEs. In these workshops, both

managers and employees could be engaged in discussions about the technologies their organisation has adopted for internal and external communication, as well as what their experiences have been. For example, one of the participants of this study mentioned that they had never heard of Yammer prior to this research. These workshops can help people to find out about the new technologies being used by other businesses and people may then decide to look into them and to see if it could be useful for their needs. Indeed, these discussions could also be an active process of re-organising what the policies and rules should be within organisations, for using new technology. This is based on people sharing their experiences of the uses and risks of microblogging and what actions they could take to mitigate risk.

#### **7.4.2. Implications for policy makers**

Industry associations, such as the Forums for Private Business and the Federation of Small Businesses can provide SMEs with valuable support and services (Bean, 2006; “Industry associations”, 2015). Training should be given that specifically identifies good uses of microblogs for SMEs and explain the potential risks in relation to each use. This would give SMEs the opportunity to familiarise themselves with the different types of issues which they could be faced with as a result of using new technology.

As SMEs have financial constraints (Ale Ebrahim et al., 2010; Gray et al., 2003) and less professional expertise (Gray et al., 2003), the Department for Business, Innovation and Skills can invest in smaller organisations and provide funding to support them. IT experts could be hired to visit SMEs and educate their employees on how to make best use of technology for business purposes. For instance how to better manage their time when using microblogging. One of the participants of this study, the director of a small organisation mentioned that a lot of time was required to use Twitter properly. This participant used Twitter for one hour a day but it got to a point where they did not have enough time anymore. They were considering employing someone from outside of the organisation to tweet for them. However, that would involve educating that individual about the business, the culture of their workplace, their client base etc. The organisation did not have enough time and resources to do this. Based on their past experiences, this participant also mentioned that they did not want their employees to use Twitter on behalf of the business, because people had previously wasted a lot of working hours using the platform; it was challenging for them to segregate Twitter from their work. Thus, if policy makers help fund for someone to educate employees about how best use

the technology, this in turn could help managers and directors to give more responsibility to their employees i.e. they may feel more comfortable to involve more employees in tweeting on behalf of the business.

The governments should make more financial resources available for treating risks confronting smaller organisations (Yusuf & Dansu, 2013). For example, they could provide the funding for staff training programmes outside of the organisation. This also can be done through sending managers and directors of organisations, as well as employees to different parts of the country, to attend courses or lectures, to better understand how different SMEs, from various fields of work adopt and use new technology. They would learn about the different techniques and approaches involved in using new technology. It would also be important for policy makers to support this kind of study, where the results can be beneficial to organisations and designers of software.

The participants identified that although larger organisations are more likely to face security issues, every organisation needs to be aware of this risk and to protect their accounts and private information. Several participants talked about the potential risk of being hacked or receiving spam. Particularly as some employees may not be IT literate within SMEs, it is likely that people outside of the organisation can hack into the organisation's computer system. As a result, data could get into the wrong hands, such as competitors. Thus, the government could provide the funding, for IT personnel to work closely with the managers and employees of SMEs, to educate them about computer security issues. For instance, not to download anything unknown, not to open pop-up messages and have more password protected systems. Also, to have safe and secure accounts, but at the same time making sure the systems are not be too difficult for employees to use; they should be secure but easily accessible for information.

The findings of this research have highlighted the importance of being aware of the risks of microblogging and the types of actions which could be taken to mitigate risk. These factors shape how businesses use microblogging for business purposes. Policy makers could apply the findings of this study by designing for organisational plans that can be applicable over time.

#### **7.4.3. Implications for designers of software**

The findings of this study showed that most participants were aware of the potential risks of microblogging. They took different types of actions to mitigate risk, such as

training members of staff. The findings could be applicable, in various ways, for designers of software. One of these ways could be through enabling managers to monitor microblogging usage. Some participants talked about employees who do not make use of microblogs, for different reasons. As a result, an email could be sent out via microblogging to the managers at the start of every month for example, providing them with information about who uses microblogs the most and for how long. The management team can identify the confident microblogging users and those employees could be asked to work closely with their co-workers. Members of staff can help encourage, teach and train the less confident microblogging users, about how to best use the tools, thus minimising the potential risks of microblogging.

Another aspect that designers of software could change about microblogging is that before submitting data, users receive suggestions from the platform to help them select the best phrases or words, which are similar to what they want to say. That would also help reassure individuals that they are posting appropriate information. Thus, it could help decrease the chances of damaging the reputation of the business. The system could also detect errors or spelling mistakes and highlight the problem to the user, asking them to change the words they are about to share on microblogs.

Activity on microblogging at the end of the week is comparatively less likely to affect behaviour the following week, indicating that to some individuals could possibly forget about the previous week's content over the weekend. Also, by taking into account that there is a lot of noise on tools such as Twitter, it may be encouraging if microblogging reminds members of staff of the important context of conversations and information shared on the platform the previous week, for example every Monday.

## **7.5. Limitations and Future Research**

The PhD research was successful in investigating the uses and risks of microblogging in SMEs in the area of South Yorkshire. Within the scope of an inevitably limited PhD project objectives have to be proscribed. Many ideas for extending the research naturally arise that cannot be pursued. The rest of this section considers some ways in which the research could be extended by future research to build on the current work.

Each organisation was visited once and interviews were conducted with the director, manager and/or employees. It would be beneficial to visit each organisation for a second time and conduct interviews again, to see if uses of microblogging changed over time.



Also, whether people perceived risks differently and changes were made in the types of action taken to mitigate risk. It would be interesting to compare the participants' uses of microblogs over time, particularly because microblogging has developed in new ways since the time of data collection.

Conducting interviews with more individuals from each organisation, or applying a mixed methods approach i.e. also distributing questionnaires to a wider number of participants, could be effective in providing a richer picture of how each organisation adopts and make use of technology. Although a maximum of two participants from each organisation took part in this research, the findings did reveal useful results which can be applicate to similar research.

This study reflects the findings based on organisations from just three sectors; most of the organisations that were examined were from the field of IT, with a few from Consultancy and Sports. SMEs can be selected from different areas of work, such as Science, Engineering and Manufacturing, as well as Creative and Media; these sectors encompass many SMEs and they are likely to use microblogging for work purposes. This could be done to confirm/refute the findings of this study. Researchers can expand this study and compare the results across different regions. As well as South Yorkshire, SMEs from other parts of the UK could be selected. It would be interesting to compare experiences of users across different geographical locations.

To better understand how organisations use microblogging platforms such as Twitter, further research could be conducted, such as adopting content analysis to categorize and examine the tweets (Hambrick et al., 2010; Hsieh & Shannon, 2005; Ma, 2013; Mayring, 2000). Patton (2002, p. 453) define content analysis as “any qualitative data reduction and sense-making effort that takes a volume of qualitative material and attempts to identify core consistencies and meanings”. Content analysis is regarded as a popular research technique (Hsieh & Shannon, 2005; Ma, 2013) and in regards to this study it is a useful way for examining systematically what content people actually post on microblogging. This would show if people do what they said they would do.

In addition, more research could be carried out, such as adopting sentiment analysis on microblogging (Hu et al., 2013; Martínez-Cámara et al., 2014). This is viewed as a method to further explore and extract subjective information from users. For instance,

people's attitudes and emotional state can be further studied (Jackson & O'Brien, 2012); examining the attitudes of users towards certain topics. This can include the user's intended emotional communication i.e. the emotional effect people want to have on those who receive their message. This would be a fruitful area for further work. For example, it would be interesting to explore whether people's attitudes influence how they perceive uses and risks of microblogging.

## **7.6. Closing Remarks**

A recent report shows that even ten years after the launch of microblogging, people who work for Twitter are still convinced that SMEs can gain value from using it for business purposes (Borrell, 2015). They have started to realise that it is not easy for some SMEs to use Twitter and efforts have been made to try and encourage uses of the platform. For example, Twitter has produced a useful guide, which provides tips to make Twitter usable for business purposes (Borrell, 2015). Nonetheless, they still have not pinpointed what is stopping some people from using microblogging. This research can be a useful guide to better understand how SMEs perceive microblogs. More specifically, the findings of this thesis can help others to recognise why some small and medium organisations decide not to adopt microblogging, what the adoption process of the platforms is and what the directors, managers and employees of SMEs perceive to be the specific uses and risks of microblogging which affect its usage.

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## Appendices

### Appendix 1: Interview plan

Questions during the interview	Interview Stages
<p><i>Researcher: introduces herself to interviewees</i></p> <p><i>Researcher: briefly chats to participants and explains the purpose of the research</i></p> <p><i>Researcher: shows appreciation of participants</i></p> <p>.....</p> <p>Are you aware of the voluntary nature of this interview and that you have the right to withdraw at any time?</p> <p>Would you like to look at the information sheet again to refresh your memory?</p> <p>Can you please read and sign the consent form to show that you agree with all the statements and are willing to participate?</p> <p>Are you happy for me to record the interview? I would like to let you know that the recordings would be only used for research purposes.</p> <p>Do you have any questions before we start the interview?</p>	<p>Before Starting the Interview</p>
<p>Please describe what your business does.</p> <p>Please describe your role in the workplace.</p> <p>Which microblogging/blogging tool/s has been adopted by your company?</p> <p>How did it come about?</p> <p>When was the tool/s adopted?</p> <p>Who decided or influenced the decision to introduce microblogging/blogging tool/s to the organisation?</p> <p>What was the main reason/s for adopting this specific microblogging/blogging tool/s over others?</p> <p>What were the objectives of adopting the tool/s?</p> <p>Were there any guidelines, rules, policies or training put in place to support the use of the tool/s in the organisation?</p>	<p>First part of the interview: exploring what the company is about and process of microblogging adoption</p>

<p>What specific features of the tool/s were mostly valued in the first place?</p> <p>Can you specify how microblogging is used inside the business?</p> <p>Who uses microblogging in the workplace?</p> <p>When do they use the tool/s?</p> <p>Why do they use the tool/s?</p> <p>Who would you say uses microblogging more than others in the organisation?</p> <p>Have you personally ever used the tool/s?</p> <p>How often do you engage with the tool/s?</p> <p>Has your opinion regarding the tool/s features changed over time?</p> <p>Has the use of the tool/s changed over time?</p> <p>Has your personal opinion about the tool/s and its benefits changed over time?</p> <p>Can you talk a bit about whether the company has a policy on safe use or permitted use of the microblogging/blogging tool/s? For example do all employees have access, or do only a specific number of people use the tool or have access to it?</p>	<p>Second part of the interview: use of microblogging over time</p>
<p>How would you say the microblogging/blogging tool/s has changed your business since it was first introduced in the company?</p> <p>What specific benefits has the microblogging/blogging tool/s brought to the company?</p> <p>Which specific features of microblogging allow you to make best use of the tools? - So what are the benefit features?</p> <p>What are the uses of microblogging? (Uses you have experienced or perceptions of use.)</p> <p>Do you see any specific limitations the microblogging/blogging tool/s has brought to the company?</p> <p>What are the risks of microblogging? (Risks you have experienced or perceptions of risk.)</p> <p>In your opinion has the microblogging/blogging tool/s to this day</p>	<p>Third part of the interview: reflecting on the uses and risks of microblogging to the business</p>

<p>helped the business achieve what was first expected of it?</p> <p>In your opinion has the company followed all the guidelines, rules or policies that were put in place to support the adoption process of the tool/s?</p> <p>Did the organisation ever find the need to make any changes to any of the guidelines, rules or policies that were put in place to support the use of the tool/s in the organisation?</p> <p>Do you ever consider adopting any other tool/s, or do you feel that the current tool benefits your business enough?</p> <p>Do you know how long the business will continue to use the same tool/s for the same purposes?</p> <p>Overall, would you recommend other companies to adopt microblogging/blogging for business purposes?</p>	
<p>Do you have anything else to add about your role and/or use of microblogging?</p>	<p>Closing statement, to end the interview.</p>



## Appendix 2: List of participant codes

<b>Participant</b>	<b>Participant Code</b>	<b>Type of Company</b>	<b>Position in the Business</b>	<b>When interviewed</b>
1	<b>IT-E-1</b>	<b>IT: IT/Software</b>	<b>E: Employee</b>	<b>1: The first participant interviewed</b>
2	<b>IT-M-2</b>	<b>IT: IT/Software</b>	<b>M: Manager</b>	<b>2: The second participant interviewed</b>
3	<b>IT-M-3</b>	<b>IT: IT/Software</b>	<b>M: Manager</b>	<b>3: The third participant interviewed</b>
4	<b>IT-D-4</b>	<b>IT: IT/Software</b>	<b>D: Director</b>	<b>4: The fourth participant interviewed</b>
5	<b>IT-D-5</b>	<b>IT: IT/Software</b>	<b>D: Director</b>	<b>5: The fifth participant interviewed</b>
6	<b>IT-D-6</b>	<b>IT: IT/Software</b>	<b>D: Director</b>	<b>6: The sixth participant interviewed</b>
7	<b>IT-E-7</b>	<b>IT: IT/Software</b>	<b>E: Employee</b>	<b>7: The seventh participant interviewed</b>
8	<b>IT-D-8</b>	<b>IT: IT/Software</b>	<b>D: Director</b>	<b>8: The eighth participant interviewed</b>
9	<b>IT-M-9</b>	<b>IT: IT/Software</b>	<b>M: Manager</b>	<b>9: The ninth participant interviewed</b>
10	<b>IT-M-10</b>	<b>IT: IT/Software</b>	<b>M: Manager</b>	<b>10: The tenth participant interviewed</b>
11	<b>IT-M-11</b>	<b>IT: IT/Software</b>	<b>M: Manager</b>	<b>11: The eleventh participant interviewed</b>
12	<b>IT-M-12</b>	<b>IT: IT/Software</b>	<b>M: Manager</b>	<b>12: The twelfth participant interviewed</b>
13	<b>IT-D-13</b>	<b>IT: IT/Software</b>	<b>D: Director</b>	<b>13: The thirteenth participant interviewed</b>
14	<b>IT-M-14</b>	<b>IT: IT/Software</b>	<b>M: Manager</b>	<b>14: The fourteenth participant interviewed</b>
15	<b>CO-E-15</b>	<b>CO: Consultancy</b>	<b>E: Employee</b>	<b>15: The fifteenth participant interviewed</b>
16	<b>CO-D-16</b>	<b>CO: Consultancy</b>	<b>D: Director</b>	<b>16: The sixteenth participant interviewed</b>
17	<b>CO-D-17</b>	<b>CO: Consultancy</b>	<b>D: Director</b>	<b>17: The seventeenth participant interviewed</b>
18	<b>SP-M-18</b>	<b>SP: Sports</b>	<b>M: Manager</b>	<b>18: The eighteenth participant interviewed</b>
19	<b>SP-D-19</b>	<b>SP: Sports</b>	<b>D: Director</b>	<b>19: The nineteenth participant interviewed</b>
20	<b>SP-E-20</b>	<b>SP: Sports</b>	<b>E: Employee</b>	<b>20: The twentieth participant interviewed</b>
21	<b>SP-M-21</b>	<b>SP: Sports</b>	<b>M: Manager</b>	<b>21: The twenty-first participant interviewed</b>

## Appendix 3: Participant information sheet

### Participant Information Sheet

#### 1. Research Project Title:

The Organisational Benefits and Risks of using Microblogging/Blogging tools for business purposes

You are being invited to take part in a research project. Before you decide it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully and discuss it with others if you wish. Ask us if there is anything that is not clear or if you would like more information. Take time to decide whether or not you wish to take part. Thank you for reading this.

#### 2. The project's Purpose

Microblogging has become popular on the Internet through Twitter, enabling users to share information and receive quick notifications. Although microblogging has attracted interest among corporations, it is still unclear exactly how it will perform in the workplace. In order to reach one step closer to answering such questions, this PhD research has the aim of investigating the extent to which organisations have adopted microblogging/blogging tool/s. Specifically the project will seek to establish:

- Which microblogging/blogging tool/s have been adopted by organisations,
- What the objectives were for adopting such tool/s
- What uses and benefits have been experienced by organisations adopting microblogging/blogging tool/s
- How the adoption of such tool/s have been managed.

#### 3. How the participants of the research have been chosen

To investigate the extent to which organisations have adopted microblogging/blogging tool/s and the effects of microblogging/blogging on business performance, organisations will be identified preferably in the area of South Yorkshire through the University of Sheffield.

Online questionnaires will be distributed to the heads of organisations, such as to CEOs and IT departments within the targeted organisations. From the questionnaire organisations will be identified from more detailed case studies. The case studies will use interviews, questionnaires and observation to build up a detailed picture of how microblogging/blogging tool/s works. The questionnaires and interviews will seek to ascertain which microblogging/blogging tool/s have been adopted by organisations, when the tool/s were adopted, what the objectives of the adoption of the microblogging/blogging tool/s were, what guidelines and policies were in place to support these objectives and the uses and benefits for organisations adopting such tool/s.

#### **4. Do I have to take part**

It is up to you to decide whether or not to take part. If you do decide to take part you will be asked to give your informed consent and you can still withdraw at any time without it affecting any benefits that you are entitled to in any way. You do not have to give a reason.

#### **5. What will happen to me if I take part**

##### **Questionnaire**

Participants only need to contribute the necessary time to complete a questionnaire, for 10 to 15 minutes. Several companies will then be contacted and asked to contribute to the second part of the study, where a number of interviews will be conducted with them.

##### **Interviews**

Agreeing to participate further, interviews will take place in the participant's workplace and will last for around 45 minutes. During the semi-structured interviews, open and closed questions will encourage and enable interviewees to provide in-depth discussions regarding which microblogging/blogging tool/s have been adopted, what the objectives for adopting such tool/s were, what uses and benefits have been experienced by adopting the tool/s and how the adoption of the tool/s have been managed.

As all results will be treated with confidentiality and anonymity, the researcher expects participants to take responsibility for a number of things, such as always providing true responses to questions and providing detailed answers given the opportunity.

Although there is no need to participate in the research after the interviews, the interviewees however will be provided with the contact details of the researcher, for if they wish to get in touch at any time.

**6. Will I be recorded, and how will the recorded media be used?**

The audio and/or video recordings of the participants activities made during the research will only be used for the purposes of this research. No other use will be made of them without the participant's written permission, and no one outside the project will be allowed access to the original recordings.

**7. What do I have to do?**

There are no lifestyle restrictions as a result of participating in the study. The researcher would appreciate it if participants would only contribute the necessary time to complete a questionnaire, and if contacted at a later date if they would be willing to take part in the interviews for a maximum of 45 minutes.

**8. What are the possible disadvantages and risks of taking part?**

The subject of the investigation is professional work practices and unlikely to cause distress to participants. However, there is a small risk arising from conducting interviews, if this is not carefully managed.

**9. What are the possible benefits of taking part?**

Whilst there are no immediate benefits for those people participating in this project, it is hoped that this work will encourage other organisations to consider the adoption of microblogging/blogging tool/s for their business purposes.

**10. What happens if the research study stops earlier than expected?**

If at any time the research study stops earlier than expected for whatever reason, all the participants will be contacted and informed about this.

**11. What if something goes wrong?**

If the participants of the study wish to raise a complaint about any aspects of the research, in the first instance they should contact the researcher of the project (who is also the person who will be conducting all the interviews). Should the participants feel their complaint has then not been handled to their satisfaction by the researcher, they can contact the University's 'Registrar and Secretary.

**12. Will my taking part in this project be kept confidential?**

All the information that the researcher collects about the participants during the course of the research will be kept strictly confidential. No one will be able to be identified in any reports or publications.

If at any time participants feel their confidential responses have been misused, they could make an official complaint regarding the research study.

**13. What type of information will be sought from me and why is the collection of this information relevant for achieving the research project's objectives?**

Participants will be asked to provide information about which microblogging/blogging tool/s have been adopted by their organisation, what the objectives were for adopting microblogging/blogging tool/s, what uses and benefits have been experienced by their work place by adopting microblogging/blogging tool/s and how the adoption of such tool/s have been managed. This information will help answer the research question i.e. the uses of microblogging/blogging by small to medium enterprises.

**14. What will happen to the results of the research project?**

The results of the research are to be published during the second half of the research duration i.e. during 2013/2014. All participants would be able to obtain a copy of the published results, by contacting the researcher, otherwise would be able to obtain the results from the final report/publication.

**15. Who is organising and funding the research?**

This research project is funded by the Information School, at the University of Sheffield.

**16. Who has ethically reviewed the project?**

This project has been ethically approved via the Information School ethics review procedure. The University's Research Ethics Committee monitors the application and delivery of the University's Ethics Review Procedure across the University.

**17. Contact for further information**

The researcher and the Supervisor of the study's contact details are provided below, in case participants wish to obtain further information about the project.

**Researcher:**

Miss Soureh Latif Shabgahi  
Information School, The University of Sheffield  
Regent Court, 211 Portobello, S1 4DP  
Email address: [lip11sl@sheffield.ac.uk](mailto:lip11sl@sheffield.ac.uk)

**Supervisor:**

Dr. Andrew Cox  
Information School, The University of Sheffield  
Regent Court, 211 Portobello, S1 4DP  
Email address: [a.m.cox@sheffield.ac.uk](mailto:a.m.cox@sheffield.ac.uk)

The information sheet states that all participants will be given a copy of the information sheet. The research would like to also thank all participants for taking part in the project and inform them that their contributions are greatly appreciated.

## Appendix 4: Participant consent form

### Participant Consent Form

**Title of Research Project:**

The Organisational Benefits and Risks of using Microblogging/Blogging tools for business purposes

Name of Researcher: Miss Soureh Latif Shabgahi

**Participant Identification Number for this project:**

**Please initial box**

1. I confirm that I have read and understand the information sheet/letter (delete as applicable) dated *[insert date]* explaining the above research project and I have had the opportunity to ask questions about the project.

2. I understand that my participation is voluntary and that I am free to withdraw at any time without giving any reason and without there being any negative consequences. In addition, should I not wish to answer any particular question or questions, I am free to decline. *Insert contact number here of lead researcher/member of research team (as appropriate).*

3. I understand that my responses will be kept strictly confidential (only if true). I give permission for members of the research team to have access to my anonymised responses. I understand that my name will not be linked with the research materials, and I will not be identified or identifiable in the report or reports that result from the research.

4. I agree for the data collected from me to be used in future research

5. I agree to take part in the above research project.

\_\_\_\_\_

Name of Participant

Date

Signature

*(or legal representative)*

\_\_\_\_\_

Name of person taking consent

Date

Signature

*(if different from lead researcher)*

*To be signed and dated in presence of the participant*

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Lead Researcher

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Date

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Signature

*To be signed and dated in presence of the participant*

**Copies:**

*Once this has been signed by all parties the participant should receive a copy of the signed and dated participant consent form, the letter/pre-written script/information sheet and any other written information provided to the participants. A copy of the signed and dated consent form should be placed in the project's main record (e.g. a site file), which must be kept in a secure location.*



## Appendix 5: Research Ethics Approval Letter

### Information School Research Ethics Panel

### Letter of Approval

Date: 26<sup>th</sup> September 2013

TO: Soureh Latif Shabgahi

The Information School Research Ethics Panel has examined the following application:


Title: The use of Enterprise Microblogging by Small to Medium Enterprises

Submitted by: Soureh Latif Shabgahi

And found the proposed research involving human participants to be in accordance with the University of Sheffield's policies and procedures, which include the University's '*Financial Regulations*', '*Good Research Practice Standards*' and the '*Ethics Policy Governing Research Involving Human Participants, Personal Data and Human Tissue*' (Ethics Policy).

This letter is the official record of ethics approval by the School, and should accompany any formal requests for evidence of research ethics approval.

Effective Date: 16<sup>th</sup> August 2012



Dr Angela Lin

Research Ethics Coordinator