



Cape Peninsula  
University of Technology

**SOCIAL MEDIA RISK MANAGEMENT IN SMALL, MEDIUM AND LARGE  
ENTERPRISES IN THE CAPE METROPOLE**

by

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**Magister Technologiae: Internal Auditing**

**in the Faculty of Business and Management Sciences**

**at the Cape Peninsula University of Technology**

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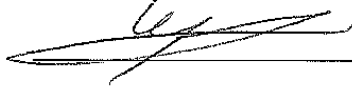
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## **ABSTRACT**

The research study focuses on the risk management practices and procedures small, medium and large enterprises in the Cape Metropole have in place to mitigate social media risks. Enterprises and employees of these enterprises use social media platforms for business and personal purposes. Their usage could have an impact on the enterprise should social media risks materialise due to a lack of formalised risk management practices and procedures. The purpose of the research study is to determine whether enterprises have risk management practices and procedures in place to mitigate social media risks. The research study also expands on the controls enterprises have in place and seeks to gain an understanding of the type of social media platforms used by the enterprise. The research study consisted of a literature review and an empirical study to investigate social media risk management practices and procedures in enterprises. A quantitative research method was used to carry out the required research, by making use of a structured questionnaire to obtain responses from respondents from small, medium and large enterprises in the Cape Metropole. The research results obtained revealed that most enterprises have implemented risk management practices and procedures. However, not all enterprises have risk management functions in place which involves all relevant departments to support in mitigating social media risks, more specifically to monitor and manage adherence to social media policies and procedures. The researcher recommends that enterprises have to enhance their control environment and improve existing risk management functions, practices and procedures on a continuous basis before such risks materialise and potentially damage their enterprise.

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## **DEDICATION**

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## **LIST OF ACRONYMS AND ABBREVIATIONS USED**

COBIT	Control objectives for information and related technology
COSO	Committee of Sponsoring Organisations
CPUT	Cape Peninsula University of Technology
CRM	Customer Relationship Management
ERM	Enterprise Risk Management
FERMA	Federation of European Risk Management Associations
HR	Human Resources
IIA	Institute of Internal Auditors
IREC	Interstate Renewable Energy Council
ISACA	Information Systems Audit and Control Association
ISPPIA	International Standards for the Professional Practice of Internal Auditing
ICT	Information and Communication Technology
PWC	Price Waterhouse Coopers
R&D	Research and development
RM	Risk Management
RQ	Research question
SRQ	Subresearch question

# CHAPTER ONE

## INTRODUCTION AND BACKGROUND

### 1.1 Introduction to social media

Social media is an instant and visual communication platform that allows for the exchanging and sharing of different forms of data texts, graphics, videos and images (Baruah, 2012). Erasmus (2012:2) asserts that Mangold and Faulds (2009) define social media as a wide range of online word of mouth forums. Kaplan and Haenlein (2010:60) define social media as “a group of internet based applications that build on the ideological and technological foundations of Web 2.0, and that allow the creation and exchange of user-generated content”. Johansson (2010:1) says that Carlsson (2010) found that the Web 2.0 is the platform on which social media is based. Addison (2006:623) states that Web 2.0 was developed to enable the new combination of information collaboration.

Social networks are online community forums that have common interests shared by social media users (Boulos & Wheeler, 2007). Further to this Patino, Pitta and Quinones. (2012:234) advise that “Social media allows one-too many communications.” This indicates the extent to which social media platforms share and exchange information across online communities and social media applications.

Exploring the online community social platform, Woodall and Colby (2011) characterise social media into the following four statements which include:

- The need to satisfy impulsive instincts to post information on social media platforms;
- The feeling of excitement to share information;
- Seeking advice from an online community; and
- Sharing information with others with similar interests.

There has been an increase in usage of social media applications such as Facebook, Myspace, Twitter and LinkedIn and their intersection within the enterprise world (Brenan, 2010:8). The exponential rise in popularity of social networking websites and the social media applications listed above is due (in large part) to their viral nature (Steinman & Hawkins, 2010:1). According to KPMG (2015b), there are 1,8 billion active social media users on the web of which Facebook has 1,4 billion active users.

### **1.1.1 Using social media in enterprises**

As enterprises rely on and use web-based technology to function, Ernst and Young (2012b) state that there are two ways social media impacts enterprises, namely:

- Enterprises use social media to engage customers and other stakeholders to help shape the conversation around their products, services and brand; and
- Employees use social media either internally or externally.

By gaining an understanding of how social media is used in enterprises and the impact its usage has, it is also important for enterprises to understand the following key considerations listed by Schlinke and Crain (2013:85) to ensure social media usage is appropriately evaluated and managed by the enterprise:

- Firm or individually set goals to accomplish and objectives to achieve these goals must be in place;
- A content strategy should be in place to ensure content and consistency for the audience to create a brand perception in the social media landscape;
- The availability of implementing tools and resources should be evaluated; and
- The threats and costs associated with using social media should be assessed.

According to the Information Systems Audit and Control Association (ISACA) (2012b), the benefits of using social media in enterprises are to: improve customer satisfaction and loyalty, recruit and retain the best talent, enhance brand awareness and perception, strengthen connections and relationships, access internal expertise and insight and use social media channels to address any publicity issues. Enterprises that include social media usage in enterprise strategies are financially more successful due to the above-mentioned benefits of using social media in enterprises (Bhanot, 2013:5). The understanding gained of social media usage will enable enterprises to be aware of the risks inherent to the usage of social media.

### **1.1.2 Social media risks in enterprises**

Risk has been defined by Smit (2012:1) as the uncertainty of an event occurring that can have an impact on the achievement of objectives within an enterprise. Schlinke and Crain (2013:90) state that to use social media in an enterprise is a matter of navigating risk, optimising the opportunity and ensuring capital are available.

Tabone (2012:12) refers to a Deloitte/Forbes Insights Survey issued in 2012 which indicates that social media could magnify the threat of other enterprise risks, including reputational risk, operational risk, financial risk and compliance risk. The Global Institute of Internal Auditors (IIA) Chairman Tarley (2012:63) states that the sheer capacity of today's communication tools can be daunting at times, and the ease and speed with which we can deliver messages pose a risk in itself.

As social media applications create confidential and valuable enterprise information which could be exposed via social media, it is important that social media risks are controlled and monitored to protect the enterprise. According to the FERMA Vice-president Michel Dennery, as cited in an article published by the Institute of Internal Auditors by Steffee (2011:16), "we have to take care of the really valuable information, the information that we use to make money, the information that gives us competitive advantage. It needs much more protection today because the environment is much more open." With this said, using social media in enterprises opens up the enterprise and employees to risk.

According to Ernst and Young (2012c), the following are examples of the social media-related risks enterprises could be faced with:

- Employees leaking sensitive enterprise information;
- Criminal hackers "re-engineering" confidential information;
- Employees misusing social applications at work;
- Hacking, faking or compromising corporate or executive social media accounts such as Twitter or Facebook fan/personal/corporate pages;
- Exposing multiple social platforms to viruses, malware, cross-site scripting and phishing;
- Damaging the enterprise brand/reputation by negative, embarrassing or even incriminating employee or customer news feeds; and
- Not establishing complete and fully compliant archiving and record-retention processes for corporate information shared on social media.

Bezuidenhout (2012:23) mentions that the use of social media have associated enterprise risks such as:

- Enterprises can lose customers when implementing digital business models which may not be easily understood and adapted by customers. This could lead to potential reputational and customer retention issues;
- The use of social media platforms could expose the enterprise to legislative/regulatory issues that could be unintentionally violated in areas such as privacy, intellectual property and defamation;
- Enterprise information not being secured from external sources could be leaked through social media platforms, which could result in the disclosure of confidential information and further legal and financial consequences;
- Negative comments shared on enterprise social media platforms could result in loss of brand credibility and damage to the enterprise reputation;
- Employees having access to social media platforms during business hours could lead to reduction in performance and productivity;
- Employees using enterprise social media platforms could publicly expose enterprises to misconduct, unlawful practices and harassment;
- Enterprises could violate social media activities of employees off duty, which could lead to disciplinary action for content shared by employees;
- Enterprises and employees could both be held legally liable for erroneous/false/misleading content shared on social media platforms;
- Employees' social media user account and password information could be misused by internal and external sources, which could impact the enterprise; and
- Employees using social media platforms during business hours could result in increased bandwidth, system downtime and even expose the enterprise network to viruses/spam/malware.

These risks are mainly influenced by customers, competitors and employees using social media and the rate at which regulations have evolved with social media. The most rated sensitive risks to ignoring social media in enterprises include branding risk, compliance risk and the risk of falling behind the competition (Mills, 2010:34). As legislation surrounding social media continue to evolve and that South African legislation has not endured specific laws on providing guidance of social media usage by enterprises, the responsibility of managing risks from using social media (content and platforms) in enterprises are challenging for enterprise management (Hegel, 2011:56). Therefore, enterprises need to ensure adequate risk management practices and procedures are developed to manage social media risks.



### **1.1.3 Risk management in enterprises**

Risk management is an important function in supporting an enterprise's strategic objectives and financial goals. According to Bannock and Manser (2003:231), risk management is defined as "the identification and acceptance or offsetting of the risks threatening the profitability or existence of an organisation".

Furthermore, enterprise risk management is defined by the Committee of Sponsoring Organisations (COSO) of the Treadway Commission (2004a:Online) as "a process, effected by an entity's board of directors, management and other personnel, applied in strategy setting and across the enterprise, designed to identify potential events that may affect the entity, and manage risk to be within its risk appetite, to provide reasonable assurance regarding the achievement of entity objectives".

Enterprises need formalised risk management practices and procedures to ensure social media risks are prevented from materialising and impacting on strategic objectives. Accenture (2014b:2) mentions that traditional risk management policies and procedures are not designed to identify social media brand, strategy, and compliance, legal and market risks. KPMG (2015b) states that social media are integral to the risk management process which requires active monitoring and analysis. Therefore, it is important for enterprises to design risk management practices and procedures to identify social media risks.

### **1.1.4 Importance of social media risk management**

According to Kapcio (2011:10), "today, there are a high correlation between social-media risk management and effective employee communications". Due to the nature of various risks posed by social media, enterprises are challenged with identifying opportunities for the Information and Communications Technology (ICT) functions to be engaged in eliminating the gaps (Ernst & Young, 2012b).

From a value-add perspective, many enterprises have developed proprietary tools and methodologies to monitor social media user activity on Facebook, Twitter, Pinterest and other social networks (Lasky, 2012). Hegel (2011:57) advises that it is important for enterprises to identify risks that they could be exposed to from both internal and external use of the social media platform. Enterprises' risk management activities must ensure that the social media usage of employees and the enterprise are monitored and that social media risks are mitigated.

Enterprises with the correct social media risk management functions would provide flexible tools to capture and govern social media platforms and activities, which mitigate associated risks (Tziahanas & Crespolini, 2011:6). In relation to the importance of managing social media risks in enterprises, Protiviti (2013b) addresses key factors that focus firstly on the design of social media strategies and goals set by the enterprise. The managers of social media strategies need to be identified to ensure all appropriate stakeholders are involved in the social media risk management process. Secondly, the enterprise needs to ensure risk management procedures are in place to identify and assess risks. The risk management procedures implemented are to be aligned with the enterprise risk profile and appetite to ensure social media risks are mitigated and controlled by the management of the enterprise.

### **1.1.5 Recommended social media risk management practices**

Social media could be regarded as an asset to employers; however, it could also turn into a liability. Strickland (2011:33) advocates the need for enterprises to have a solid social media policy. This policy should outline what constitutes inappropriate use, as well as penalties for improper disclosures which should also address disciplinary procedures for violations of social media use. Howard and Van Buskirk (2010:18) recommend that employers who encourage social media use for professional purposes should promulgate a clear policy so that employees are familiar with the employer's expectations for online activities.

According to Nguyen (2011:10), the usage of social media applications generates a wealth of data, so enterprises need to implement strategies to manage social media risks which should consist of the following practices. Therefore, enterprises should:

- periodically review their website terms of use and privacy policies to ensure compliance;
- perform due diligence checks before using third-party technology;
- get a good indemnity provision for patent and privacy violations and infringements; and
- periodically audit websites for online threats relating to hacking, spyware and spamming.

Enterprises should consider using COBIT frameworks to manage ICT risks and establish control objectives to assist in forming sound social media governance policies (Stroud, 2010:13). Effective implementation of COBIT frameworks should be reinforced through ongoing training and awareness programmes offered to employees. Enterprises must, on

a continuous basis, educate and train their workforce on their social networking policies and the risks of social media use (PWC, 2010a:8).

Accenture (2011a:14) advises that enterprises should create social media policies by gaining an understanding of the effects that social media have on the enterprise's processes, what could be achieved by identifying the employees who will carry out those processes, the measures of success, their unique culture and their context.

A social media policy is the best form of protection to minimise risk in cases where an institution wishes to discipline an employee (Kelly, 2012:5). However, Farley (2011:19) suggests that a policy will not eliminate the occurrence of negative comments on social media, but can, nevertheless, minimise the risk by providing employees with clear guidelines to follow when dealing with negative situations.

It is of importance that enterprises' policies should inform employees that they are responsible and that they could be held liable for the content they post on social media sites (Bray, 2012:4). Furthermore, it is critical to have a social media policy that reads like a friendly guide and not a stern warning (Dysart, 2013:31). In support of enterprises implementing employee friendly social media policies and practices, internal audit functions also contribute to evaluating/assessing social media risk and providing combined assurance to enterprise risk management.

#### **1.1.6 Internal auditing's role in social media risk management**

The Institute of Internal Auditors (IIA) (2013:6) describes the role of Internal Audit as follows: "Internal Audit should not be part of, or responsible for, the risk management, compliance or finance function". Ernst and Young (2013h:19) advise that the following types of audit could ensure that social media risks are mitigated:

- Social media risk assessment;
- Social media governance audit; and
- Social media activities audit.

These are the types of audit engagements internal audit could perform to provide assurance over social media risks. Millage (2011:7) from the IIA states that according to the International Standards for the Professional Practice of Internal Auditing (ISPPA): "the internal audit activity must evaluate the effectiveness and contribute to the improvement

of risk management processes". Internal auditors can work with management to identify risks and gaps to determine which controls could be implemented to minimise risks and offer guidance on social media policies and strategies (Cain, 2012:46 citing Jacka, 2011:1). In a survey performed by Price Waterhouse Coopers (PWC) (2013b:14), it is stated that high performing internal audit functions have a higher level of integration with enterprise risk management and other risk functions.

## **1.2 Background to the research question**

As social media platforms are changing constantly, enterprises might not detect social media risks in time. Social media risk has emerged as one of the top ten ICT risks enterprises should consider assessing when preparing for audit planning activities, as published in a workbook by Ernst and Young (2012e:10). It is an emerging topic for enterprises that want to know how to mitigate the risks while maximising their rewards. The first step for enterprises is to create a safe space for staff, volunteers, and other stakeholders through clear, effective social media policies (Social Fish & Croydon Consulting, 2010: 2).

Corporate environments, in general, either have no social media policy in place, block social media usage, have some sort of controlled access to social media usage or have limited user access controls in place (ISACA, 2012b). Walaski (2013:43) mentions that the use of social media has disadvantages which management may cite to justify its hesitation or unwillingness to engage. Management recommends that social media requires procedural and technical controls, for example: policy and technology (Schulich, 2012:4).

Field and Chelliah (2012:36) suggest that implementing a social media policy will not mitigate an employer's risk completely. Rather, for the implementation to be effective, a social media policy must be part of a coordinated and properly documented human resource management strategy. As social media risk management does not focus on specific functions of enterprises only, management of the enterprise needs to ensure social media risks are adequately controlled. The Corporate Board (2013:29) shares an opinion that lack of social media policies and processes can raise risks for enterprises.

There is a need for enterprises to design and implement research structures to monitor social media communication on their enterprises, their brands and messaging (Erasmus, 2012:V). A survey report (Protiviti, 2013a:1) on internal audit executives and professionals across various industries and sectors expressed key findings on how enterprises' social

media usage is rising and becoming more important to management from a risk perspective. Moreover, evaluation and monitoring of social media risks would soon be a requisite part of audit plans as the nature of enterprises' social media risks are rapidly changing. Aula (2010:45) also argues that social media expands the spectrum of reputation risks and boosts risk dynamics.

Singleton (2012:13) states that: "the proliferation of social media and the fact that major risk areas are associated with it (whether an enterprise uses it or not) create a need for IT auditors to assist management in managing the associated risk and making sure that social media is an effective tool". Managing social media risks is part of living in a world where social technologies become increasingly prevalent (Mckinsey Global Institute, 2012:54).

Ernst and Young (2012d:4) partner, Ferdinand Kobelt, further explains that: "social media emerged suddenly and is here to stay. As a result, enterprises of all sizes and industries are already developing social media strategies as rapidly as they can". The Birla Institute of Technology and Science (BITS) (2011:48) advises that to effectively use and manage social media, an enterprise would need to closely monitor social media activity, as using social media could potentially cause unintended consequences such as reputational, financial and regulatory impacts on the enterprise when not managed. These impacts can relate to customer complaints, legal implications and damage to the brand/goods/service which can result in financial and operational loss.

Enterprises should carefully prepare a policy and social media programme to mitigate the many risks the various social media communication channels present (Pry, 2010:27). The social media risks inherent to the use of various social media communications are caused by the actions of employers (Hoy, 2012:1). According to Bartkiewicz (2008:27), the use of social media and networking initiatives has brought hidden risks to enterprises they never thought possible. The power and unpredictability of social media create a different perspective on brand and reputational risk (Miskin, 2010:6).

It is argued that the use of social media exposes enterprises to risks that management is not even aware of as a result of poor monitoring and management of social media usage.

### **1.3 Statement of the research question**

The evolving use of social media platforms exposes enterprises to potential risks of which previous research studies indicate the need for enterprises to implement risk management

practices and procedures to mitigate social media risks. Therefore, the research question identified to be investigated is, **“Do enterprises have formalised risk management practices and procedures in place to mitigate social media risks”?**

### **1.3.1 Primary research objective**

The primary research objective of this study is to perform an investigative review **“To determine whether enterprises have formalised risk management practices and procedures in place to mitigate social media risks”**.

### **1.3.2 Secondary research objectives**

The secondary research objectives of the study are:

- To consult literature to define social media risks in enterprises (Chapter 2);
- To develop a research design and methodology in order to address the research question and primary objective of the study (Chapter 3);
- To analyse and interpret the primary data collected (Chapter 4); and
- To provide recommendations based on the findings of the research and to conclude the study (Chapter 5).

### **1.3.3 Research question, sub-research questions and objectives**

This study’s research questions and objectives are aligned accordingly to investigate the social media risk management practices followed by enterprises and evaluate the procedures in place to mitigate social media risks enterprises are exposed to.

#### **1.3.3.1 Research question (RQ)**

The research question for the purpose of this study is two-fold:

RQ 1: “What risk management procedures are in place to mitigate social media risks?”

RQ 2: “How do management control social media risks in their enterprise?”

#### **1.3.3.2 Sub-research questions (SRQ), research methods and objectives**

The sub-research questions for this study are listed as follows:

SRQ 1: “How do employees use social media in the enterprise?”

SRQ 2: “What social media policy exists in the enterprise?”

SRQ 3: “What risk management procedures are in place to control social media risks in the enterprise?”

SRQ 4: “What controls are in place to mitigate social media risks in the enterprise?”

The research methods and objectives which relate to the research question and sub-research questions are shown below in Table 1.1.

**Table 1.1: Sub-research questions, research methods and objectives of this research study**

No.	Sub-research question	Research method(s)	Research objectives
SRQ 1	How do employees use social media in the enterprise?	Survey	To determine the extent to which enterprises make use of social media.
SRQ 2	What social media policy exists in the enterprise?	Survey	To determine whether a social media policy exists and provides compliance for the use of social media.
SRQ 3	What risk management procedures are in place to control social media risks in the enterprise?	Survey	To identify the risk management procedures used by the enterprise to assess and control risks.
SRQ 4	What controls are in place to mitigate social media risks in the enterprise?	Survey	To determine the existing controls used by the enterprise to mitigate social media risks.

#### **1.4 Research design and methodology**

The research design and methodology describe the methods of research applied to the population, sampling and data collection techniques used to perform the study. According to Oppenheim (2000:6), there is a significant distinction between research design and research technique. This research study consists of a literature review and an empirical study to investigate social media risk management practices and procedures in enterprises.

A quantitative research method is the preferred approach to be used to carry out the required research, by making use of a structured questionnaire allowing for close-ended responses. The structure of the questionnaire provided a positivist (objective) opinion which is based on the literature review. Likert-type Scales were used in the survey for respondents to offer responses of their opinions (Chin, Johnson & Schwars, 2008). The pre-determined instrument used provided data for analysis and potential findings to report on (Wellman & Kruger, 2001:69). Further details of the research design and methodology are explained in Chapter 3 of this research study.

#### **1.5 Delineation of the research**

All government, non-governmental organisations (NGO) and non-profit organisations (NPO) were excluded from the research study.

## **1.6 Value of the research**

The research study contributes to existing social media literature and emphasises the importance of social media practices and risk management procedures for enterprises of all sizes.

Recommendations are suggested based on the findings identified during the research study. The recommended practices could assist enterprises in developing, implementing and reviewing social media practices and risk management procedure.

## **1.7 The chapter outline**

The chapters of this research study are as follows:

Chapter two: Social media risks in enterprises.

Chapter three: Research design and methodology.

Chapter four: Data analysis and results.

Chapter five: Recommendations and conclusion.



## CHAPTER TWO SOCIAL MEDIA RISKS IN ENTERPRISES

### 2.1 Introduction

The literature sources reviewed in this chapter will provide an understanding of social media risks in enterprises, the type of social media platforms used by employees and enterprises and the importance of social media risk management practices and procedures. Social media is an evolving research area across different industries, which is due to the significant benefits and opportunities that the use of social media platforms have on enterprises. Today, “[p]articipating in Social Media has become an enterprise imperative. More than 70% of enterprises operating around the world are now active on Social Media. Many are finding significant benefits, as well as unexpected risks, along the way” (KPMG, 2012a:2). Moving away from traditional communication channels, modern enterprises are heavily reliant on information systems. Many small to large enterprises use social media platforms to perform various activities such as maintaining customer feedback on forums, Facebook pages, Twitter tweets, LinkedIn groups, blogging and even for creating social media footprints in relation to competitors in the market (Kim, 2012:1). Deloitte (2012a:8) summarises social media benefits and challenges as follows in Table 2.1.

**Table 2.1: Social media benefits and challenges (Source: Deloitte, 2012a:8)**

<b>Social media benefits</b>	<b>Social media challenges</b>
Generate prospects and leads (sales)	Loss of control
Decrease costs	Inconsistent message
Increase loyalty	Confidential information
Manage brand reputation	Productivity loss

The use of social media in enterprises creates great opportunities for the enterprises to interact with customers and enterprise partners. However, there are significant risks to enterprises that choose to use social media technology without a clear strategy that addresses both the benefits and the risks of using social media applications (ISACA, 2010a:10). The usage of social media applications in enterprises is unpredictable and could create a different perspective on brand and reputational risk (Miskin, 2010:6). Using social media applications without clearly defined objectives outlined in a strategy, could pose a greater opportunity for social media risk to be more of a threat than an opportunity for the enterprise.

Nguyen (2011:11) mentions that online and social media will forever be a world that requires a delicate balance. Entities should be one step ahead in managing social media risks to prevent such risks from materialising. What may be up-to-date today could have disappeared from the virtual landscape tomorrow as social media is a very active and fast-moving domain (Kaplan & Haenlein, 2010:65). An example of this is that information being released using social technologies could reach an audience of millions in a matter of hours based on social technologies forcing greater transparency (The Mckinsey Global Institute, 2012:54).

The main threats social media risks hold for enterprises are loss of information, virus entry point, reputation damage and legal and regulatory liability (Goldberg, 2011:22). According to a 2012 survey of 192 executives conducted by Deloitte and Forbes Insights (2013b:4), social media was identified as the fourth largest risk factor facing enterprises over the next three years, through 2015, placing it at par with financial risk. An Interstate Renewable Energy Council (IREC) member survey (Goldberg, 2011:12) showed that one in six respondents in the poll admitted to using social media in a manner that posed high risks to their enterprise. This included using Facebook for job-related networking or collaboration, posting enterprise or client information on collaboration sites, blogging about work-related topics and using Twitter to discuss work-related topics.

## **2.2 Defining social media**

Social media is used in a range of online platforms within different industries and sectors. The term *social media* could be interpreted in more than one way. Kaplan and Haenlein (2010:60) define social media as, “a group of internet based applications that build on the ideological and technological foundations of Web 2.0”, the platform on which social media is based that was developed to enable the new combination of information collaboration (Carlson, 2010 cited by Johansson, 2010:1; Addison, 2006:623), “that allow the creation and exchange of user-generated content”.

Various other authors such as Mangold and Faulds (2009) cited by Erasmus (2012:2), Brussee and Hekman (2009) and Boulos and Wheeler (2007), explain social media as a wide range of online word-of-mouth forums such as an umbrella term that refers to the set of tools, services and applications that allow people to interact with others using network technologies, and online community forums with a common interest shared by social media

users. However, Patino, Pitta and Quinones (2012:234) advise that “social media allows too many communications”.

Aula (2010:43) characterises social media as being interactive, explaining that participants freely send, receive and process content. This indicates the extent to which social media platforms share and exchange information across online communities and social media applications.

Advancing the conception of social media as an online community social platform, Woodall and Colby (2011) characterise social media as having the following four elements:

- Satisfying an impulse;
- The excitement of sharing;
- Seeking advice; and
- Sharing with others with similar interests.

Deloitte (2012a) states that social media is a type of online media that accelerates conversations as opposed to traditional social media which delivers content but does not allow readers, viewers or listeners to participate in the creation or development of the content. Traditional social media creates communication channels between people with related interests in a physical environment while online social media is on cyberspace (Kim, 2012:12).

For the purpose of this study, social media is defined as an online platform used by enterprises to conduct various enterprise activities.

### **2.3 Types of social media platforms**

The operation and success of Web 2.0 tools, used by entities, are worthy of study in numerous disciplines, from media studies to sociology and computer science (Boulos & Wheeler, 2007). This is because various social media platforms can be used by enterprises, but not all are suited for corporate use. Accenture (2011a:17) explains that a social platform is technology that enables an enterprise to identify and aggregate in one place all of its interactions with customers as well as the social media chatter of those customers about the firms.

Table 2.2 indicates the most common social media platforms and examples of social media applications used by enterprises. These platforms are explained in sections as indicated in the first column of Table 2.2

**Table 2.2: Social media platforms and examples (Source: Deloitte, 2012a:5)**

<b>Section no.</b>	<b>Social media platforms</b>	<b>Examples of social media platforms</b>
2.3.1	Blogs, microblogging and social networking sites	Blogger (Blogging and Microblogging) Facebook TVIV
2.3.2	Connectivity	Twitter WikiHow
2.3.3	Internet	Plaxo Technorati
2.3.4	Media and video sharing	Live Journal WordPress YouTube
2.3.5	Professional networking	LinkedIn Ning Plaxo
2.3.6	Social content-driven communities	Wikipedia (Wiki Books) Newsvine Winktravel
2.3.7	Web	Google Yahoo Wikipedia Xanga.com

Walaski (2013:40) explains the social media platforms listed above as follows:

### **2.3.1 Blogs, microblogging, social networking sites**

Blogs, micro-blogging and social networking sites are separately explained. Blogs represent a method of communicating information and opinions in a short, web-based form rather than in more traditional forms of print publications.

Blogs can be used by enterprises to advertise marketing campaigns and share updates to users on Facebook for specific events, sales, announcements, trends and also express opinions on existing social media platforms where comments can be posted.

Microblogging allow for short blogs unlike typical blogs that are much longer. The most familiar is Twitter, whose 140-character limit was based on the use of telecommunications to send text messages. Enterprises use Twitter as a platform to share rapid updates on current news feeds which allows users to follow threads on an ongoing basis.

Social networking sites promote relationships among people with similar interests and activities. The most familiar one, currently, is Facebook, although for years Myspace was the leader. Facebook not only builds relationships with people, but enterprises also use Facebook to connect with people and build customer relationship platforms for consumers and users of Facebook to follow and share comments.

### **2.3.2 Connectivity**

Social media platforms such as Twitter and WikiHow allow for instant communication sharing of short texts and visuals to connect with other users on the social media platform. Enterprises use such applications to communicate with consumers and share enterprise content efficiently with a wide reach of users.

### **2.3.3 Internet**

Online publishing and address platforms such as Technorati and Plaxo respectively provide a network for online advertising and address book maintenance. Enterprises use these platforms to support their online presence.

### **2.3.4 Media and video sharing**

These sites allow users to upload video content. YouTube is the most common of these sites. While it started as a venue for personal videos, its use by enterprises has increased dramatically in recent years. Enterprises can use YouTube to share visual messages to users of this social media platform, which has the advantage of spreading across other social media applications quickly.

### **2.3.5 Professional networking**

As counterpart to social networks, these sites are intended for professional networking, allowing interaction, sharing of information and discussion of issues relevant to work settings. LinkedIn leads the pack in this category. Plaxo and Ning are sites with a growing number of members. These tools enable enterprises to search for potential candidates for employment opportunities and share updates on their performances, achievements and initiatives in addition to various news feeds.

### **2.3.6 Social content-driven communities**

The most common examples of social content-driven communities are Wikipedia (Wikibooks), Newsvine and Winktravel which are sites that allow any user to edit content

by enhancing it or disputing content believed to be inaccurate. These sites are less about interacting and more about sharing content.

Enterprises that use content-driven communities share enterprise information to the public. The enterprise information is easily accessible to the public, and detailed enterprise information is shared with visitors of the online community (website), for example monthly reports on investment products performances, which provide investors with sufficient content to analyse and draw conclusions on.

### **2.3.7 Web**

The web (www) allows users to use search engines such Yahoo, Google, Wikipedia and Xanga.com to identify websites related to content being searched by the user. Enterprises have websites that offer users access to enterprise information relating to the content users search via the web.

## **2.4 The role of social media in enterprises**

Much have been reported about social media applications such as Facebook, Myspace, Twitter and LinkedIn and their intersection with the enterprise world (Brenan, 2010:8). The exponential rise in the popularity of social networking web sites and the social media applications listed above, is due, in large part, to their viral nature (Steinman & Hawkins, 2010:1). ISACA (2012b:5) reported 845 000 million users on Facebook of which 45 000 Facebook logins were hijacked, 760 enterprises were hacked by foreign countries operations, eight out of ten enterprises were spoken about on Twitter and corporate YouTube channels were viewed 680 747 per corporate channel in 2012.

A 2010 Burson-Marsteller study cited by ISACA (2010a:4) reports that “of the Fortune Global 100 enterprises, 65% have active Twitter accounts, 54% have Facebook fan pages, 50% have YouTube video channels and 33% have corporate blogs”. With more and more users “linking”, “liking”, “friending” and “following” the social media platforms, it is an important medium for communicating with customers, increasing brand awareness and promoting innovation and collaboration among employees (Deloitte, 2013b:2).

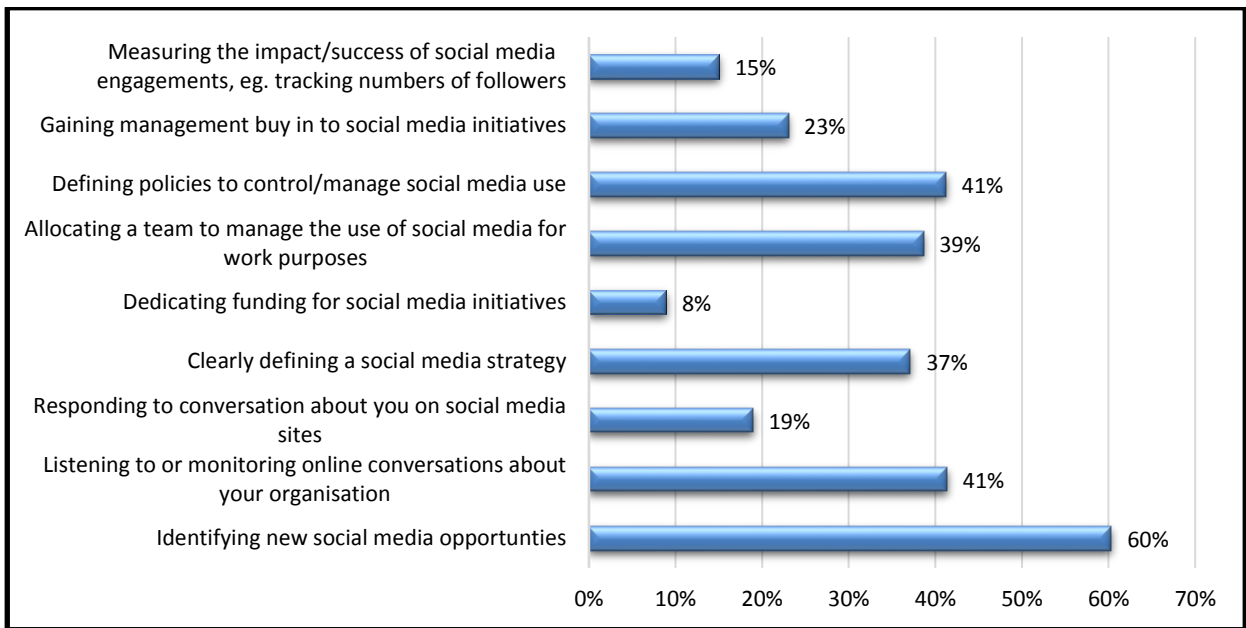
According to research from Gartner cited by Bray (2012:4), less than 30% of large enterprises will have blocked employee access to social media sites by 2014 in comparison to 2012 at 50%. This indicates that the number of enterprises allowing their employees to use social media sites is steadily growing since enterprises are arguably

realising the importance of social media being used by employees in the enterprise on an ongoing basis.

Reilly and Weirup (2010:3) state that enterprises may use social media to increase the demand for their products or services and to enhance communication with customers, employees or partners. Enterprises, according to Goldberg (2011:10), also use social media for the following purposes:

- Increasing revenue through marketing initiatives, running campaigns and advertising on a larger scale. Consumers can be reached using social media to advertise promotions and seasonal sales;
- Building customer relationships through using social media is useful for enterprises to develop existing customer relationships and attract new customers to their enterprise by ensuring customer needs, requests and services are handled in a professional manner via social media platforms;
- Humanising the brand on social media platforms by considering the needs and requirements of customers who support the enterprise, is important in order to maintain a trusted and reputable brand;
- Improving customer satisfaction and loyalty can be achieved by providing an online interactive mechanism for customer complaints. This can also be improved by posting regular surveys for customers to complete and allowing customers to rate the services provided by the enterprise. Customers can then provide feedback for the enterprise which can be used effectively to enhance social media content and address customer feedback;
- Recruiting and retaining the best employee talent by posting on recruitment agency sites and also on enterprise websites that advertise vacancies;
- Developing products by obtaining innovative ideas from feedback from social media platforms where consumers and users of social media platforms provide reviews of products and ideas for improvement; and
- Enhancing brand awareness and perception ensures that customers understand the enterprise and how they play a part in improving the brand through marketing on social media platforms.

According to the “Going Social” survey conducted in 2011, the following top five critical success factors in Figure 2.1 are attributed to the use of social media by enterprises (KPMG, 2012a:2).



**Figure 2.1: Critical success factors (Source: Going Social, KPMG, 2012a)**

The critical success factors extracted indicate that enterprises are actively using social media applications and focusing on controlling social media usage in enterprises as listed below:

- 60% of the enterprises surveyed identified new social media opportunities;
- 41% listened to or monitored enterprises online;
- 41% defined social media policies to control/manage social media usage;
- 39% allocated a team to manage the use of social media for work purposes; and
- 37% of the enterprises surveyed clearly defined a social media strategy.

Enterprises place reliance on using web-based technology for the operation of their enterprises. Smith, Wollam and Zhou (2011:11) are of the opinion that “when an enterprise is not using social media, it will find its competitors filling the gap and potentially could see its brand and reputation damaged”. In addition to gaining an understanding of how social media is used in enterprises and the internal and external impact of its usage, it is also important for enterprises to understand the following key considerations listed by Schlinke and Crain (2013:85):

- Goals: What is the firm or individual attempting to accomplish?
- Strategy: Is there a content strategy in place to ensure content and consistency for the audience? How will the brand be perceived in the social media landscape?



- Tools and implementation: What tools and resources are available and how are they implemented?
- Risks: What are the threats and costs associated with using social media?

Another important consideration is the enterprise's objective for using social media. Enterprises may be able to create social media objectives aligned to enterprise objectives (Cain, 2012:46). Brennan (2010:8) advises that entities can achieve the following goals using social media:

- Bolstering customer connection;
- Replacing press releases with social media updates;
- Communicating consumer news quickly;
- Keeping tabs on competitors;
- Addressing public relations issues;
- Recruiting employees;
- Monitoring employee behaviour; and
- Improving internal communications.

According to Tziahanas and Crespolini (2011:9), with the evolvement of social media it will only become more pervasive and create changing methods for interacting with employees, clients, counter-parties and the public at large.

Using social media platforms in entities to achieve some of the goals listed above could result in increased expenditure. This is due to the implementation of IT-automated controls to monitor and mitigate social media risks associated with these activities. Goldberg (2011:29) identifies the following free social media monitoring tools that enterprises could use to monitor social media platforms:

- Social Mention, a real-time social media search directory, provides users with requested searches and analyses;
- Facebook.com advertising allows users to post quality updates and promote posts with advertisements to engage with customers and friends. These posts can be edited, managed and monitored to view the number of visits and users who “like” the enterprise pages. The comments posted by users can also be viewed;
- Technorati has many services and allows users to create a personal Technorati profile, create blogs to comment on and follow blogs;

- Blogsearch.google.com is operated by Google and allows users to run searches for blogging information which are linked to social media platforms, websites and online sources;
- Blogpulse.com is a form of search directory for viewing blogs across social media platforms; and
- Search.twitter.com allows users to create personalised adverts on Twitter whereby the performance can be measured by monitoring trends and provides a fast service for the user to share advertised content.

PWC (2010a:5) reported in their 2010 Global State of Information Security Survey that only 40% of respondents have security technologies that support Web 2.0 exchanges. In addition, only 36% of the respondents audit and monitor posts on external blogs or social networking sites and only 23% have security policies that address employee access and posts on social networking sites.

Howard and Van Buskirk (2010:25) recommend that enterprises that encourage employees to blog or use social networking sites to further networking connections, must take steps to manage the risks associated with employees' online presence. In relation the above, the 2016 Global State of Information Security reported by PWC (2015c:26), the following should be noted with regards to improving and implementing key security safeguards in enterprises:

- 58% have an overall information security strategy;
- 54% have a Chief Information Security Office (CISO);
- 53% have employee training and awareness programmes;
- 52% have security baselines/ standards for third parties;
- 49% conduct threat assessments; and
- 48% perform active monitoring of security intelligence.

The above statistics indicates that enterprises are focusing on investing in information security safeguards to ensure cyber threats and risk are mitigated.

## **2.5 Defining risk**

Andersen and Terp (2006:31) define risk "as internal and external uncertainties, events, or circumstances that the enterprise must understand and manage effectively as it executes

its strategies to achieve enterprise objectives and create shareholder value”. Ritchie and Brindley (2007:305-306) define the following risk elements:

- The probability of an event occurring or its outcome;
- The consequences of the event or its outcome; and
- The causal pathway leading to the event.

Risk is a concept of uncertainty, and the impact it can have on enterprises can prevent them from achieving enterprise goals and objectives. Jackson and Stent (2010:5-7) further state that “enterprise risk is a significant condition, event, circumstance, action or inaction that could adversely affect an enterprise’s ability to achieve its objectives and execute its strategies”. The UK Corporate Governance Code (UK Code, 2010:Online) further classifies risks into the categories below:

- Financial risk;
- Business risk including strategic risk;
- Compliance risk;
- Operational risk; and
- Other risks.

Financial risk relates to any monetary impact that could affect the enterprise’s financial performance and position and could be a hindrance in achieving financial goals. Business and operational risk mostly relate to breakdown in internal controls that could pose an obstacle in achieving production, performance and strategic goals. Compliance risk relates to an enterprise’s non-adherence to internal and external legislation, practices and procedures that could have a legal impact on the enterprise. The risks described provide an outline of the type of impact social media risks could have on enterprises, should one or some of the above-mentioned risks materialise in an enterprise.

Coetzee, Bruyn and Fourie (2012:15) state that, “management of enterprises refer to the term risk as a hazard or threat which includes potential uncertain negative events such as financial loss, fraud or theft, damage to reputation, injury or death, systems failure or a lawsuit”. Given the above definitions and risk classifications, risk arises from uncertainty, and controls are intended to reduce this uncertainty, which is no different for managing social media risks (Pickett 2011:61).

For the purpose of the research study, risk is defined as the uncertainty of an event occurring as a result of social media risks materialising, which has a negative impact on the achievement of an enterprise’s goals and objectives. Non-conformance to rules and procedures implemented by enterprises could result in the materialising of social media usage risks. Social media risks could result in the materialising of other risks such as reputational, financial and regulatory risks, which could affect the enterprise.

## 2.6 Social media risks in enterprises

Global IIA chairman, Tarley (2012:63), states that the sheer capacity of today's communication tools can be daunting at times, and the ease and speed with which we can deliver messages is a risk in itself. Communication tools prompt enterprises to act without realising the potential risks that could arise from using social media. Table 2.3, compiled by Deloitte (2012a:12), indicates the potential social media risk categories and specific risks enterprises could be faced with as a result of using social media:

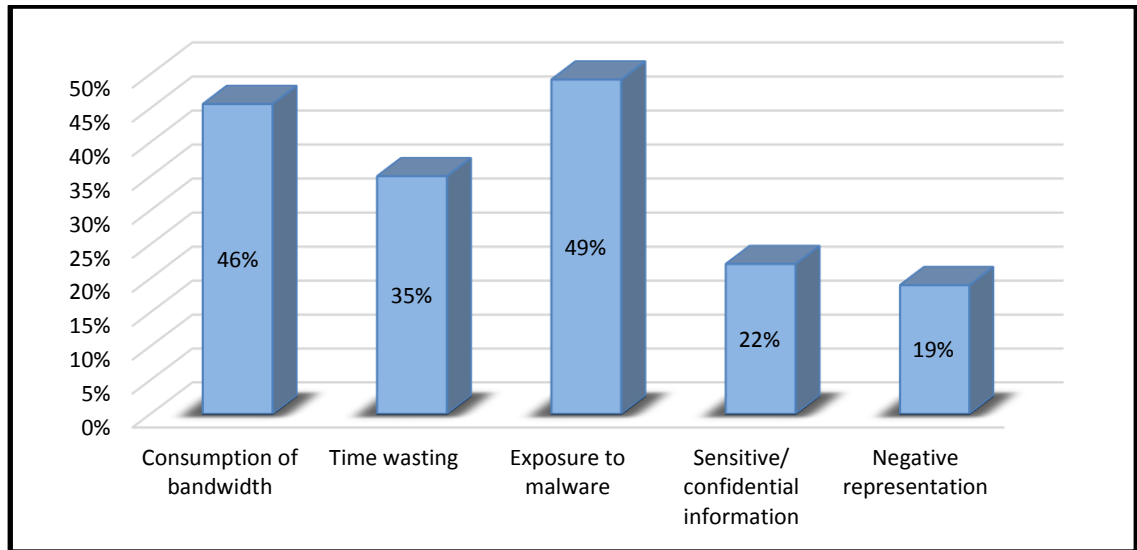
**Table 2.3: Risk categories (Source: Deloitte, 2012a:12)**

<b>Risk category</b>	<b>Specific risk</b>
Data	<ul style="list-style-type: none"> <li>• Data theft from mobile devices</li> <li>• Unauthorised disclosure</li> <li>• Intellectual property theft</li> <li>• Improper content</li> </ul>
Technology	<ul style="list-style-type: none"> <li>• Flash vulnerabilities</li> <li>• Introduction of viruses/worms/Trojans</li> <li>• Impact network availability</li> </ul>
People	<ul style="list-style-type: none"> <li>• Identity theft</li> <li>• Human Resource (HR) policy violations</li> <li>• Social impersonation</li> <li>• Loss of productivity</li> </ul>
Enterprise	<ul style="list-style-type: none"> <li>• Copyright issue</li> <li>• Lack of situational awareness</li> <li>• Privacy and brand/reputation risk</li> <li>• Loss of control over content</li> <li>• Trademark infringement</li> </ul>
Public	<ul style="list-style-type: none"> <li>• Negative publicity</li> <li>• False impression or misguidance</li> <li>• Unsatisfied constituents</li> </ul>

Bartkiewicz (2008:27) states that “[w]hat is urgently needed is an understanding of the risks posed by Web 2.0 and the development of strategies to address those risks”. The top time-sensitive risks to ignoring social media in enterprises include branding risk, compliance risk and the risk of falling behind the competition (Mills, 2010:34). These risks are mainly influenced by customers, competitors and employees using social media and the rate at which regulations have evolved with social media. Erasmus (2012:94) says that

Kiergeraad (2010) found that in the legal world, new technology devices and social messages are taking society into new territory where ethical challenges abound.

According to KPMG (2012a:2), enterprises experienced the following issues in a 12 month period, as shown in Figure 2.2:



**Figure 2.2: Issues pertaining to employees having access to social media (Source: KPMG, 2012a:2)**

The issues relating to enterprises allowing employees access to social media are listed below based on the results extracted from the above survey. The results are listed in order of the highest percentage of responses obtained:

- The enterprises surveyed were exposed to malware;
- Enterprises noted a greater consumption of bandwidth;
- Identified employees were less productive and wasted time during business hours;
- Enterprises experienced exposure of sensitive/confidential information; and
- Enterprises dealt with negative reputational impacts.

Based on the above survey, employers allowing employees access to social media platforms through the enterprises' resources and bandwidth could result in financial, compliance and reputational impacts. Enterprises' resources, servers and networks contain confidential information. Such confidential information may not be protected by antivirus or information security applications to prevent any of the above issues from

materialising. The credibility, brand and values of an enterprise could also be negatively affected should an enterprise's confidential information not be adequately protected.

It is also the responsibility of the employer to ensure its employees protect confidential information in order to have control over social media risks. As employees of enterprises have access to confidential information and social media platforms, social media risks are influenced by the actions of these employees using social media for communicating (Hoy, 2012:1).

According to Bartkiewicz (2008:27), the use of social media and networking initiatives has resulted in undetected risks for enterprises. Aula (2010:45) also argues that social media expands the spectrum of reputation risks and boosts risk dynamics. This is illustrated in Figure 2.3 where the impact of social media in enterprises is indicated across enterprise functions.



**Figure 2.3: Impact of social media (Source: Accenture, 2011a:15)**

In Figure 2.3, it is depicted that there is a higher impact of social media risk in enterprise functions that have business relationships with employees and customers. Enterprise functions such as marketing, sales, supply chain and human resources use social media for advertising to internal and external stakeholders. Examples are social media platforms to procure or market goods or services, advertise job vacancies and manage online forums with customers.

According to Strickland (2011:33), social media has revolutionised not only the way we connect with friends and family, but also how we conduct business, specifically referring to the hiring, discipline and termination of employees' contracts. PWC (2010a:5) mentions that consumers use social networking to make buying decisions, corporations promote new products and services with tweets, and customer service takes on a life of its own. This indicates that enterprises rely on social media to perform various customer and

employee activities. Enterprises that perform such activities should ensure social media risks are mitigated with adequate risk management practices and procedures. Social media risks could negatively impact an enterprise's achieving its goals and objectives, should social media risks materialise.

Social media is constantly evolving, and enterprises are exposed to different risk categories as a result of social media risks. It is the responsibility of both the enterprise and employees to ensure social media practices and procedures are adhered to. The impact of social media risks on enterprises can negatively affect the enterprise. Therefore, it is important that enterprises ensure that detailed social media policies are in place. Furthermore, employees of the enterprises should be educated on the social media policies so that they can be made aware of the impact of social media risks. The understanding gathered is that social media is used by enterprises and employees on a daily basis for business and personal use. Enterprises need to ensure social media activities are aligned to social media policies to mitigate the potential impact of social media risks.

## **2.7 Defining management**

Management can be defined as the enterprise process that includes planning strategies, developing objectives, planning of resources, and measuring performance of financial goals and human resources (Knowledge Management Terms, 2009). With the definition of management described, it is understood that enterprises require formalised strategic plans, goals, objectives and structured management functions.

According to George (2009:31), management should establish goals for the enterprise and employees in order to achieve enterprise strategic goals. Hissom (2009:15) describes management as a process of using functions, including planning, organising, leading and controlling an enterprise that consists of three levels of management which are top, middle and first-line management.

Enterprises require management to perform managerial tasks on all levels to achieve the enterprises' goals and objectives. Employees support managerial tasks by performing secondary tasks such as communication and delegating to different levels of employment structures. Middle to lower level employees support these managerial tasks by executing administrative, specialised and analytical roles.

Fayol (1949) cited by Rodrigues (2001:880-887) lists the following 14 principles of management which have been adapted to focus on enterprises:

1. Division of work: Enterprises generally design the enterprise activities and objectives into functions and sub-functions which consist of specific job profiles. These job profiles outline the roles, duties, responsibilities and objectives of the job profile which are aligned to the primary and secondary functions;
2. Authority and responsibility: Employees in enterprises are empowered in different job profiles to make decisions and be held accountable for their roles, duties and responsibilities;
3. Discipline: The form of discipline is based on peer-pressure controls in terms of which employees uphold the enterprise's code of ethics and values;
4. Unity of command: Enterprises have multiple reporting lines of authority in terms of which employees report to more than one line supervisor. This allows employees to not be restricted to direct reporting lines for supervision;
5. Unity of direction: Enterprises are designed with multiple levels of management that ensure communication channels, and delegations are clearly outlined;
6. Subordination of individual interests to the common good: Enterprises are committed to retaining talent and ensuring employee expectations and needs are valued;
7. Remuneration of personnel: Enterprises implement performance-based compensation systems to reward employees in a fair and objective manner;
8. Centralisation: Decisions in the enterprise are task-related and specific to functions that allow for *ad hoc* and uniformed decision-making opportunities;
9. Scaler chain: Communication structures are accessible and are less formalised since employees in enterprises share information and make decisions;
10. Order: Enterprises use multiple information systems and applications to perform, control, monitor and coordinate enterprise activities. Employees are required to adhere to policies and procedures when using enterprise information systems and applications;
11. Equity: Employees are required to apply a sense of ownership to adhere to enterprises' policies and procedures;
12. Stability of personnel tenure: Enterprises provide ongoing training and development which are supported by management;
13. Initiative: Employees should take initiative and implement new innovative ideas to support management and enterprise objectives; and



14. Employee morale: Management provides guidance on career development and support employee performance to maintain high morale in enterprise environment.

These management principles provide a general framework of principles to support managerial duties. Enterprises' management should regard the application of the above management principles as essential in their roles. This will ensure that risk management practices and procedures are properly implemented and social media risks mitigated by the enterprise. Enterprises that have clearly structured and defined management principles can have more effective risk management practices and procedures.

## **2.8 Defining risk management**

Hollman and Forrest (1991:49-50) define risk management for service-related enterprises as: "The protection of a firm's assets and profits. It is a systematic method of using a firm's resources – physical, financial, and human capital – to realise certain objectives concerning pure loss exposures. Pure loss is one where there is a chance of loss, but no chance of gain".

Miccolis, Hively and Merkley (S.a.:xxii) define enterprise risk management (ERM) as "a rigorous and coordinated approach to assessing and responding to all risks that affect the achievement of an enterprise strategic and financial objectives. This includes both upside and downside risks". According to Liebenberg and Hoyt (2003:41), ERM guides management through an integrated risk framework which enables the identification of risk interdependencies. According to Briers (2000:8), risk management is defined as "the process of intervention in economic and behavioural risk dynamics so that the value of the enterprise is enhanced". ERM supports the need for continuous risk identification and control which are influenced by the internal and external enterprise environment (Tchankova, 2002:290). With the above-mentioned definitions of risk management and enterprise risk management, it is understood that risk management is a sub-process that should develop into enterprise risk management (ERM) frameworks, which supports the enterprise and managerial functions in achieving ERM strategic objectives.

Valsamakis, Vivian and Du Toit (2000:22) further mention that risk management is a managerial function that focuses on protecting the enterprise, employees, assets and profits against the physical and financial consequences of risk. The Treadway COSO (2013c:Online) outlines key components of the COSO integrated risk management framework which focus on managing risks and achieving objectives across different

industries, sectors and enterprises. The key components outlined by COSO are shown in Figure 2.4:



**Figure 2.4: COSO cube (Source: COSO, 2013c:Online)**

The above figure's key components are described as follows according to the COSO integrated risk management framework:

- Control environment: The control environment relates to an enterprise being able to demonstrate a commitment to integrity and ethical values. Management of the enterprises would need to support this by overseeing responsibilities and demonstrating competencies within the control environment. The enterprise should have structure, authority and responsibilities which enforces accountability;
- Risk assessment: Risk assessment is the quantification of the impact that risks which can occur, can have on the enterprise. Risk assessment is evaluated by understanding the impact and likelihood of the occurrence of inherent and residual risks. Inherent risks are risks that affect the enterprise before they are addressed and managed. Residual risks are risks that are addressed by the enterprise after implementing mitigating controls. The enterprise are required to identify and analyse risk, significant changes, assess fraud risk and specify suitable objectives for such risk assessment.
- Control activities: Reporting, reviews, authorisations, verifications, approvals and segregation of duties are control activities that enterprise management implements to avoid risks from materialising. Enterprises, in addition, are required to select and develop control activities and general controls over technology which are maintained in policies and procedures;
- Information and communication: Enterprise information is communicated to all relevant and appropriate employees (internal and externally) in a timely manner, and

information requiring escalation to senior management is communicated without delay;  
and

- Monitoring Activities Assessments are performed to evaluate the quality of control systems through monitoring activities, separate evaluations or both. Any deficiencies from assessments performed are to be communicated to enterprise management.

ERM frameworks such as COSO are important for enterprises to integrate into risk management functions to ensure enterprises have formalised risk management practices and procedures in place to mitigate social media risks. ERM frameworks, provide support to management in order to manage social media risks and ensure key components are adequately monitored by the enterprise.

## **2.9 Importance of social media risk management**

King III states that “risk management is inseparable from the enterprise’s strategic and enterprise processes”, with risk management defined as “the practice of identifying and analysing the risks associated with the enterprise and, where appropriate, taking adequate steps to manage these risks” (Institute of Directors in Southern Africa, 2009:73).

According to Kapcio (2011:10), “today, there is a high correlation between social media risk management and effective employee communication”. Due to the nature of various risks posed by social media, enterprises face the challenge of identifying opportunities for the IT functions to be engaged in covering the gaps (Ernst & Young, 2012b). Research shows that it is more important to be aware of and manage risk rather than try to avoid risk altogether because that is costly, frustrating and impossible (Shih, 2009). It is, therefore, important for discussions to be held internally on both the positive and negative implications of social media, and on an overall risk management plan to be put in place which defines how to address the many diverse exposures through social media (Hegel, 2011:56).

From a value-added perspective, many enterprises have developed proprietary tools and methodologies to monitor social media user activity on Facebook, Twitter, Pinterest and other social networks (Lasky, 2012). Hegel (2011:57) advises that it is important for enterprises to identify risks that they could be exposed to from both internal and external use of the social media platforms. Ernst and Young (2012b:3) advise that executives should apply a risk management approach to review social media in an enterprise. Key in doing so is applying simple steps such as assessing supply chain risks, ensuring that the

enterprise meets the minimum social and environmental standards and leveraging social media to protect confidential information.

The right social media governance solution will provide flexible tools to capture and govern interactions which mitigate associated risk (Tziahanas & Crespolini, 2011:6). With regard to the importance of managing social media risks in enterprises, Protiviti (2013b) highlights the following key questions to be considered:

- What are the social media strategies and goals?
- Who owns social media in the enterprise, and are all appropriate stakeholders involved in ownership?
- Is there a formal process for identifying and assessing risks and ensuring that the management approach is aligned with the enterprise's risk profile and appetite?

There is a significant need for enterprises to design and implement research structures to monitor social media communication in their enterprises, brands and messaging (Erasmus, 2012:V). ISACA (2010a:4) argues that enterprises that embrace social media aggressively as part of their strategy are more financially successful. Research and findings of a study by Ernst and Young (2012f:1) indicate that enterprises with more established risk management practices outperform their peers financially.

According to Mitchel (2015:2), it is important to have core risk management procedures in place to mitigate social media risks in the enterprise by:

- Designing social media policies and procedures that include compliance with regulations;
- Performing annual risk assessments of the enterprise's social media activities;
- Designing pre-approval procedures for employees to set up enterprise social media sites;
- Reviewing and monitoring enterprise and employees' social media activity and feeds;
- Performing due diligence checks on third-party service providers used by the enterprise;
- Designing retention controls for all records created from social media use;
- Implementing security and safeguards to ensure privacy of enterprise information;
- Drafting appropriate disclosures in social media policies as required; and
- Educating and training employees on the enterprise's social media policies and regulatory requirements.

The evolving use of social media within enterprises presents significant challenges from a risk management point of view as 47% of enterprises surveyed (Internal Audit Needs and Capabilities 2013 Survey) do not have social media strategies while 43% do not have formal social media policies in place (Protiviti, 2013a:1). The Corporate Board (2013:29) suggests that lack of social media policies and processes raises risks for enterprises. It is evident that small to large enterprises do not have formalised risk management practices and procedures in place to manage social media risk effectively. This indicates that enterprises could be faced with challenges in managing social media risks, thereby creating a greater need for enterprises to maintain adequately designed social media policies and strategies.

A research survey by Protiviti (2013a:1) on internal audit executives and professionals across various industries and sectors expressed key findings on how enterprises' social media usage is rising and prevailing to be more important for enterprises to manage social media risks. Zhou, Vasconcelos and Nunes (2008:166-167) further explain that risk assessment is an integral process as it provides risk control in the enterprise environment in anticipating future risk concerns. This means that evaluation and monitoring of social media risks should form part of audit plans as the nature of enterprises' social media risks is rapidly changing.

#### **2.10 Recommended social media risk management practices and procedures**

Social media policies should be reinforced through ongoing training and awareness programmes offered to employees. Enterprises must on a continuous basis educate and train their workforce on their social networking policies and the risks of social media use (PWC, 2010a:8). According to Howard and Van Buskirk (2010:25), any policy should be consistently implemented and uniformly applied, since having a policy that is not enforced may be as harmful to an enterprise in the event of litigation than not having a policy at all.

Social media seems to be a “chat style” of communication, “useful for simple communication, but it is difficult to apply to profound communication concerning risk management” (Ernst & Young, 2013g:25). Communicating through social media applications raises the importance of enterprises having to manage potential social media risks through risk management practices. The usage of social media applications generates a wealth of data (Nguyen, 2011:10), and enterprises need to implement strategies to manage social media risks.

Enterprises should:

- Periodically review their website in terms of use and privacy policies to ensure compliance;
- Perform due diligence checks before using third-party technology;
- Get a good indemnity provision for patent, privacy violations and infringements; and
- Periodically audit websites for hidden tags<sup>1</sup>, cookies<sup>2</sup> and other applications.

The strategies designed by enterprises to manage social media risks should consist of frequent reviews, substantive checks and audits to further enhance risk management strategies. According to research conducted by Ernst and Young (2012f:7), top-performing enterprises have the following risk management practices in place:

- Completion of risk-related training is incorporated into individual performance;
- Risk monitoring and reporting tools are standardised across the enterprise;
- Integrated technology enables the enterprise to manage risk and eliminate or prevent redundancy and lack of coverage; and
- An overlap and duplication of risk activities are identified and addressed.

Risk management practices should be clearly defined in line with the enterprise's strategies for monitoring and managing social media risk. Enterprises should consider establishing risk IT and COBIT frameworks to assist in forming sound social media policies (Stroud, 2010:13). Considering risk IT and COBIT frameworks when developing a social media strategy will provide clear processes and controls to help form sound social media policies. The following questions, according to ISACA (2010a:8), should be considered when creating a social media management strategy:

- What is the strategic benefit of leveraging a particular emerging technology?
- Are all appropriate stakeholders involved in social media strategy development?
- What are the risks associated with the technology, and do the benefits outweigh the costs?
- What are the new legal issues associated with the use of social media?
- How will customer privacy issues be addressed?
- How can positive brand recognition be ensured?
- How will awareness training be communicated to employees and customers?
- How will inquiries and concerns from customers be handled?
- Does the enterprise have the resources to support such an initiative?

<sup>1</sup> A tag is a hidden text on a webpage visible to the online visitor that contains information.

<sup>2</sup> Cookies are data files that contain information that is unique to the web browser and the device accessed.

- What are the regulatory requirements that accompany the adoption and integration of the technology?

Ernst and Young (2011a:3) advise that the following basic steps should be considered when developing a social media management strategy:

- Identify enterprise areas that can benefit from social media - such as sales, marketing, support, customer relationship management (CRM), human resources (HR) and research and development (R&D);
- Involve stakeholders from the affected concerned areas;
- Investigate how social media can support the goals of each enterprise area identified;
- Determine what processes each area should use to engage in social media;
- Identify metrics for success and how they will be measured; and
- Continually optimise social media practices and procedures.

Accenture (2011a:14) advises that when enterprises create social media policies, they should have an understanding of the effects social media has on the enterprise's processes, identify the employees who will carry out those processes, the measures of success, their unique culture and their context.

A social media policy is the best form of protection to minimise social media risk and protect an institution that wishes to discipline an employee for any misconduct (Kelly, 2012:5). However, Farley (2011:19) suggests that a policy will not eliminate negative comments on social media from occurring. Instead, it can minimise the risk by providing employees with clear guidelines to follow. Social media policies should inform employees that they are responsible for the content they post on social media sites (Bray, 2012:4). The social media policies drafted by enterprises are normally similar in content as the most popular social media applications are accessed by employees.

However, Accenture (2011a:14) states that every enterprise would likely need to develop multiple social media policy documents for different purposes and audiences. It is critical to have a social media policy that reads like a friendly guide and not a stern warning (Dysart, 2013:31). For example, the definition and use of social media by employees should be clearly defined in social media policies to ensure employees understand how to use social media in their enterprise (Sherer & McLellan, 2015:14).

Implementing an effective social media policy will not mitigate an employer's risk completely. A social media policy should rather be part of a coordinated and properly documented human resource management strategy (Field & Chelliah, 2012:36). To effectively manage social media use, enterprises should develop a documented strategy with associated policies and procedures that involve all relevant stakeholders, which should include leaders from the enterprise units, sales and marketing, risk management, human resources and legal departments (Stroud, 2010:13).

A 2011 Global Information Security Survey conducted by Ernst and Young (2011a:12) revealed that enterprises implemented controls to mitigate the use of social media. Enterprises have been implementing the following controls to mitigate the new or increased risks related to the use of social media:

- 53% implemented limited or no access to social media sites as a control to mitigate risks related to social media;
- 46% implemented policy adjustments to include social media usage;
- 39% conducted security and social media awareness programmes;
- 38% enhanced the monitoring of internet usage;
- 12% implemented new disciplinary procedures; and
- 11% adjusted incident management processes.

The findings suggest that enterprises are actively implementing controls to improve the managing and monitoring of the use of social media in enterprises. However, the Global Information Security Survey 2011 conducted by Ernst and Young (2011a:12) also noted that 15% of the enterprises surveyed did not implement any controls to mitigate the use of social media. Based on the above results, Ernst and Young (2011a:13) states that enterprises should consider the following in order to mitigate the risks associated with social media by way of implementing effective controls:

- Reconsider (if applicable) using hard-and-fast "no access/no use" policies for social media sites;
- Embrace the full advantages of social media;
- Consider testing and using technical solutions that also enforce the security stance outlined within your social media policy; and
- Perform your own reconnaissance to better understand what potential attackers can find on social media.



Social media controls in enterprises lack consistent practices as corporate environments in general either have no social media policy in place, block social media usage, have some sort of controlled access to social media usage or have limited user access controls in place (ISACA, 2012b). Walaski (2013:43) mentions that the use of social media has disadvantages which management may cite to justify its hesitation or unwillingness to engage. It is, therefore, recommended that “management of social media requires procedural and technical controls, i.e. policy and technology” (Schulich, 2012:4). Possible risks and mitigating controls to reduce social media risks in enterprises are depicted in Table 2.4 below:

**Table 2.4: Social media risks and mitigating controls in enterprises (Source: Field and Chelliah, 2012:37)**

<b>Social media risk</b>	<b>How to reduce the risk</b>
Negative comments posted online by one employee to fellow employees outside normal working hours could trigger claims of bullying and harassment by other employees.	Well-drafted employment contract Social media policy Anti-bullying policy Staff training on these policies Keeping records of training Internal grievance procedures Discipline and termination procedures
Excessive use of social media during work hours is reducing productivity and creating conflicts.	Internet usage and social media policy Staff training on these policies Keeping records of training Training management in performance review techniques Discipline and termination procedures
A discrimination claim and a privacy information request are made as a result of an excellent candidate not being offered a position after his Facebook page was accessed by your recruiter.	Anti-discrimination policy Recruitment policy Privacy policy Staff training on these policies Discipline and termination procedures
Failure to engage in social media marketing for fear of negative exposure (this is a missed opportunity and a real risk).	Social media strategy Social media policy Robust human resources infrastructure
In trying to defend your enterprise in an online forum, a staff member makes a comment that offends other users and leads to complaints and reputational damage. A disgruntled client/customer starts to post negative comments across social media sites and industry forums.	Social media policy Staff training on these policies Discipline and termination procedures Complaints-handling programme Social media policy Staff training on these policies
An employee whose Facebook page identifies him or her as working at your enterprise posts on his or her Facebook page, which is visible to colleagues: “Work sucks. I can’t stand it any longer.”	Social media policy Staff training on these policies Discipline and termination procedures

Social media risk	How to reduce the risk
An employee fails to secure his or her smart phone or tablet computer. This is accessed by an unauthorised third party who posts derogatory comments on your enterprise's Twitter account.	Information security policy Staff training on these policies Discipline and termination procedures
An employee sets up a LinkedIn group in his or her own name, which attracts thousands of users. The employee takes the group with him or her when leaving to go to a competitor.	Employment contract Confidentiality agreement Social media policy
An employee posts confidential information on a social media site either deliberately or inadvertently.	Employment contract Confidentiality agreement Social media policy Staff training Discipline and termination procedures

Prevention is often better than cure as a policy is the best form of protection and identifies clear boundaries on permitted use of social media - what is and what is not allowed, as well as a warning that comments made on social media sites should be treated as public rather than private (Kelly, 2012:5). The first step is to create a safe space for staff, volunteers and other stakeholders through clear and effective social media policies (Social Fish & Croydon Consulting, 2010:2).

Ernst and Young (2012d:9) advise that effective social media strategy and governance consist of an overall social media assessment, a clear social media strategy, consistent social media policies, an awareness programme and professional social media monitoring. Social media risk management does not only focus on specific functions of enterprises in order to ensure that social media risks are adequately controlled, but also the social media strategy and governance. A social media governance strategy should focus first on a user's behaviour by developing policies for personal use in the workplace, personal use involving enterprise information outside the workplace, and enterprise use (Stroud, 2010:13). The opportunities and challenges associated with social media usage present growing risks that need to be addressed on an enterprise-wide basis (Millage, 2011:7).

The right support not being provided by the Internal Audit function could, apart from other factors, also contribute to the enterprise not appropriately mitigating and effectively controlling social media risks. Management of enterprises should, therefore, not only focus on the benefits of using social media but also continuously identify ways of improving the managing of social media risks in coordination with enterprise assurance providers such as internal auditors and external auditors.

## **2.11 The role of internal auditing in social media risk management**

“Internal auditing is an independent, objective assurance and consulting activity designed to add value and improve an enterprise’s operations. It helps an enterprise accomplish its objectives by bringing a systematic and disciplined approach to evaluate and improve the effectiveness of risk management, control, and governance processes” (Gleim, 2001:2). Internal auditors can play a role in assisting management to identify and manage all risks associated with social media (Deloitte, 2013b:5). Cain (2012:47) mentions that while internal auditors cannot be expert users of every social media channel, it is nonetheless, important for them to be aware of what is out there and be familiar with the most popular sites.

The management of social media risks is part of living in a world where social technologies become increasingly prevalent (The Mckinsey Global Institute, 2012:54). Singleton (2012:13) states that “the proliferation of social media and the fact that major risk areas are associated with it (whether an enterprise uses it or not) create a need for IT auditors to assist management in managing the associated risks and making sure that social media is an effective tool”. It is important that entities with social media risks are proactive in their attempts to manage and monitor false statements and negative posts on the web. Since the enterprise’s management should be concerned with the operational effectiveness of using social media tools, social media audits should be included in its internal audit function (ISACA 2012b:12).

Internal audits add value in assessing and evaluating enterprises’ social media risk management practices and procedures. It is the role of internal audit to help protect the enterprise’s assets, reputation and sustainability from being affected by the use of social media (Chartered Institute of Internal Auditors, 2013:4). Assurance to the enterprise could also be provided by means of the Treadway Commission COSO Internal Control Integrate Framework as “it promotes efficiency and effectiveness of operations and supports reliable reporting and compliance with laws and regulations” (COSO, 2011b:1).

Goldberg (2011:31) also advises that internal auditing should perform the following in evaluating social media usage in the enterprise to ensure that appropriate assurance is provided to the enterprise:

- Evaluate the enterprise’s structure around social media;
- Ensure the existence of a social media plan/policy;

- Plan for addressing social media concerns;
- Develop a social media footprint (opinions of people about the enterprise); and
- Assess the financial, legal/regulatory, reputation and speed of onset impact.

Understanding the emerging social media phenomena is important for enterprises wishing to maximise social media usage rewards while mitigating the risk associated with its use. Social media risk management has emerged as one of the top ten IT risks enterprises should consider assessing when preparing for audit planning activities. It is critical that IT internal audit has an understanding of the enterprise's social media strategy as well as the related IT risk as IT internal audit adds value by providing leading practice enhancements and assurance that key risks are mitigated (Ernst & Young, 2012e:10; Ernst & Young, 2013h:18). Technology has emerged as a key enabler for internal audit to improve audit quality and value while remaining cost-effective. One of the fundamental ways internal audit can leverage technology is through data analytics (PWC, 2013b:10).

Enterprises' internal audit functions should assess existing social media controls, policies and processes to ensure that social media risks in the enterprise are being mitigated. The internal audit function could include social media risk and control assessments, as part of annual audit plan reviews, to ensure control activities relating to social media are functioning effectively, and existing mitigating social media controls are adequately designed.

It is echoed by many that "social media emerged suddenly, and is here to stay. Enterprises of all sizes and industries are already developing social media strategies as rapidly as they can" (Ernst & Young, 2013g:4). It is advised that to effectively use and manage social media, an enterprise would need to closely monitor social media activity, as using social media could potentially cause unintended consequences when not managed (BITS, 2011:48).

A survey undertaken by PWC (2013b:14) stated that high performing internal audit functions have a higher level of integration with enterprise risk management and other risk functions. These could assist internal audit in identifying key issues earlier as they engage with the emerging risks in the enterprise. Internal auditors can work with management to identify risks and gaps to determine which controls could be implemented to minimise risks and offer guidance on social media policies and strategies (Jacka, 2011:1 cited in Cain, 2012:46).

Deloitte (2013b:2) states that “Internal audit can also help develop enterprise processes that will mitigate risks associated with unintended consequences, assume responsibility for monitoring compliance with implemented processes, and assess implemented controls.” However, Giltrow (2013) mentions that internal auditors should be mindful of the risks associated with social media and take steps to ensure that the enterprise has established an effective social media risk management programme commensurate with the degree of the enterprise’s use of social media.

## **2.12 Summary**

Social media could have a significant impact on an enterprise should any social media risks materialise due to a lack of risk management and control monitoring procedures being performed by management. Therefore it is important for enterprises to implement and maintain adequate social media policies and practices. The social media policies and procedures would support enterprise risk management practices to ensure social media risks do not materialise.

Internal auditing provides an important role in supporting reviews of social media control activities, such as policies and procedures in place, to ensure social media risks in enterprises are mitigated. Independent reviews of the enterprise risk management practices would provide the enterprise with assurance in terms of the managing and controlling of social media risks. In instances where risk management functions and social media control activities are not adequately designed, internal audit could recommend practices to support social media risk management in the enterprise. For the purpose of this study and in order to achieve the research objectives introduced in Chapter 1, the research design, methodologies and delineating factors will be further explained in Chapter 3. Chapter 3 will also provide information on the main research questions that will be covered in the questionnaire instrument that has been used to collate data in support of the literature sources reviewed.

## **CHAPTER THREE RESEARCH DESIGN AND METHODOLOGY**

### **3.1 Introduction**

This chapter explains the research methodology and design that support the research questions and objectives to be achieved. This empirical study investigated social media risk management practices in enterprises, by making use of a structured questionnaire consisting of closed-ended questions. The structure of the questionnaire provided a positivist (objective) opinion which is based on the literature review.

### **3.2 Purpose of the study, research questions and objectives**

The purpose and aim of the study, research questions and objectives are explained below separately.

#### **3.2.1 Purpose of the study**

The purpose of this study is to provide an investigative review of the perception that enterprises do not have formalised risk management procedures in place to mitigate social media risks. This study highlights the importance for enterprises to understand the need as an enterprise to manage social media risks and continuously identify practices and procedures to enhance risk management.

#### **3.2.2 Research questions and objectives**

The research questions (RQs) investigated within the ambit of this research study are:

RQ 1: "What risk management procedures are in place to mitigate social media risks?"

RQ 2: "How do management control social media risks in their enterprise?"

In supporting the two research questions, the following sub-research questions (SRQs) and objectives were identified:

SRQ 1: "How do employees use social media in the enterprise?"

Objective 1: To determine the extent to which enterprises make use of social media.

SRQ 2: "What social media policy exists in the enterprise?"

Objective 2: To determine whether a social media policy exists and provides compliance for the use of social media.

SRQ 3: "What risk management procedures are in place to control social media risks in the enterprise?"

Objective 3: To identify the risk management procedures used by the enterprise to assess and control risks.

SRQ 4: "What controls are in place to mitigate social media risks in the enterprise?"

Objective 4: To determine the existing controls used by the enterprise to mitigate social media risks.

The research questions and objectives are further explained in section 3.5.2, "Outlay of questionnaire", which provides a breakdown of the eight sections used by the researcher in the questionnaire. The eight sections of the questionnaire cover the two research questions and sub-research questions of this research study.

### **3.3 Research design**

The rationale applied in respect of the research design and research method for the aim and purpose of the research study, respectively, explain the requirements and understanding of the research design and quantitative approach applied for the research study.

#### **3.3.1 Rationale for research design**

The research design provides an interpretation by the researcher of the rationale applied for the purpose and objectives of this research study. Yin (1989:29) states that the research design deals with a logical problem and not a logistical problem. Polit and Hungler (1993:36) mention that a research design is an overall plan for obtaining answers to questions posed and managing challenges from the research study.

In order to ensure that the questions of the research study are answered to support the purpose of the research, "the function of the research design is to ensure that the evidence obtained enables us to answer the initial question as unambiguously as possible" (De Vaus, 2001:9). This research study was guided by the purpose of the research, the process of the research, the logic of the research and the outcome of the research (Collins & Hussey, 2009:4).

A well-structured model for research, as stated by Luker (2008:3), is holistic and attentive to context, conceptually innovative and methodological. Furthermore, the research model is strongly committed to building theory in a cumulative way and is deeply attentive to questions of power. Saunders, Lewis and Thornhill (1997a:72) state that the research

design assists the researcher in making an informed decision about the research methodology in terms of deciding how data would need to be collected and analysed to ensure the outcomes of the research study are achieved. The research design needs to be adapted to take into consideration the limitations and constraints such as delays in responses from participants, restricted access to confidential data and in certain instances, the lack of subject matter and understanding of a topic by respondents.

### 3.3.2 Research method

Research methodology is explained by White (2002) as the approach a researcher uses to conduct the research. Methodology is the design used in research for data collection and analysing procedures to investigate a research question (McMillan & Schumacher, 2008). According to Collins and Hussey (2009:44), there are two standard research paradigms, a positivist or quantitative and phenomenological or qualitative approach.

This empirical research study follows a quantitative research approach. Prior to the empirical research study, a literature study was undertaken to gain a thorough understanding of the topic which, in turn, formed the basis of the empirical study (questionnaire). Flick (2009:94) states that quantitative research focuses on testing an existing theory of objectives, which follows a linear quantitative step-by-step process, as illustrated below in Figure 3.1. Quantitative research is a procedure followed to quantify data for statistical analysis (Creswell, 2003:95).



**Figure 3.1: Quantitative research process, linear model**  
(Source: Adapted from Flick, 2009:95)

As mentioned in Chapter 1, this empirical study followed a quantitative approach whereby the structure of the questionnaire was designed to provide a positivist (objective) opinion from respondents as the questionnaire consisted of close-ended questions which tested the existing theory of this research study. Saunders *et al.* (1997a:72) further state that the appropriate research methods for a particular study would need to be determined since proper research methods assist in identifying the why's, how's and what's of the subject.



### **3.4 Population and sampling**

The population and sampling methods and techniques applied are explained in sections 3.4.1 and 3.4.2, respectively.

#### **3.4.1 Population**

Saunders and Lewis (2012:110) define a population as a set of group members in the scope of a study. McDaniel and Gates (2006:301) define a research population of interest as a total group from which information is required to be obtained. Small, medium and large enterprises in the Cape Metropole from the private sector across all industries were the targeted population for this research study. The population considered for this study was restricted to small, medium and large enterprises that meet the delineation criteria outlined in Chapter 1, section 1.5.

According to the Abor and Quartey (2010), small, medium and large enterprises consist of employees with less than 100 employees, less than 200 and more than 200 employees, respectively. For the purpose of this research study, enterprise sizes were classified and grouped according to the number of employees per category mentioned above. The population of small, medium and large enterprises, according to the City of Cape Town (Online: 2016), consist of 15740 accredited business enterprises registered and operating in the Cape Town Metropole.

#### **3.4.2 Sampling**

Sampling is a procedure followed to collect information from a population. The sampling process is described by Neelankavil (2007:234) as follows: define the target population; obtain a list of the population; select a sample frame; determine the sample methods; develop a procedure for selecting the sample units; determine the sample size; and draw the sample. According to Nieuwenhuis (2007), sampling refers to the process used to select a portion of the population for study purposes.

Non-probability sampling was used for this research study. Sampling was initially done by emailing the survey to 45 enterprises. These enterprises were known to the researcher. Sampling was then done by using the "snowball" technique (Saunders et al., 2009c:213). The initial enterprises recommended possible companies for participation. In this way 120 surveys were distributed and 88 responses received. This sampling method was chosen because of convenience for the research as time and funding were limited. The

organisations were selected on the basis of their availability and willingness to participate and share information.

Lee, Benoit-Bryan and Johnson (2011) state that the larger a respondent rate of a group, the more representative the population results will be. Polit and Beck (2008) also state that a quantitative study entails using a sufficient number of participants to achieve statistical significance and identify differences between the groups. The sample size of this research was small due to time constraints and insufficient funding. As a result, care was taken in generalising the results presented in Chapter 5, sections 5.2 to 5.8.

### **3.4.3 Unit**

According to Holloway and Wheeler (1996:74), purposive sampling is described as individuals or groups with special knowledge of a topic being chosen for the research study. The surveys were distributed to the enterprises for completion because the researcher had no influence on the enterprise identified to complete the questionnaire; questions 6 to 13 were posed to verify that the unit of analysis of the enterprises were knowledgeable or aware of the research subject matter.

## **3.5 Data collection**

This section explains the design and pilot testing of the questionnaire used for this research study, the distribution of questionnaires and collection procedures followed to obtain data.

### **3.5.1 Questionnaire as the data collection instrument**

The research design and methods used for this research study accommodate the use of a questionnaire to collect response and data for analysis to achieve the purpose and objectives outlined. According to Pawar (2004:28), questionnaires allow researchers to reach out to respondents in various locations while maintaining confidentiality and anonymity. Law (2004:5) states that a particular set of rules and procedures may be questioned and debated. However, the overall need for proper rules and procedures do not apply to this research study as responses remained in line with the designed questionnaire. A Likert-type Scale was used in the survey for respondents to offer subjective responses reflecting their opinions and attitudes (Chin, *et al.*, 2008). The pre-determined instrument used provided data to be analysed for potential findings to report on (Wellman & Kruger, 2001:69).

The questionnaire consisted of close-ended questions to ensure that the responses from participants are restricted to the objectives of the research study. According to Ruane (2004:131), close-ended or restricted questions provide a limited number of response alternatives for respondents to select. These selections are based on a list of possible responses provided in the questionnaire from which the respondents chose the most appropriate answers (Friesen, 2010) in this study.

An important point noted regarding the appearance of the questionnaire, as mentioned by Cohen, Manion and Morrison (2007:338), is that the questionnaire is designed in a simple and clear manner, thus allowing respondents to easily complete the questions listed. The questionnaire provides simple instructions for the completion of the listed questions and also includes a short description of the purpose of the research study and how the respondent information would remain confidential for research purposes only.

### **3.5.2 Questionnaire design and structure**

The questionnaire used by the researcher to collect information for the research study consisted of eight sections (Section “A” to “H”). The questions designed in the questionnaire were aligned to the research questions and the four subresearch questions of this research study. The purpose of each section in the questionnaire is explained below to ensure that the objectives of the research study’s research questions are achieved:

- **Section A - Business identification**

This section identifies the characteristics of the enterprise. Information on the industry, size of the enterprise, level of employment and length of service to the enterprises is obtained from the respondent in this section.

- **Section B - Social media usage by the enterprise**

This section collects information on the enterprise’s social media usage by determining the purpose and frequency of social media platforms used.

- **Section C - Social media usage by the employee**

This section provides information about the employee’s personal usage of social media platforms, as well as the purpose, frequency and time spent by the employee using social media platforms at the enterprise.

- **Section D - Social media enterprise policies and restrictions**

This section identifies the social media policies and restrictions in place which employees adhere to when using social media platforms in the enterprise.

- **Section E - Social media (risk management)**

This section identifies whether enterprises have risk management procedures in place and which department in the enterprise plays a role in providing governance over managing risks associated with social media use.

- **Section F - Social media (controls)**

This section identifies the key control activities enterprises have in place to mitigate social media risks and monitor social media usage by employees in the enterprise.

- **Section G - Social media risks**

This section collects information from the respondent to gain an understanding of the risks social media usage holds for the enterprise and determine the level of awareness the respondent has on the impact and effect of social media usage on the enterprise.

- **Section H - Respondent contact details**

This section requires the respondent to provide his or her contact details and location of the enterprise in order to validate the questionnaire according to the delineation criteria of the research study. The questionnaire used within this research study is contained in Appendix A.

Along with the questionnaire, a consent form was designed to provide further clarity and details about the research study conducted. The participant's letter is contained in Appendix B, and the consent form is contained in Appendix C.

### **3.5.3 Distribution of questionnaire**

Questionnaires were distributed to enterprises selected, as indicated in paragraph 3.4 via e-mail, LinkedIn and also hand-delivered to respondents to complete. This distribution method was selected based on cost, time efficiency and to ensure the questionnaire are widely disbursed to obtain responses which covered different industries and sized enterprises.

#### **3.5.4 Collecting of data**

Burns and Grove (2009:43) describe data collection as a precise, systematic gathering of information relevant to the research purpose. The researcher followed a structured approach in distributing and collecting questionnaires.

The questionnaire, as mentioned in section 3.5.3, was distributed to personnel currently employed in small, medium and large private enterprises via e-mail, LinkedIn and also hand-delivered to respondents to complete. This also allowed the researcher to request participants to distribute the questionnaire to other potential participants to increase turnaround time and range of distribution.

Completed questionnaires were returned to the researcher via the designated researcher's e-mail address. The questionnaires were obtained in PDF and Word formats from the respondents and collected during the period April 2014 to July 2014 over a four-month period. Follow up and repetitive communications were also made via email and LinkedIn Inbox messages to ensure a higher response rate.

#### **3.5.5 Pilot testing of questionnaire**

A pilot test was performed by two finance specialists, one Marketing and one ICT specialist. The two finance specialists were selected based on their knowledge of internal auditing. The Marketing and ICT specialists were specifically selected for the knowledge of and use of social media.

A pilot test was undertaken to identify the completion time and whether the questions posed any difficulty with regards to completion. The respondents in the pilot test took, on average, 15 minutes to complete the questionnaire and confirmed they encountered no difficulty in understanding and completing the questionnaire.

#### **3.6 Data analysis**

Merriam (1998:92) states that data analysis is a process of logically understanding the data collected for interpretation. The data collected from each of the eight sections in the questionnaires were scrutinized to ensure that the questionnaires were valid and completed appropriately according to the research delineation criteria.

Respondents' data collected from the questionnaire were captured in a Microsoft Excel template by the researcher. The data captured in the Microsoft Excel template were then

analysed by a CPUT statistician using IBM NCSS 9 statistical software (2013) used for data analytics. The CPUT statistician provided descriptive statistics to the researcher for analysis and interpretation in order to give effect to the research objectives indicated in section 1.3.1 and 1.3.2.

### **3.7 Research validity and reliability**

Information provided from responses is reliable if controlled and managed in a structured approach to ensure that valid responses are obtained with the limitations provided in the questionnaire instrument by means of close-ended questions and the use of the Likert-type Scale. Collins and Hussey (2009:55) also state that the reliability of open-ended questions is low compared to the higher validity of using closed-ended questions as generalisations can be construed and used in different settings with a lower reliability. The research study consisted of closed-ended questions which provided reliable data as respondents were required to select responses from pre-populated options.

The Cronbach's alpha was used by the researcher to validate the reliability of Likert-type Scale questions used in the questionnaire. According to Cooper and Schindler (2001a), Cronbach's alpha coefficient is an index of reliability associated with the variation accounted for by the true score of the underlying construct of which supports the validity of information collected for data analysis. Therefore, measures such as validating and testing of data were applied throughout the research study (Wiersma, 2000:8-9). This ensured that the responses are reliable and that valid questionnaires have been obtained from respondents.

According to Fraenkel and Wallen (2000), an instrument is valid if it measures what it is intended to measure and accurately achieves the purpose for which it was designed. In terms of validating and testing the responses provided in questionnaires, 50% of the questionnaires completed were judgementally selected in that respondents were contacted telephonically and via email to confirm that participants were employed by the enterprise and to test the validity of their responses. The researcher assessed the responses received from the questionnaires to confirm their relevance to the questions posed.

### **3.8 Ethical considerations**

Cooper and Emory (1995:97) cited by Smit (2012:199) advise that the objective of research ethics is to ensure that no adverse consequences or harm follow from the research activities. According to Terre Blanche and Durrheim (1999:65), it is argued that ethical concerns should play an important part during the planning and implementation of the research study.

A survey questionnaire was the data collection instrument (Cooper & Schindler, 2006b:245). The format in which the information and questionnaire were presented to the respondents was considered to ensure that there were no challenges for the respondents to participate in an informed manner, for example, no harm should come to the participants (Cormack, 2000). This was taken into account by pilot testing the questionnaire to ensure that respondents experienced no challenges and could participate in an independent and professional manner.

In addition, respondents were provided with information about the objectives of the research project (Cormack, 2000) in terms of clarifying their specific role and involvement in the research study. The researcher was obliged to respect the participant's right to limit the distribution of information or withdraw from the project at any time (World Medical Association, 2008). Informed consent is the cornerstone of ethical research (Cassell & Young, 2002). Therefore, consent was obtained from respondents to confirm their voluntary participation in the research study (Hall, 2008:68).

The information disclosed by the respondents was protected and secured from unauthorised parties, and data encryption techniques were considered to protect data obtained from the respondent as the right to confidentiality is important in research (Polit & Beck, 2008).

According to Pawar (2004:28), questionnaires allow researchers to reach out to respondents in various locations whilst maintaining confidentiality and anonymity. Therefore, respondents who provided consent to participate in the research study were informed that the information disclosed was for research purposes and that the information remained confidential and anonymous (enterprise names/ respondent details are not disclosed publicly) unless otherwise specified in the questionnaire (Fox & Ritchie, n.d). If the respondent did not consent to participating in completing the questionnaire, he or she was not forced to provide a response (Saunders, Lewis & Thornhill, 2000b:138).

As the research also consists of consulting literature sources to support the objectives of the study, the work of others is to be cited accordingly to ensure that appropriate credit is acknowledged (Polonski & Waller, 2010). Therefore a list of references of the literature sources cited in the study have been prepared by the researcher.

### **3.9 Summary**

This chapter described the methodology that provided a breakdown of the research study's design and methodology applied to achieve the research questions and objectives. The research study's design and methodology further explained the validity and reliability of the quantitative approach.

The research study's population and sampling were outlined and the ethical considerations explained. Pilot testing and the distribution and collection of the questionnaire were also reported on. The data analysis and findings are explained in Chapter 4.



## **CHAPTER FOUR DATA ANALYSIS AND RESULTS**

### **4.1 Introduction**

This chapter discusses the data analysis and results obtained from the research study's questionnaire conducted at small, medium and large enterprises in the Cape Metropole. According to De Vos (2002), data analysis represents the process of bringing order, structure and meaning to the mass of collected data. The main objective of this research study is to collect data to identify the risk management practices and procedures enterprises have in place to mitigate social media risks in the Cape Metropole. The data collected from the research study's questionnaire were analysed and presented by using descriptive statistics to quantify the data in line with the study's primary research objective.

### **4.2 Method of analysis**

The procedures the CPUT statistician and researcher followed to validate the questionnaire's results and responses obtained are described in this chapter.

#### **4.2.1 Validation of the questionnaire results**

The reliability of the responses obtained was measured by using the Cronbach's alpha coefficient (refer to section 4.3.1). Cronbach's alpha coefficient was applied in order to measure internal reliability and consistency of the instrument (questionnaire).

The questionnaire used for this research study was piloted by respondents as described in Chapter 3, section 3.5.5. This was done to validate the construction and planning during the development phase. The questionnaire consisted of a total of 29 closed-ended questions which were intended to measure whether enterprises in the Cape Metropole have risk management and control procedures in place to mitigate social media risks.

The data obtained from the questionnaire were validated in the Microsoft Excel template by using pre-defined dropdown lists to capture the participants' responses. The pre-defined dropdown lists served as a validation check to prevent any data-capturing anomalies and errors. As the questionnaire consisted only of closed-ended questions, this allowed for standardised responses to be captured in the Microsoft Excel template for simplified preliminary analysis methods to be applied.

#### **4.2.2 Data format**

The data collated from the questionnaire responses were captured by the researcher in line with the design and numbering convention of the questionnaire into the Microsoft Excel template and imported to IBM NCSS 9 statistical software by the CPUT statistician. This allowed the CPUT statistician to align the coding and quantitative information to the questionnaire's pre-determined numbering scheme.

The Likert-type Scale used in the questionnaire required the following coding:

- Strongly agree is coded as 5;
- Agree is coded as 4;
- Undecided is coded as 3;
- Disagree is coded as 2; and
- Strongly disagree is coded as 1.

The researcher checked the prepared data sets to ensure that the correct codes were applied for the Likert-type Scale.

The researcher also validated 50% of the completed questionnaires by asking the following questions telephonically:

1. "Does your organisation use social media platforms?"
2. "Does your organisation have a social media policy in place that guides the use of social media?"
3. "Does your organisation have a risk management function to assess and monitor social media risks?"

The above questions were used as they closely relate to the questions asked in the questionnaire and objectives of this research study.

#### **4.2.3 Preliminary analysis**

Descriptive analysis was performed on the original values to illustrate frequencies, cumulative frequencies, percentages and cumulative percentages. Descriptive analysis was also performed on closed-ended questions ("Yes/No" responses) or on statements to be selected. This descriptive analysis was performed to ensure that the original values of all questions in the questionnaire were analysed and presented data for interpretation. These are described in sections 4.3.2 and 4.3.3. (Refer to Appendix F for printouts of raw data analysis results.)

#### **4.2.4 Inferential statistics**

Multiple variables of the questionnaire for Likert-type Scale questions were measured using Cronbach's alpha to illustrate how well a set of multiple variables relates to a single variable which provides for analysis of any relationships and trends for interpretation. The value of the Cronbach's alpha coefficient will be higher when there is a similar correlation between variables of statements that are compared. The Cronbach's alpha coefficient is usually low when the data has a multiple variable that is not related and has multiple constructs. The researcher generally accepts the Cronbach's alpha coefficient of 0.70 and above to correlate the level of reliability of the data (Nunnally, 1978:248-292 cited in Smit, 2012:223).

As mentioned in section 4.2.3, closed-ended questions such as "Yes" and "No" responses or questions that prompted statement selections were grouped and comparative analysis performed by the researcher to illustrate descriptive analysis for interpretation for the objective of this research study.

#### **4.2.5 Assistance to the researcher**

The data analysed were interpreted and reviewed with the assistance of the CPUT statistician in order to reach conclusions on the quantitative information provided. This was performed in order to ensure any misinterpreted information and data analysis errors were excluded from the final results extracted from the quantitative information.

#### **4.2.6 Sample**

For this research study, purposive sampling was applied to collect information from small, medium and large enterprises in the Cape Metropole. The targeted sample of individuals approached consisted of employees from enterprises in the Cape Metropole who use and are aware of social media and understand social media usage in the enterprise where they are employed.

### **4.3 Analysis**

A response of 90 out of 120 questionnaires distributed was received from enterprises in the Cape Metropole of which 88 questionnaires was completed in full. An analysis was performed only on the 88 questionnaires completed in full.

### 4.3.1 Reliability testing

Cronbach's alpha coefficient was applied to all statements consisting of Likert-type Scale responses in the questionnaire. Table 3.1 below and Appendix D illustrate the Cronbach's alpha coefficients. This table indicates the correlation between each question's statements and the overall Cronbach's alpha coefficient applied.

The table also indicates the consistency of the Cronbach's alpha coefficient if a respective statement was deleted. This measure indicates the correlation of the statement's effect on the Cronbach's alpha coefficient. Therefore, in column 3 (Cronbach's alpha coefficient column) of Table Appendix D, the reliability of the scale would be higher if any of the statements are omitted.

As noted in the Cronbach's alpha coefficient, it was not necessary to remove any statements from the analysis as the Cronbach's alpha coefficient was greater than the value of the statements measured. The removal of any statement would not significantly affect the overall value of each statement's alpha coefficient. For example, if statement Q24\_7 is omitted, the overall coefficient alpha will increase from 0.9050 to 0.9119, which indicates that the questionnaire was a reliable instrument of measurement.

In addition to the above example, questions 7 and 16 from Section B and Section C respectively in Appendix D were statements that did not allow for Likert-type Scale responses. Therefore, by applying the Cronbach's alpha coefficient to these two questions, low Cronbach's alpha coefficient of 0.600111 and 0.571390 were calculated for the statements measured. This indicates that Cronbach's alpha coefficient is only suitable and reliable for Likert-type Scale questions.

**Table 3.1: Cronbach's alpha coefficients for survey measuring instrument**

Statements (Sections from questionnaire)	Cronbach's alpha	Standard Cronbach's alpha
Section E – Social media (risk management)	0.852328	0.854693
Section F – Social media (controls)	0.905021	0.907484
Section G – Social media risks	0.857340	0.860778
Cronbach's alpha coefficient for standardised variable	0.809095	
Cronbach's alpha coefficient for raw variables	0.812818	

According to Cronbach's alpha coefficient in Table 3.1 for the statements measured in the questionnaire using the Likert-type Scale, the overall Cronbach's alpha coefficient for raw variables are 0.812818, and the overall Cronbach's alpha coefficient for standardised variables is 0.809095. Therefore, both the overall Cronbach's alpha coefficient for raw variables and standard variables are greater than the acceptable level of 0.70, which indicates that the data is reliable for analysis.

The variables for Q7 and Q16 were excluded from the overall Cronbach's alpha coefficient for standardised variable and raw variables to ensure that an acceptable level of reliability is calculated (refer to Appendix D). Therefore, the Cronbach's alpha coefficient measuring instrument provided an acceptable level of reliability and consistency for the statements analysed.

#### **4.3.2 Descriptive statistics**

Appendix E shows the frequencies of each section and question, including the percentage out of the total number of questionnaires. The descriptive statistics are based on the data obtained and reflected in Appendix F (*Frequency data report*).

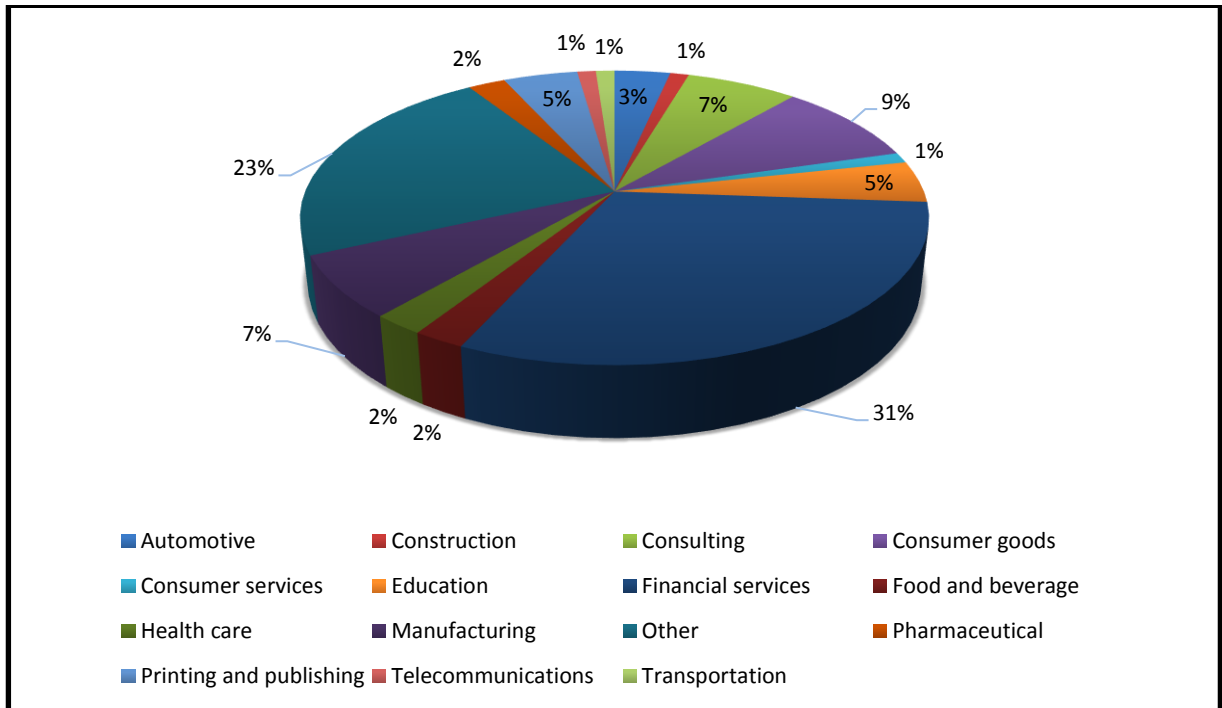
#### **4.3.3 Univariate graphs**

As explained in section 4.2.3, descriptive statistics on the analysis performed is illustrated and described in the univariate graphs below as per the individual sections of the questionnaire designed. The descriptive statistics provide details on the analysis results and findings extracted from the univariate graphs for the individual sections of the questionnaire.

##### **4.3.3.1 Section A - Business identification**

Section A of the questionnaire obtained responses on the classification of the industry in which the respondent is employed, the size of the enterprise, the staffing level of the respondent and the amount of time the respondent is employed in the respective position at the enterprise.

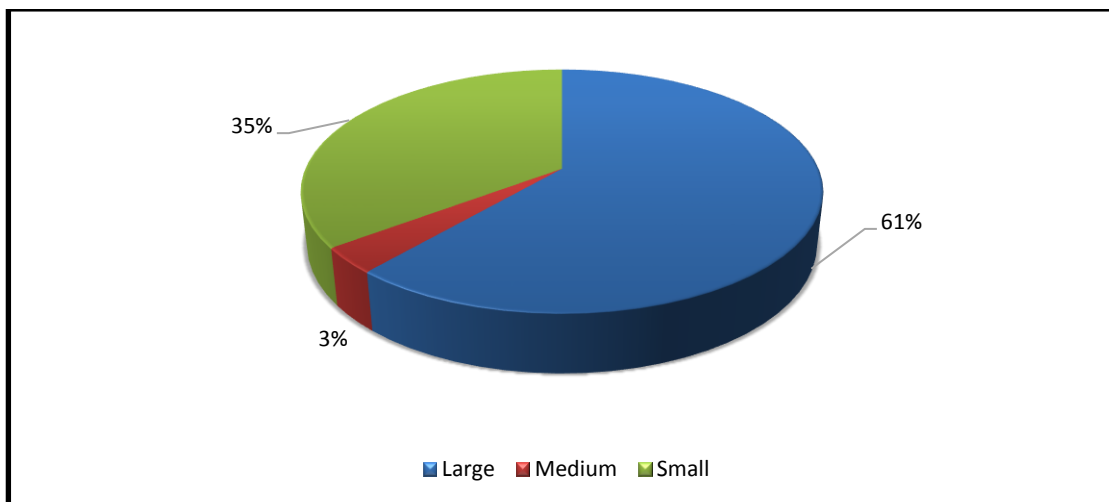
#### 4.3.3.1.1 Classification of industries



**Figure 4.1: Classification of industries**

According to Figure 4.1, the industry that had the greatest response was “Other” at 31%, followed by “Financial Services” at 23%. With regard to the enterprises listed under “Other”, respondents consisted of employees who had positions in Marketing, Tourism, Communication, Accounting, Auditing and Management.

#### 4.3.3.1.2 Classification of enterprise size



**Figure 4.2: Classification of enterprise size**

As the objective of the research study was to focus on small (0 – 99 employees), medium (100 – 200 employees) and large (more than 200 employees) enterprises, it is evident in Figure 4.2 that the majority of enterprises that participated consisted of large enterprises at 61%, with small enterprises at 35% and only 3% comprising medium enterprises.

#### 4.3.3.1.3 Classification of staffing level

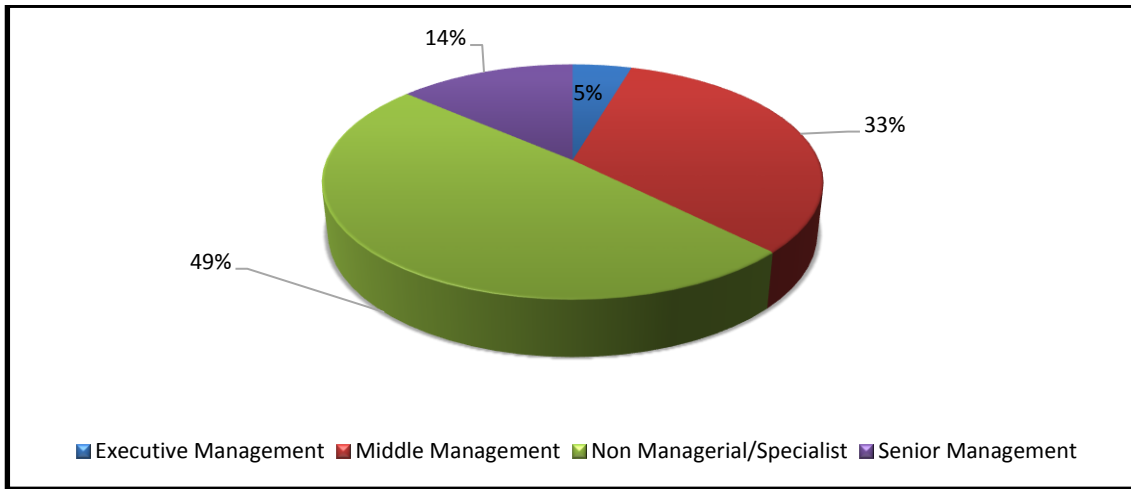


Figure 4.3: Classification of staffing level

According to Figure 4.3, almost half (49%) of the respondents were in non-managerial positions or specialists, and 33% were middle management. The participation percentage for senior management (14%) and executive management (5%) collectively was low at 18%.

#### 4.3.3.1.4 Time employed in a particular position

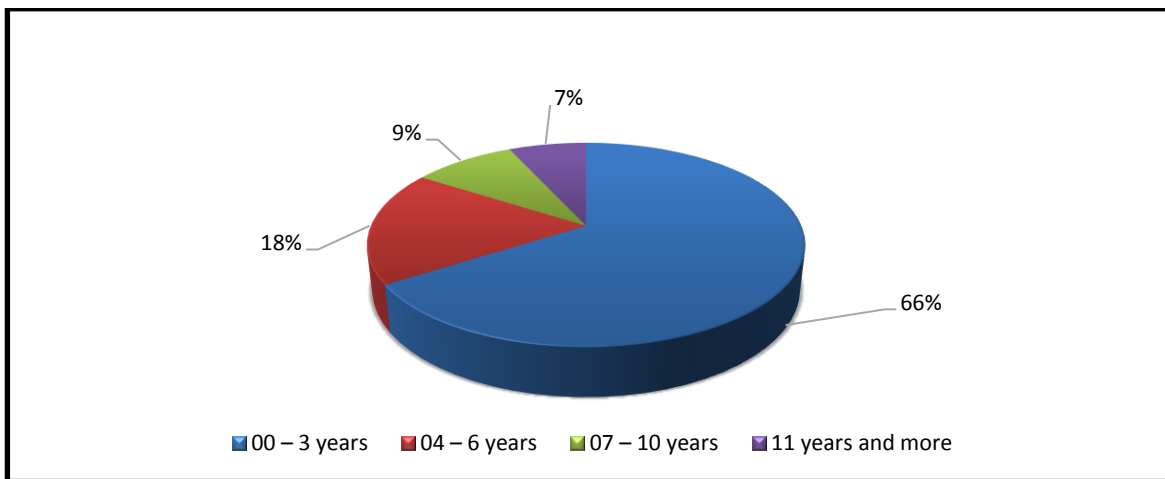


Figure 4.4: Time employed in a particular position

Figure 4.4 illustrates that 66% of the respondents had been employed in a particular position for 0 – 3 years and 34% for 4 – 11 years and more.

#### 4.3.3.2 Section B - Social media usage by the enterprise

This section provided information on the enterprise’s social media usage by determining the purpose and frequency of social media platforms used.

##### 4.3.3.2.1 Enterprises using social media platforms

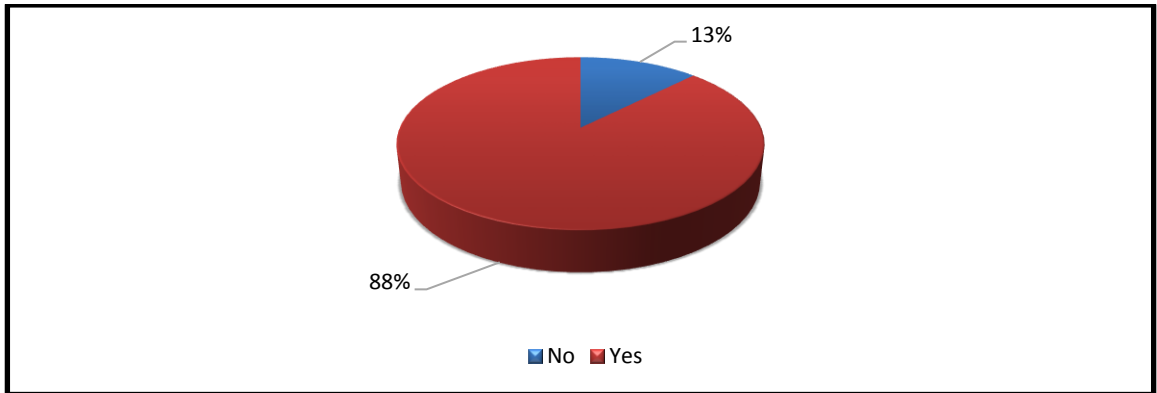


Figure 4.5: Enterprises using social media platforms

Figure 4.5 indicates that 88% of the enterprises that participated in the research study use social media platforms. The purpose and type of social media platforms used is further explained in Figure 4.6.

##### 4.3.3.2.2 Purpose and usage of social media platforms accessed by enterprises

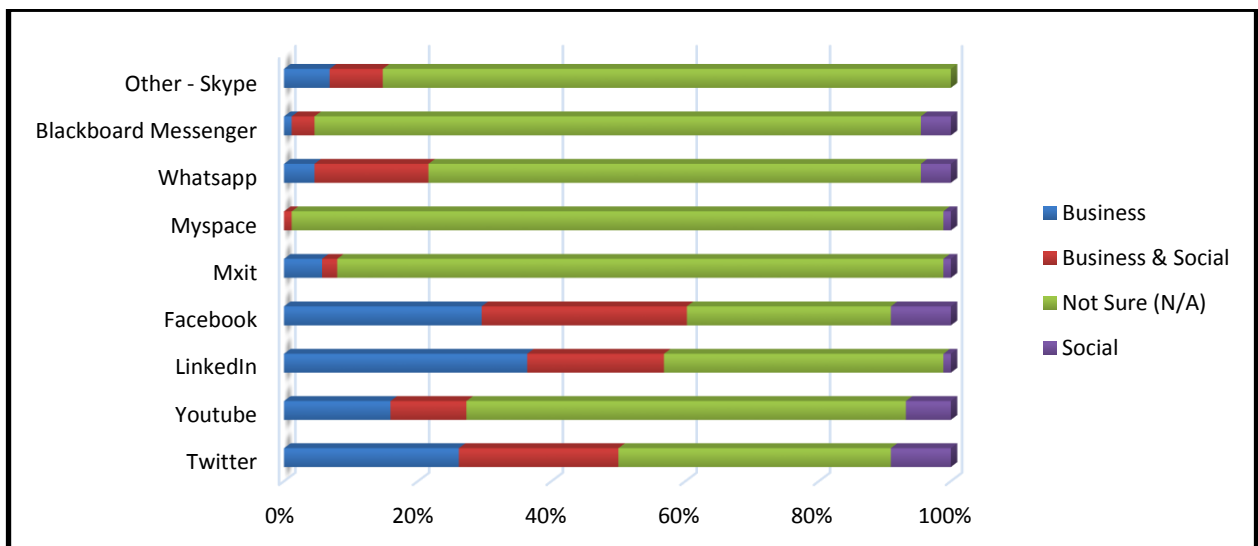


Figure 4.6: Purpose and usage of social media platforms accessed by enterprises



Respondents were provided with a list of social media platforms to indicate which platforms are used by the enterprise and what the platforms are used for i.e. “business” purposes, “business & social” purposes, or “social” purposes and if the platform was not used “N/A”. Combining “business” purposes, “business & social” purposes, “social” responses provided statistics on only the usage of the above social media platforms used by the enterprise. Listed in descending order, these statistics are:

- Facebook (69%);
- Twitter (59%);
- LinkedIn (58%);
- YouTube (34%);
- WhatsApp (26%);
- Other – Skype (15%);
- Blackboard Messenger (9%);
- Mxit (9%); and
- Myspace (2%).

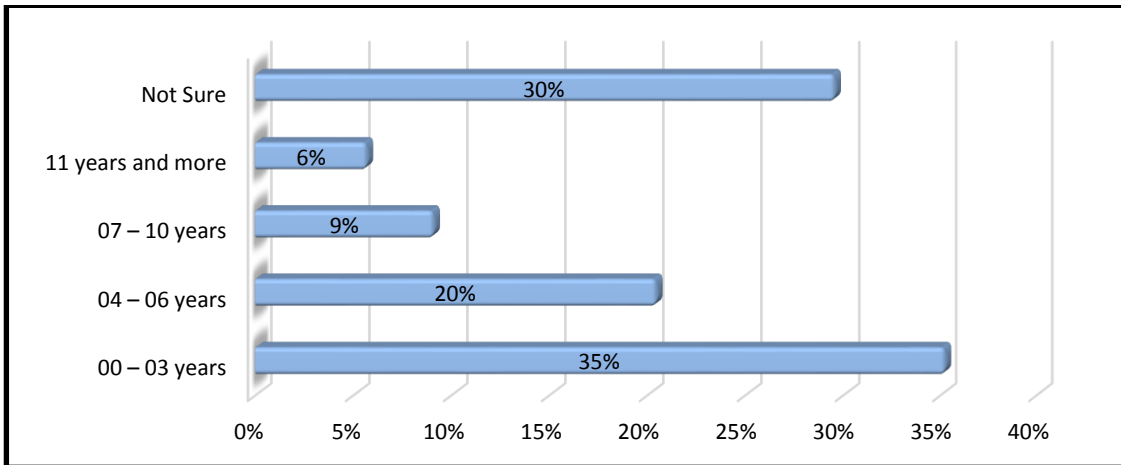
A review of the above list of social media platforms used by enterprises shows that Facebook, Twitter and LinkedIn are the most popular social media platforms used by enterprises.

By reviewing the specific purpose of the social media platforms used by enterprises in Figure 4.6, the top three social media platforms’ statistics are discussed below. Based on the results, it is evident that LinkedIn (36%), Facebook (30%) and Twitter (26%) are the social media platforms enterprises used mostly for “business” purposes.

In respect to enterprises using social media platforms for “business & social” purposes, Figure 4.6 indicates that LinkedIn (20%), Facebook (31%) and Twitter (24%), the same platforms mostly used by enterprises for “business” purposes, are closely related for their usage and purpose. In terms of “social” usage, enterprises are mostly not using any of the social media platforms as all the platforms were used less than 9% for “social” purposes, for example, Twitter (9%), Facebook (9%) and YouTube (7%).

However, it is also clear that many of the enterprises are unsure or do not use the social media platforms for business or social purposes, more specifically as far as Myspace (98%), Blackboard Messenger (91%), Mxit (91%) and Skype (85%) are concerned.

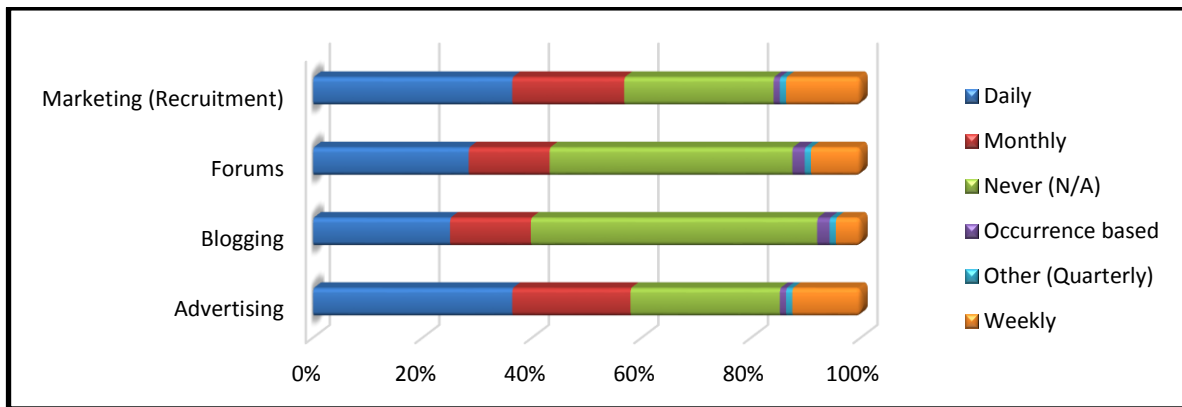
#### 4.3.3.2.3 Number of years enterprises have been using social media platforms



**Figure 4.7: Number of years enterprises use social media platforms**

Social media platforms have mostly been used by enterprises for the past 0 - 3 years as indicated in Figure 4.7 at 35%; thereafter, 4 - 6 years at 20% and for 7 years and more, collectively, at 15%. There is also a group of respondents (30%) who were “not sure” as to how long their enterprises have been using social media platforms.

#### 4.3.3.2.4 Frequency of social media platforms used for business purposes



**Figure 4.8: Frequency of social media platforms used for business purposes**

The frequency of social media platforms used for business purposes such as marketing (recruitment), forums, blogging and advertising was used to measure which business purpose enterprises regarded as most relevant. By combining the frequencies for each social media platform used for business purposes (excluding the results for Never “N/A”), the following statistics in ascending order indicated that social media platforms are used mostly for:

- Marketing (recruitment) (73%);
- Forums (56%);
- Blogging (48%); and
- Advertising (36%).

As listed above, social media platforms are frequently used for business purposes such as marketing (recruitment) and forum activity. Enterprises used social media platforms for marketing (recruitment) purposes in order to communicate and attract external candidates for employment. Furthermore, marketing (recruitment) (36%), advertising (36%), forums (28%) and blogging (25%) are mostly used on a daily basis for business purposes.

Thereafter, on a monthly basis, 22% use social media platforms for business purposes such as advertising, 20% for marketing and 15% for both blogging and forums. Social media platforms are not frequently used on an occurrence/weekly/quarterly basis for business purposes as, on average, less than 5% applied these frequencies. Evident from the enterprises that participated, 52% do not use social media platforms for blogging, 44% for forums and 27% for both advertising and marketing.

#### 4.3.3.3 Section C - Social media usage by the employee

This section provided information about the employee’s usage of social media platforms as well as the purpose, frequency and time spent by the employee using social media platforms at the enterprise.

##### 4.3.3.3.1 Number of enterprises whose employees use social media platforms for business purposes

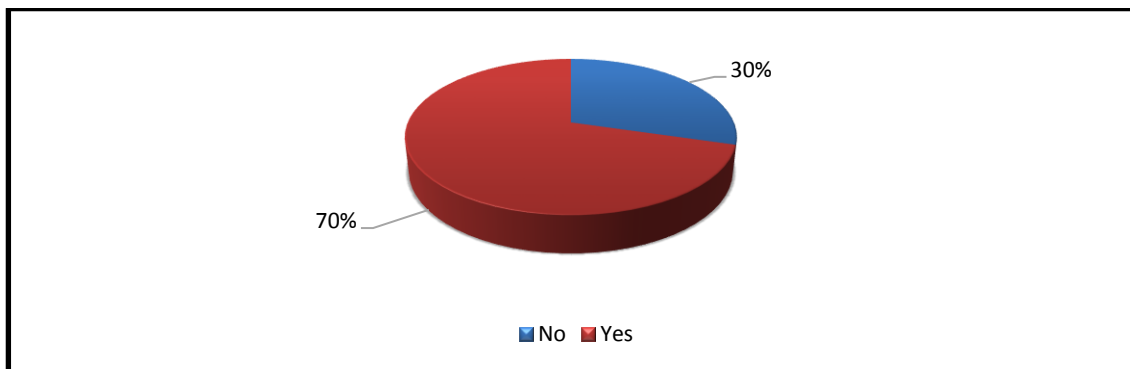


Figure 4.9: Number of enterprises whose employees use social media platforms for business purposes

Figure 4.9 indicates that the employees of 70% of the enterprises that participated in the research study use social media platforms for business purposes. A low 30% do not have any employees using social media platforms for business purposes.

#### 4.3.3.3.2 Number of enterprises that allow employees to access social media platforms for personal/social use during business hours

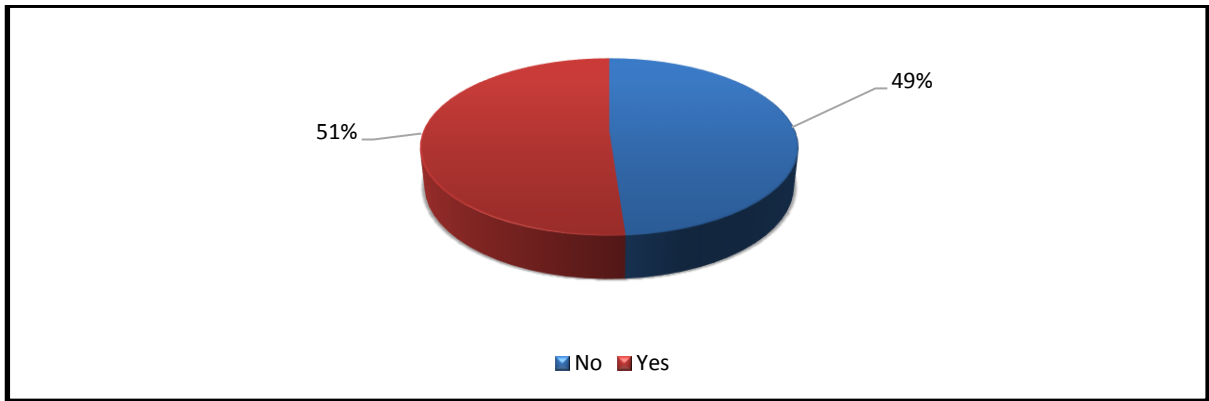


Figure 4.10: Number of enterprises that allow employees to access social media platforms for personal/social use during business hours

The number of enterprises that allow or deny employees to access social media platforms for personal/social use during business hours is nearly even at 51%, who allow their employees access to these platforms and 49% who deny access.

#### 4.3.3.3.3 Number of enterprises that think employees should have access to social media platforms during business hours

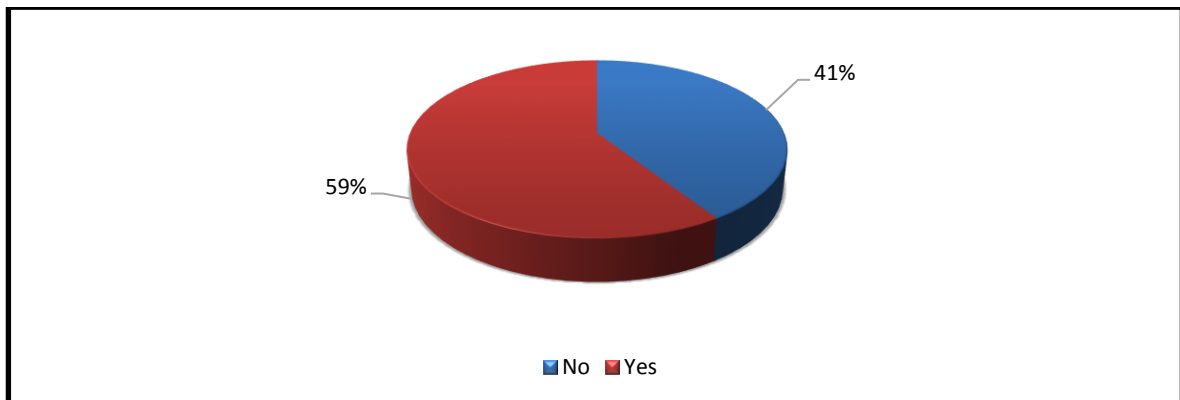
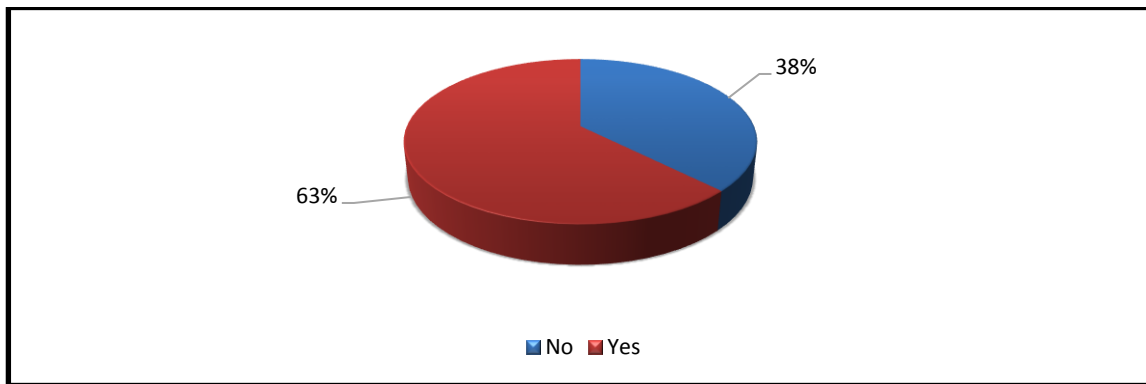


Figure 4.11: Number of enterprises that think employees should have access to social media platforms during business hours

In relation to Figure 4.10, the result is similar as 59% of enterprises that participated, think that employees should have access to social media platforms during business hours. There is a very small variance in the percentage of 8% for the number of enterprises that allow employees to access social media platforms for personal use during business hours, namely 51%.

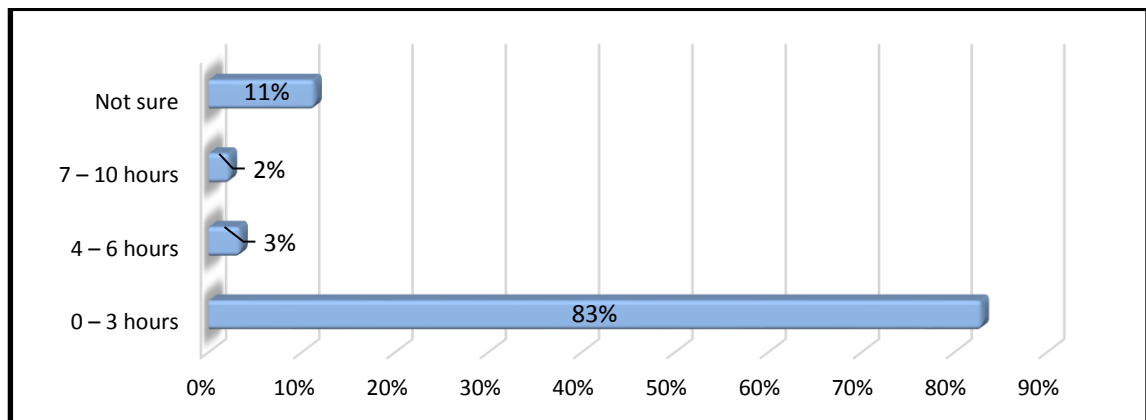
**4.3.3.3.4 Number of employees accessing social media platforms using the enterprise’s resources**



**Figure 4.12: Number of employees accessing social media platforms using the enterprises resources**

Figure 4.12 indicates that 63% of employees access social media platforms using the enterprise’s internet and computer facilities/workstations while 38% do not access social media platforms via any of the enterprise’s resources at all.

**4.3.3.3.5 Daily number of hours employees spend accessing social media platforms for business purposes**



**Figure 4.13: Daily number of hours employees spend accessing social media platforms for business purposes**

According to Figure 4.13, the majority (83%) of the employees access social media platforms at their enterprises for business purposes for between 0 - 3 hours daily. Collectively, 6% of the employees access social media platforms at their enterprises for business purposes for between 4 - 10 hours daily. However, 11% of the employees are not sure how long they spend accessing social media platforms daily.

#### 4.3.3.3.6 Daily number of hours employees spend accessing social media platforms for personal/social use

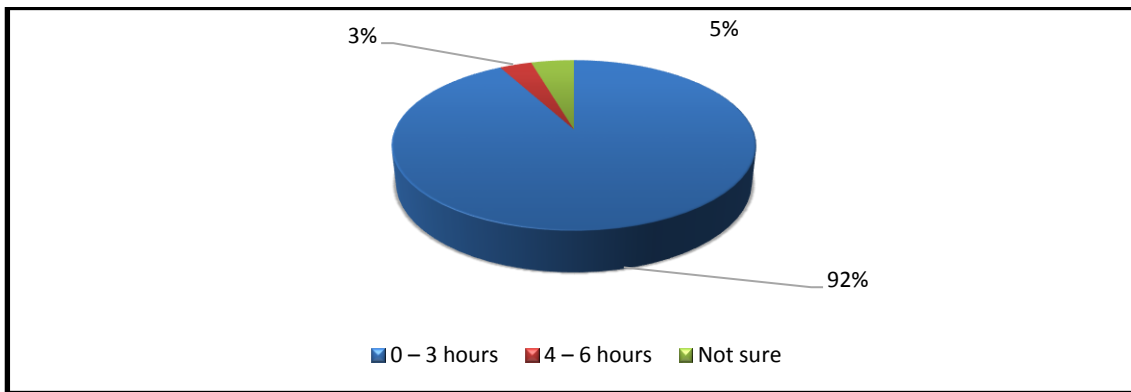


Figure 4.14: Daily number of hours employees spend accessing social media platforms for personal/social use

According to Figure 4.14, 92% of employees spend 0 - 3 hours a day accessing social media platforms at their enterprises for personal/social use. A small percentage of 3% of employees access social media platforms at their enterprises for personal/social use for between 4 - 6 hours a day.

#### 4.3.3.3.7 Purpose and usage of social media platforms accessed by employees

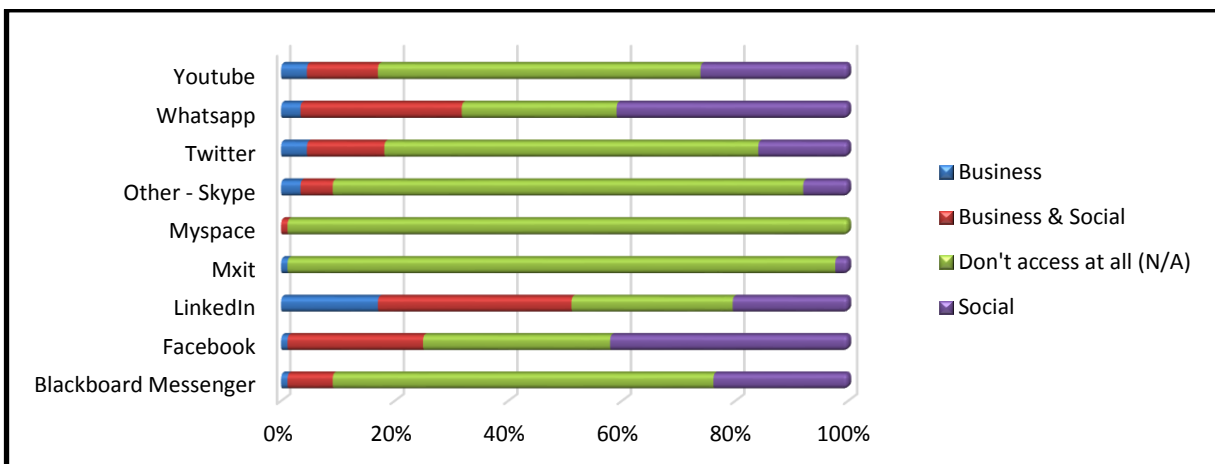


Figure 4.15: Purpose and usage of social media platforms accessed by employees

On average, 62% of the above social media platforms are “not accessed at all” by employees at the enterprise. They are Myspace (99%), Mxit (97%), other – Skype (83%) Blackboard Messenger (67%) and Twitter (66%), making up the majority of the social media platforms not accessed.

However, employees do access Facebook (42%), WhatsApp (41%), YouTube (26%), Blackboard Messenger (27%), LinkedIn (20%) and Twitter (16%) at the enterprise for “social” purposes.

By further reviewing Figure 4.15, social media platforms that are accessed by employees for social purposes, closely relate to the social media platforms that are accessed by employees for “business and social” purposes such as LinkedIn (34%), WhatsApp (28%), Facebook (24%) and Twitter (14%).

#### 4.3.3.4 Section D - Social media enterprise policies and restrictions

This section identified social media policies and restrictions in place which employees adhere to when using social media platforms in the enterprise.

##### 4.3.3.4.1 Number of enterprises that have social media policies

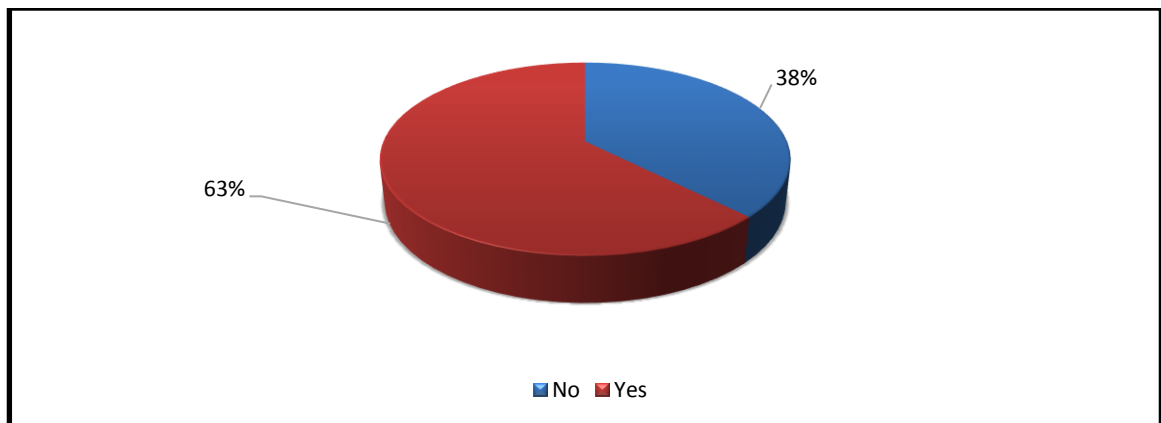
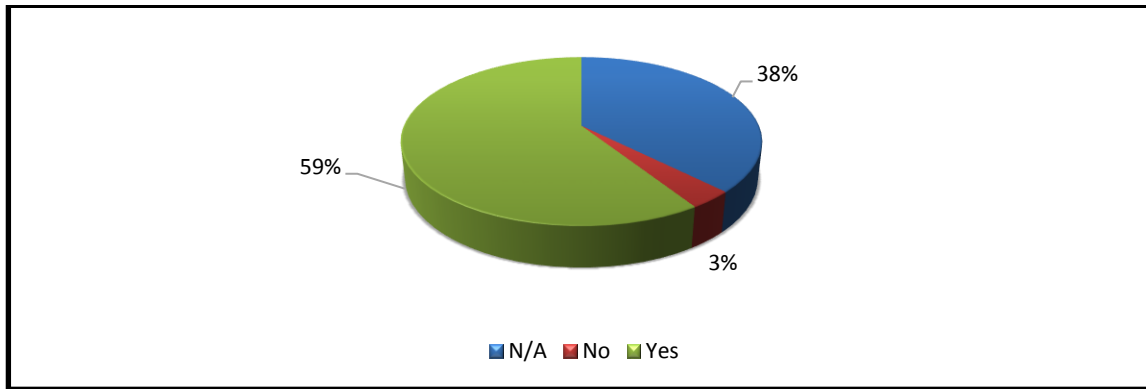


Figure 4.16: Number of enterprises that have social media policies

According to Figure 4.16, only 63% of the enterprises that participated had social media policies in place to provide governance and guidance over best practices when using social media platforms while 38% had no social media policies in place.

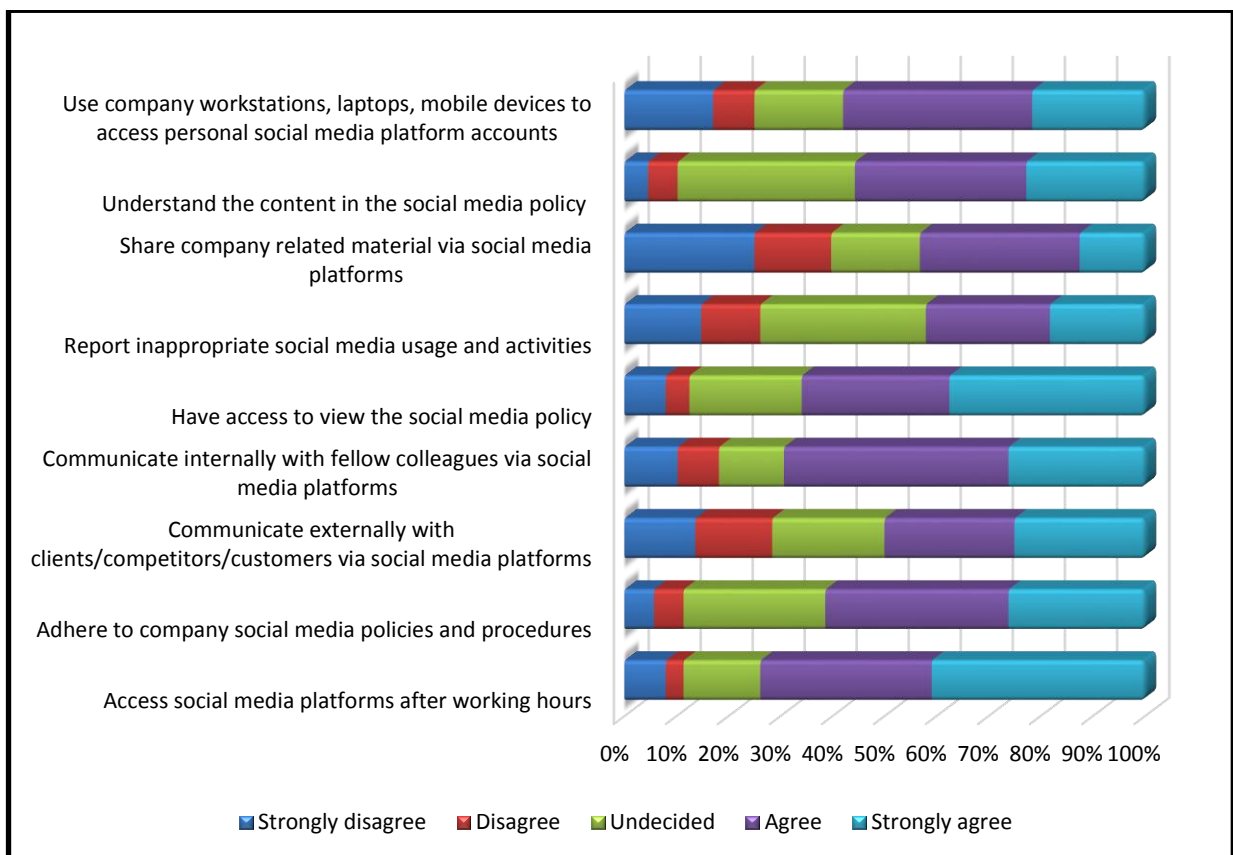
#### 4.3.3.4.2 Alignment of enterprise's social media activities to social media policy



**Figure 4.17: Enterprise's social media activities alignment to social media policy**

Figure 4.17 indicates the number of enterprises that have social media policies in place that are aligned to social media activities. It reveals that 59% of the enterprises have social media policies aligned to the enterprise's social media activity, and only 3% of the enterprises do not have social media policies aligned to social media activities.

#### 4.3.3.4.3 Understanding employees' awareness of social media policy in the enterprise



**Figure 4.18: Understanding employees' social media activity in the enterprise**

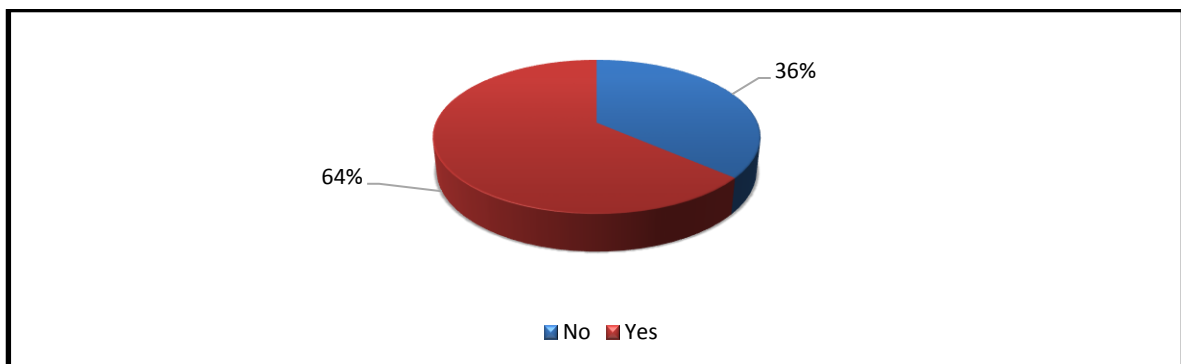


Statements were provided to respondents to gain an understanding of employees' awareness of social media policies in the enterprise. The statements listed in Figure 4.18 mostly reflected "Undecided" to "Strongly agree" responses. This indicated that there is a great awareness of social media policies by employees and a moderate response for governance procedures and control by the enterprise. For analysis purposes, the variable "Undecided" was interpreted as a moderate response for the statements measured.

The statements which respondents moderately to strongly agreed to are in descending order as follows:

- Employees of the enterprises understand the content in the social media policy (90%);
- Employees adhere to the enterprise's social media policies and procedures (89%);
- Employees access social media platforms after working hours (89%);
- Employees have access to view the social media policy (88%);
- Employees communicate internally with fellow colleagues via social media platforms (82%);
- Employees use company workstations, laptops and mobile devices to access personal/social media platform accounts (75%);
- Employees report inappropriate social media usage and activities (74%);
- Employees communicate externally with clients, competitors and customers via social media platforms (72%); and
- Employees share enterprise-related material via social media platforms (60%).

#### 4.3.3.4.4 Access restrictions to social media platforms listed in the social media policy



**Figure 4.19: Access restrictions to social media platforms listed in the social media policy**

Figure 4.19 indicates that only 64% of the enterprises have access restrictions listed in the social media policy for employees to be aware of when accessing social media platforms.

Approximately one-third (36%) of enterprises does not have restrictions listed in social media policies for employees to adhere to when accessing social media platforms.

#### 4.3.3.5 Section E - Social media (risk management)

This section identified whether enterprises had risk management functions in place and which department played a role in the enterprise to provide governance and management of risks associated with social media use.

##### 4.3.3.5.1 Enterprise risk management function for social media risks

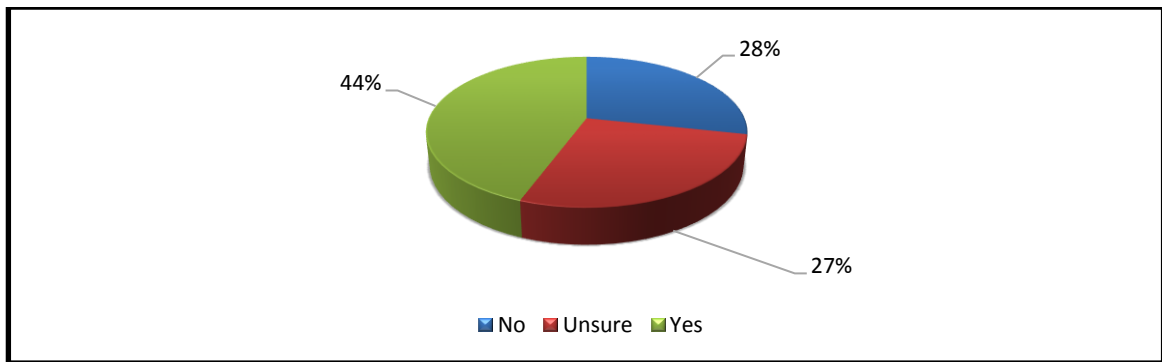


Figure 4.20: Enterprise risk management function for social media risks

The usage of social media by employees and enterprises requires risk management and governance control activities to ensure social media risks are adequately assessed and monitored. Figure 4.20 indicates that 44% of the enterprises have a risk management function in place to assess and monitor social media risks, 28% of the enterprises do not have any risk management and governance functions in place, and 27% are not aware of any risk management and governance functions that are in place.

##### 4.3.3.5.2 Type of enterprise risk management function

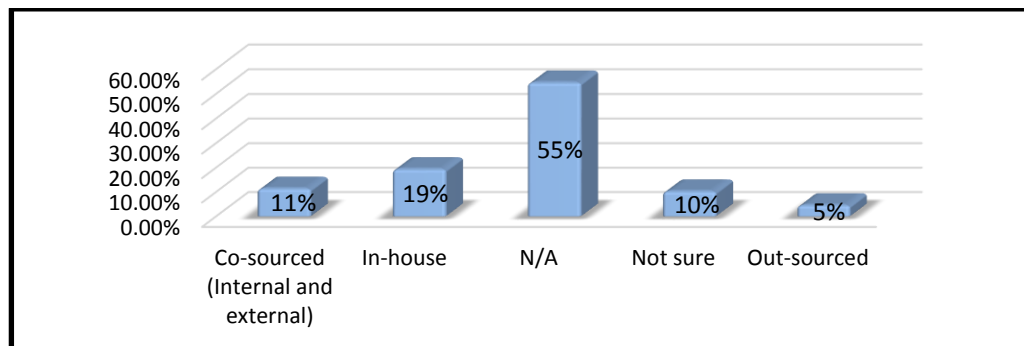
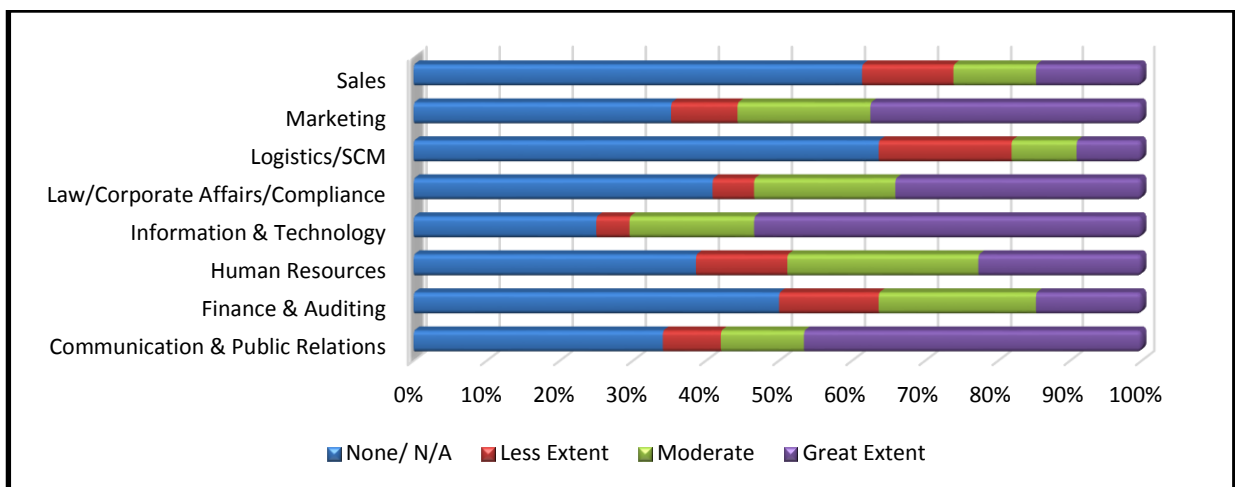


Figure 4.21: Type of enterprise risk management function

Figure 4.21 identifies that the following types of enterprise risk management function listed in ascending order are in place:

- 55% of the enterprises indicated that enterprise risk management's functions were not applicable, which could be related to the observation in Figure 4.20 that 56% of the enterprises did not have or were not sure if an enterprise risk management function was in place;
- 19% had in-house enterprise risk management functions in place which were managed by the enterprise;
- 11% had co-sourced enterprise risk management functions in place that consisted of both in-house and outsourced risk management business partners; and
- 5% outsourced enterprise risk management functions to external enterprises to manage.

#### 4.3.3.5.3 Departments involved in the risk management of social media usage



**Figure 4.22: Departments involved in the risk management of social media usage**

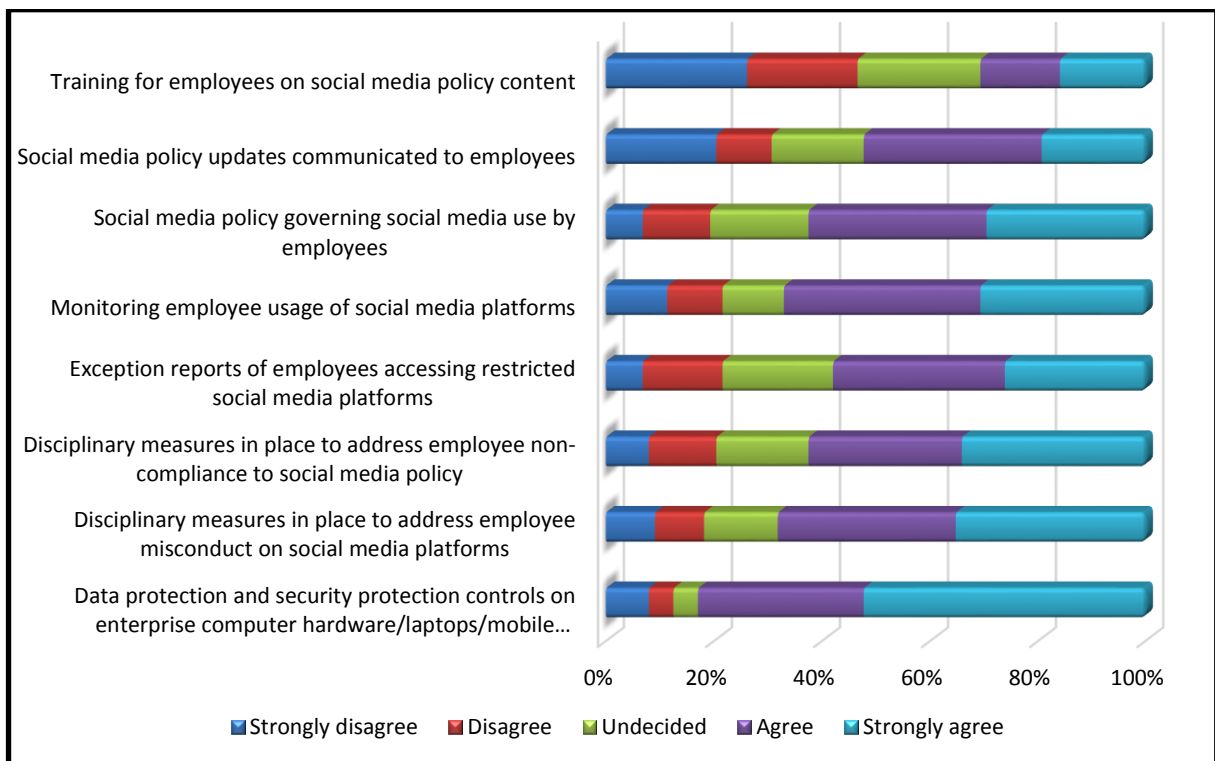
Risk management functions can be managed by one department or supported by multiple departments in an enterprise. Figure 4.22 identifies the extent to which the above departments play a role in the enterprise in reducing and managing the risks associated with using social media platforms. For the purposes of the above figure, the responses for “Moderate” to “Great extent” were grouped together, and “None/ N/A” and “Lesser extent”, as the combined responses indicated a greater value towards either two of the variables grouped together. The results for each of the two groups have been interpreted in ascending order as follows:

- The respondents stated that Information & Technology (70%), Communications & Public Relations (58%), Marketing (56%) and Law/Corporate Affairs/Compliance (53%) departments have a moderate to great involvement in supporting the enterprise’s risk management function for the monitoring and assessing of social media usage; and
- Alternatively, the respondents also stated that Logistics/ Supply Chain Management (82%), Sales (74%), Finance and Auditing (64%) and Human Resources (51%) have nearly no or less involvement in supporting the enterprise’s risk management function to monitor and assess the use of social media.

#### 4.3.3.6 Section F - Social media (controls)

This section identifies what key controls enterprises have in place to mitigate social media risk and monitor social media usage by employees in the enterprise.

##### 4.3.3.6.1 Enterprise controls implemented for social media



**Figure 4.23: Enterprise controls implemented for social media**

Employees were required to provide their opinion with regard to whether they agree or disagree with the statements shown in Figure 4.23. The statements listed relate to the controls enterprises have in place or have implemented to manage social media. The

statements listed in Figure 4.23 mostly obtained “Undecided” to “Strongly agree” responses.

This indicated that key controls are in place to manage social media in the enterprise. For analysis purposes, the variable “Undecided” was interpreted as a moderate response for the statements measured. The statements which respondents moderately to strongly agreed to are in descending order as follows:

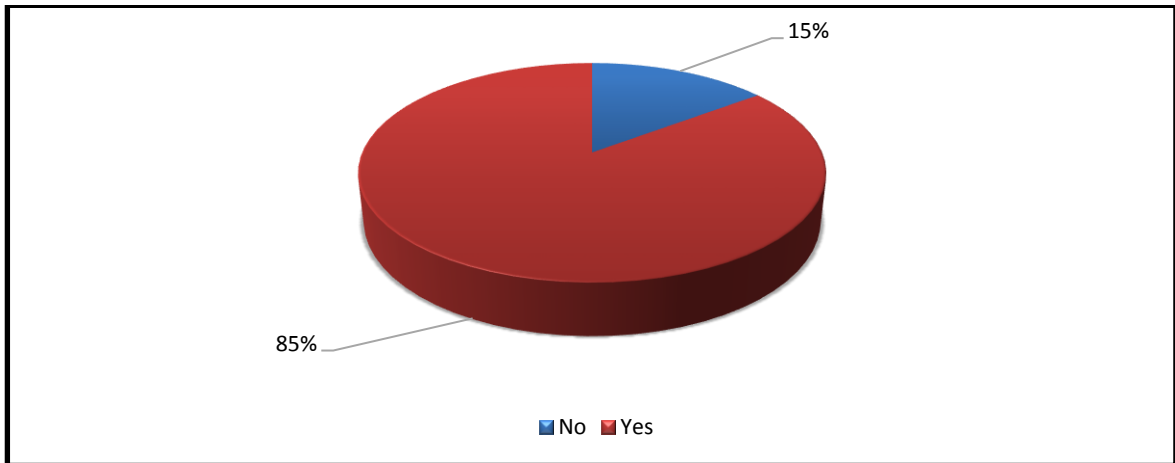
- 88% of the enterprises have data protection and security protection controls in place to manage and monitor the enterprise’s computer hardware/laptops/mobile devices/workstations used by employees;
- 82% of the enterprises have disciplinary measures in place to address employee misconduct on social media platforms;
- 81% of the enterprises have a social media policy in place which provides governance for the use of social media by employees;
- 80% have disciplinary measures in place to address employee non-compliance with the enterprise’s social media policy;
- 78% of the enterprises monitor exception reports of employees accessing restricted social media platforms;
- 78% of the enterprises monitor employee usage of social media platforms;
- 69% of the enterprises provide social media policy updates and communications to employees which relate to social media usage in the enterprise and by the employee; and
- 53% of the enterprises provide training for employees on the content of the enterprise’s social media policy.

From the above figure, it can also be observed that 31% of the employees disagreed to strongly disagreed with the statement that their enterprise did not provide training for employees on the content of social media policies.

#### **4.3.3.7 Section G - Social media risks**

This section provides information from the respondents to gain an understanding of the social media usage risks for the enterprise and what awareness the respondents have about social media usage’s impact and effect on the enterprise.

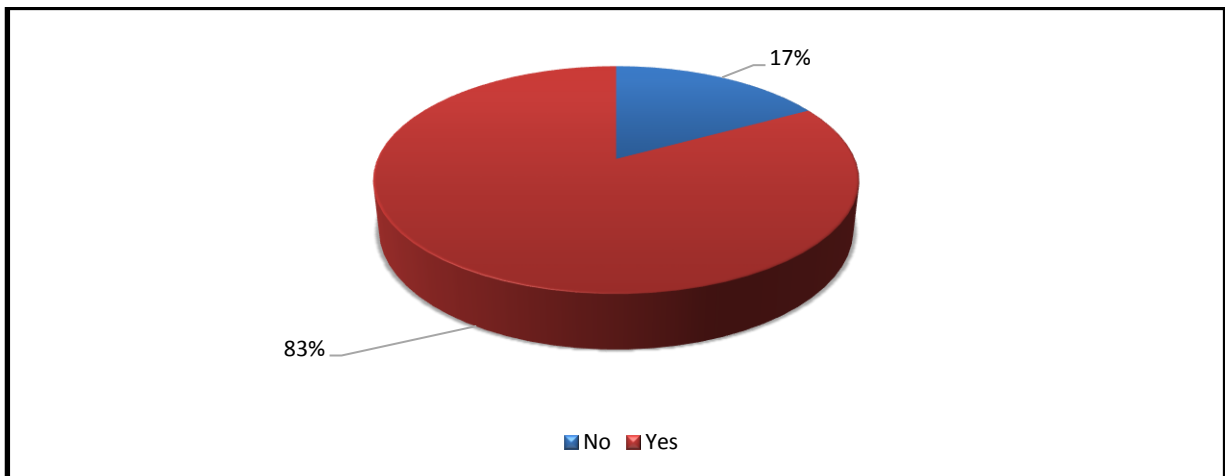
#### 4.3.3.7.1 Employee understanding of risks relating to social media in the enterprise



**Figure 4.24: Employee understanding of risks relating to social media in the enterprise**

Figure 4.24 indicates that the majority (85%) of employees from the enterprises that participated in the research study understood the risks relating to social media in their enterprise. A small portion of the participants (15%) did not have an understanding of risks relating to social media in the enterprise.

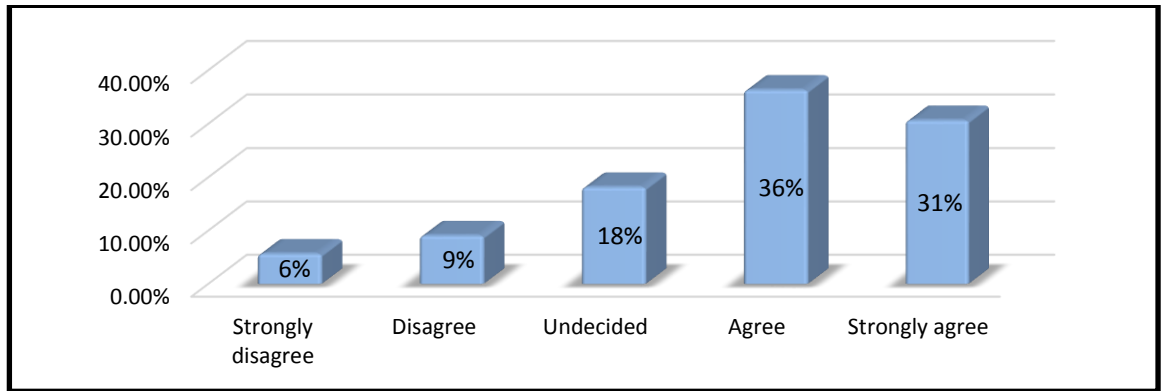
#### 4.3.3.7.2 Employee understanding of risks relating to social media within own function/department/business unit



**Figure 4.25: Employee understanding of risks relating to social media within own function/department/business unit**

The results in Figure 4.25 correspond with those of Figure 4.24 and indicate that 83% of the employees had an understanding of risks relating to social media within their own function/department/business unit.

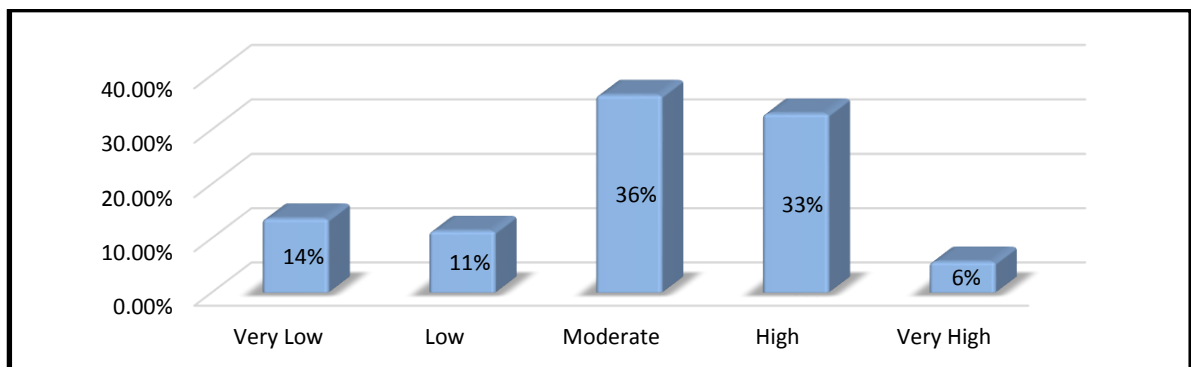
#### 4.3.3.7.3 Management of social media risks in the enterprise



**Figure 4.26: Management of social media risks in the enterprise**

In Figure 4.26, employees were required to provide an opinion as to how well social media risks have been managed in their enterprise based on past occurrences experienced within the enterprise employed. The figure indicated that 67% (“Agree and “Strongly agree) of the employees agreed that their enterprise managed social media risks well.

#### 4.3.3.7.4 Impact level of social media risk on the enterprise

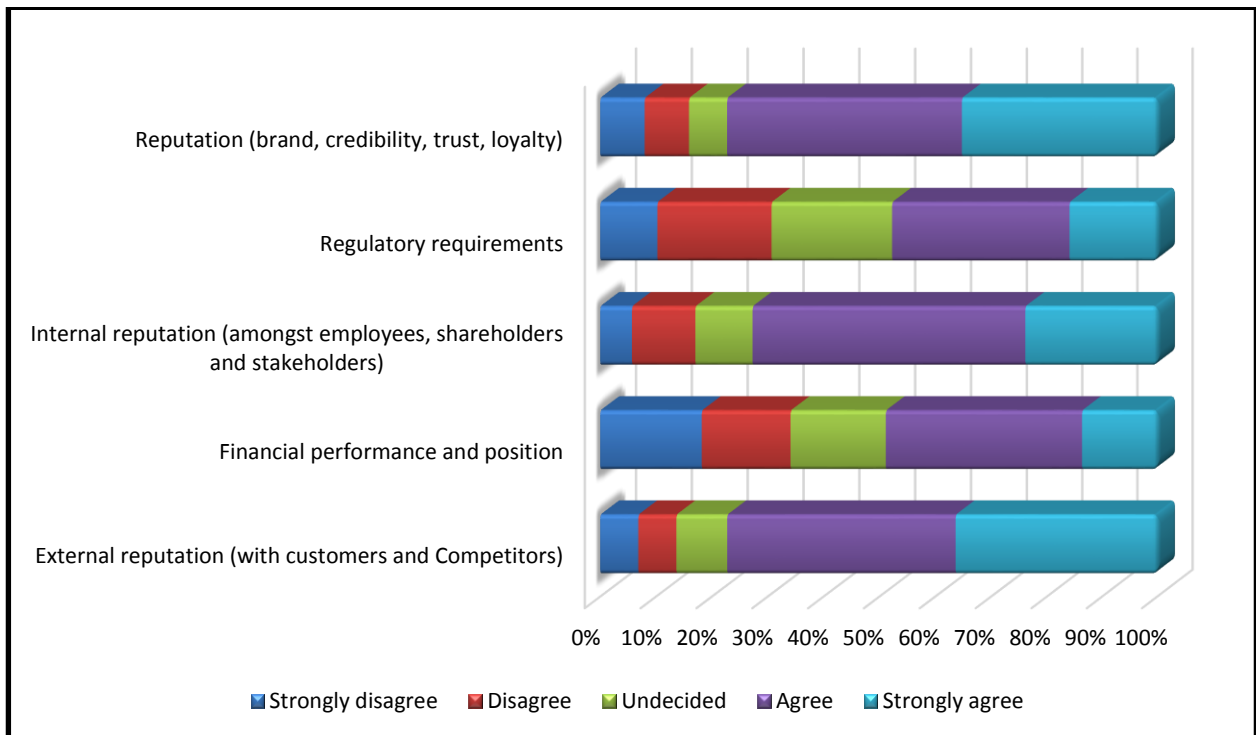


**Figure 4.27: Impact level of social media risk on the enterprise**

In Figure 4.27, employees were required to provide an opinion as to the level of impact social media risks would have on their enterprise. The statement in Figure 4.27 mostly obtained “Moderate” and “High” responses.

This indicated that employees understood that social media risks had a significant impact on their enterprise, which is also dependent on the type of industry in which the enterprise conducts its business. As a result, 75% of the employees were of the opinion that social media risks could have a moderate to very high level of impact on the enterprise.

#### 4.3.3.7.5 Negative effects of social media risks on enterprises



**Figure 4.28: Negative effects of social media risks on enterprises**

As employees had an awareness and understanding of the level of impact of social media risks on the enterprise, as illustrated in Figure 4.27, the above figure measured the negative effects of these risks. The statements listed in Figure 4.28 mostly obtained “Undecided” to “Strongly Agree” responses. For analysis purposes, the variable “Undecided” was interpreted as a moderate response for the statements measured.

The statements which respondents moderately to strongly agreed to are in descending order as follows:

- 86% of the employees confirmed that social media could negatively affect the enterprise’s external reputation among business partners such as customers, suppliers and competitors;
- 84% of the employees confirmed that social media could negatively affect the reputation of the enterprise’s brand, credibility, trust and loyalty, should a service or product be affected;
- 83% of the employees confirmed that social media could negatively affect the enterprise’s internal reputation among key stakeholders, employees and shareholders;



- 69% of the employees agreed that social media risks could result in the imposition of non-adherence regulatory and legislative requirements which might impact the enterprise negatively; and
- 66% of the employees stated that social media could negatively affect the financial performance and position of the enterprise.

#### **4.4 Summary of results and findings**

The following results and findings were identified and are summarised below for Sections A – G:

##### **4.4.1 Section A - Business identification**

This section provides results on the classification of the respondents' industries, the size of the enterprise, the staffing level of the respondent and the period of time the respondents have been employed in the respective position at the enterprise.

##### **4.4.1.1 Results**

- The industries that had the greatest responses were “Other” at 31% and “Financial Services” at 23%;
- 61% of the respondents who participated came from large enterprises (more than 200 employees) and 35% from small (0 – 100 employees) enterprises;
- 49% of the respondents are in non-managerial positions or specialists and 33% are middle management; and
- 66% of the respondents have been employed for 0 – 3 years while 34% have been employed in their present position for 4 – 11 years and more.

##### **4.4.1.2 Findings**

The results from Section A indicate that responses were obtained from a variety of industries, with nearly two-thirds from large organisations. Non-managerial/specialist and management positions are almost evenly presented in the survey while two-thirds have been in their present position for a short period – three years and less.

##### **4.4.2 Section B - Social media usage by the enterprise**

This section provides results on the enterprises' social media usage of social media platforms by obtaining information on the purpose and frequency of social media platforms used.

#### **4.4.2.1 Results**

- 88% of the enterprises that participated in the research study use social media platforms;
- Social media platforms that are mostly used by enterprises for “business” purposes are LinkedIn (36%), Facebook (30%) and Twitter (26%);
- Social media platforms that are mostly used by enterprises for “business and social” purposes are Facebook (31%), Twitter (24%) and LinkedIn (20%);
- Social media platforms that are mostly used by enterprises for “social” purposes are Twitter (9%), Facebook (9%) and YouTube (7%);
- Social media platforms have been mostly used by enterprises for the past 0 - 3 years (35%), 4 – 6 years (20%) and 7 years and more (15%);
- Social media platforms are mostly used for marketing – recruitment (73%), administration of forums (56%), blogging (48%) and advertising (36%); and
- Social media platforms are mostly used on a daily basis for marketing – recruitment (36%), advertising (36%) administration of forums (28%) and blogging (25%).

#### **4.4.2.2 Findings**

The results in Section B indicate that enterprises have mostly been using social media platforms such as LinkedIn, Facebook and Twitter for business and social purposes (marketing – recruitment and advertising) on a daily basis for the past 0 – 7 years and more, and 88% of enterprises use social media platforms.

LinkedIn, Facebook and Twitter combined represent 92% of the platforms used by businesses. The same platforms mentioned above are also mostly used in the case of social and business purposes (a combined 75%). Enterprises use social media mainly for marketing, administration of forums, advertising and blogging on a daily basis.

#### **4.4.3 Section C - Social media usage by the employee**

This section provides results on the employee’s use of social media platforms by obtaining information of the purpose, frequency and amount of time employees spend on social media platforms at enterprises.

#### **4.4.3.1 Results**

- 92% of employees spend 0 – 3 hours daily to access social media platforms at their enterprises for personal/social use;

- 83% of the employees access social media platforms at their enterprises for business purposes between 0 – 3 hours daily;
- 70% of the employees at the enterprises are using social media platforms for business purposes;
- 63% of employees access social media platforms using the enterprise’s internet and computer facilities/workstations;
- 59% of the enterprises think that employees should have access to social media platforms for personal/social use during business hours;
- 51% of the enterprises allow employees to access social media platforms for personal/social use during business hours;
- Employees mostly access social media platforms such as Facebook (42%) and WhatsApp (41%) for “social” purposes; and
- Employees mostly access social media platforms such as LinkedIn (34%), WhatsApp (28%) and Facebook (24%) for “business and social” purposes.

#### **4.4.3.2 Findings**

The results in Section C indicate that employees are mostly accessing social media platforms such as LinkedIn, Facebook and WhatsApp for business and social purposes daily between 0 – 3 hours using the enterprise’s workstations/facilities.

Most of the respondents believe that enterprises should allow employees to access social media platforms for personal/social use during business hours. The results indicate that half of the enterprises allow employees to access social media platforms for personal/social use during business hours. Moreover, not all enterprises understand the use and purpose of social media platforms by employees in their enterprise.

#### **4.4.4 Section D - Social media enterprise policies and restrictions**

This section identifies social media policies and restrictions enterprises in place for the use of social media platforms by employees.

##### **4.4.4.1 Results**

- 90% of the respondents understand the content in their enterprise’s social media policy;
- 89% of the respondents adhere to the enterprise’s social media policies and procedures;

- 89% of the respondents have access to social media platforms after working hours;
- 88% of the respondents have access to view the enterprise's social media policy;
- 82% of the respondents communicate internally with fellow colleagues via social media platforms;
- 75% of the respondents use company workstations, laptops and mobile devices to access personal social media platform accounts;
- 74% of the respondents report inappropriate social media usage and activities;
- 72% of the respondents communicate externally with clients, competitors and customers via social media platforms;
- 64% of the enterprises have restrictions drafted in the social media policy for employees to be aware of when accessing social media platforms;
- 63% of the enterprises have social media policies in place to provide governance and guidance over best practices for employees when using social media platforms;
- 60% of the respondents share enterprise-related material via social media platforms;
- and
- 59% of the enterprises have social policies aligned to social media activities.

#### **4.4.4.2 Findings**

The results in Section D indicate that most enterprises have social media policies in place to support risk management procedures and practices. Social media activities identified from the results include employees accessing social media platforms after working hours, employees communicating internally with fellow colleagues and externally with clients, competitors and customers via social media platforms and using company workstations, laptops and mobile devices to access personal social media platform accounts.

However, not all enterprises have social media policies in place that are aligned to the enterprise's social media activities for employees to adhere to. Furthermore, not all of these enterprises have restrictions drafted in social media policies for employees to adhere to when accessing social media platforms.

#### **4.4.5 Section E - Social media (risk management)**

This section identifies the risk management functions enterprises have in place and the department that plays a role in providing governance and management of risks associated with social media use.

#### **4.4.5.1 Results**

- 44% of the enterprises have risk management functions in place to assess and monitor social media risks;
- Respondents indicated that Information & Technology (70%), Communications & Public Relations (58%), Marketing (56%) and Law/Corporate Affairs/Compliance (53%) departments have a moderate to great involvement in supporting the enterprise's risk management function for the monitoring and assessing of social media usage; and
- Respondents also indicated that Logistics/Supply Chain Management (82%), Sales (74%), Finance and Auditing (64%) and Human Resources (51%) have virtually no or less involvement in supporting the enterprise's risk management function for the monitoring and assessing of social media usage.

#### **4.4.5.2 Findings**

The results in Section E indicate that not all enterprises have structured and formalised risk management functions in place to assess and monitor social media risks. There is also a lack of awareness among employees as to whether there are risk management functions in place.

#### **4.4.6 Section F - Social media (controls)**

This section identifies the key controls that enterprises have in place to mitigate social media risk and monitor social media usage by employees.

#### **4.4.6.1 Results**

- 88% of the enterprises have data protection and security protection controls in place to manage and monitor the enterprise's computer hardware/laptops/mobile devices/workstations used by employees;
- 82% of the enterprises have disciplinary measures in place to address employee misconduct on social media platforms;
- 81% of the enterprises have a social media policy in place which provides governance for the use of social media by employees;
- 80% have disciplinary measures in place to address employee non-compliance with the enterprise's social media policy;
- 78% of the enterprises monitor employee usage of social media platforms;

- 78% of the enterprises monitor exception reports of employees accessing restricted social media platforms;
- 69% of the enterprises provide social media policy updates and communications to employees which relate to social media usage in the enterprise and by the employee; and
- 53% of the enterprises provide training for employees on the content of the enterprise's social media policy.

#### **4.4.6.2 Findings**

The results in Section F indicate that not all enterprises provide training to employees on social media policies and practices. Enterprises do not have dual controls in place to support risk management procedures and practices and to enhance the control environment. The results indicate that most of the enterprises (78%) monitor employee usage of social media platforms and 78% monitor access reports. Not all enterprises monitor confidential information shared on social media platforms by the enterprise and employees for enterprise and social purposes.

#### **4.4.7 Section G - Social media risks**

This section provides an understanding of the risks relating to social media usage, including the impact and effect of social media usage on the enterprise.

##### **4.4.7.1 Results**

- 85% of the respondents understand the risks relating to social media in their enterprise;
- 83% of the respondents understand the risks relating to social media within their own function/department/business unit;
- 85% of the respondents mostly agree that their enterprise manages social media risk well;
- 75% of the respondent indicated that social media risks could have a moderate to very high level of impact on their enterprise;
- 86% of the employees confirmed that social media could negatively affect the enterprise's external reputation among business partners such as customers, suppliers and competitors;

- 84% of the employees confirmed that social media could negatively affect the reputation of the enterprise's brand, credibility, trust and loyalty should a service or product be affected;
- 83% of the employees confirmed that social media could negatively affect the enterprise's internal reputation among key stakeholders, employees and shareholders;
- 69% of the employees agreed that the risk of social media could result in the imposition of non-adherence regulatory and legislative requirements which can negatively impact on the enterprise; and
- 66% of the employees state that social media can negatively affect the financial performance and position of the enterprise.

#### **4.4.7.2 Findings**

The results in Section F indicate that social media risks could have a very high and negative level of impact on the enterprise. Employees are aware and understand social media risks and the impact and effect that using social media could have on the enterprise.

#### **4.5 Summary**

This chapter illustrated the descriptive, inferential and univariate statistics obtained from the research study questionnaire. The findings and observations from the statistical analysis in this chapter are further explained in more detail in the last chapter of this research study, which is Chapter 5.

In Chapter 5, the literature sources reviewed in Chapter 2, the research study's investigative questions and sub-research questions, and objectives and sub-objectives from Chapter 3 are all revisited to ensure the application of the research methodologies and literature consulted correlates to the findings and observations extracted by the researcher and CPUT statistician from this chapter's statistics.

## **CHAPTER FIVE RECOMMENDATIONS AND CONCLUSION**

### **5.1 Introduction**

By referring to Chapter 2, it is understood that social media risks in enterprises need to be controlled effectively to ensure enterprises are safeguarded against the forms of impact resulting from the enterprise and employees' usage of social media. It is, therefore, important that internal controls and measures are in place to support risk management practices and procedures with a view to mitigating social media risks in enterprises.

In support of the above introduction to this chapter, the data analysis and interpretation of the results presented in Chapter 4 indicated that not all enterprises have formalised risk management practices and procedures in place which involves all relevant departments to support in mitigating social media risks. Furthermore, as most enterprises allow employees to access social media platforms using their resources for enterprise and social purposes, it is also noted that most enterprises have social media policies in place to support risk management practices and procedures for the managing and monitoring of social media activity in the enterprise. However, with regard to the enterprises that do have social media policies in place, not all of these enterprises have access restrictions and security limitations drafted in their social media policies to control the social media platforms accessed by their employees. The results from Chapter 4 assisted in identifying issues relating to the research question.

The research question, sub-research questions, key research objectives and survey findings have been revisited in Chapter 5 to ensure that the research study has been completed as per the introduction provided in Chapter 1. Chapter 5 seeks to draw final conclusions and recommendations of the research study.

### **5.2 Main research question revisited**

The main research question identified to be investigated for this research study reads as follows: **“Do enterprises have formalised risk management practices and procedures in place to mitigate social media risks”?**



In Chapter 2, the importance of social media risk management practices and procedures in enterprises was discussed. Further reading of Chapter 2 also indicated the recommended social media risk management practices and procedures enterprises should have in place to mitigate social media risks, and that not all enterprises had controls in place to mitigate the use of social media. Furthermore, the literature sources consulted in Chapter 2 supported the aim of the above research question.

In support of the research question of this study, the results discussed in Chapter 4, section 4.3.3.6.1 indicated that most enterprises have implemented key controls to mitigate social media risks in the enterprise. This finding is supported by statistics that state the following:

- 88% of the enterprises have data protection and security protection controls in place to manage and monitor the enterprise's computer hardware/laptops/mobile devices/workstations used by employees;
- 82% of the enterprises have disciplinary measures in place to address employee non-compliance with the enterprise's social media policy;
- 81% of the enterprises provide social media policy updates and communications to employees which relate to social media usage in the enterprise and by the employee;
- 80% of the enterprises monitor exception reports of employees accessing restricted social media platforms;
- 78% of the enterprises monitor employee usage of social media platforms;
- 78% of the enterprises have a social media policy in place which provides governance for the use of social media by employees; and
- 69% of the enterprises provide training for employees on the content of the enterprise's social media policy.

From the above, it appears that most enterprises have key controls in place to support risk management practices and procedures; however, not all of these enterprises have risk management functions in place to ensure these key controls and social media risks are adequately assessed and monitored. This can be further supported by statistics that state 28% of the enterprises do not have any enterprise risk management functions in place, and 27% are not sure as to whether there are risk management functions in place to support the assessment of key controls and social media risks in the enterprise. This indicates that some enterprises still need to implement structured risk management functions to mitigate social media risks in the enterprise.

The above results also indicate that approximately half of the enterprises have formalised risk management practices and procedures in place to support the monitoring of key controls and assessing social media risks in the enterprise. As an observation from the research study, enterprises need to design and implement risk management functions to support the assessment of key controls and social media risks in the enterprise. Furthermore, enterprises would then need to improve the awareness of risk management functions in the enterprise as it is perceived that there is a lack of awareness by employees as to whether there is a risk management function in place or not in their enterprise.

In support of the above, 63% of the enterprises have social media policies in place to support risk management practices and procedures. For the enterprises that do have social media policies in place, 41% of these enterprises policies are not aligned to the enterprise's social media activities. This indicates that there is a need among 37% of the enterprises to develop and implement social media policies that are aligned in order to support the enterprise's risk management practices and procedures in mitigating social media risks.

### **5.3 Research questions revisited**

The research questions (RQs) for this research study are two-fold as indicated in Chapter 1 and read as follows:

RQ 1: "What risk management procedures are in place to mitigate social media risks?"

RQ 2: "How do management control social media risks in their enterprise?"

In Chapter 2, the literature sources reviewed provided insight that management of the enterprises implement social media policies and social media management strategies to prevent any social media risks from affecting the enterprise and its activities. The social media policies and social media management strategies are managed and monitored by the risk management function's custodians in the enterprise. Management of these enterprises apply risk management procedures and practices such as:

- Performing periodical and substantive reviews of the usage of social media platforms;
- Using monitoring and reporting tools to ensure social media risks are identified and addressed;
- Establishing risk IT and COBIT control frameworks and social media management strategies;
- Adjusting social media policies and raising awareness of policy changes;

- Designing strict disciplinary procedures to address non-compliance with social media policies;
- Implementing access and security restrictions to social media platforms to mitigate related social media risks to the enterprise; and
- Involving as many functions and departments as possible to support the risk management procedures and practices in place in order to mitigate social media risks.

Based on the findings in Chapter 4, section 4.3.3.5.3, it is evident that not all enterprises have formalised risk management practices and procedures in place which involves all relevant departments to support in mitigating social media risks. This is based on the involvement percentages indicated in section 4.3.3.5.4 for departments such as Finance and Auditing (64%) and Human Resources (51%) that have virtually no or less involvement in supporting the enterprise's risk management function to monitor and assess social media usage. However, the ICT department are excluded from the above result due to the moderate to great involvement percentage at 70%.

The results in section 5.2 provide evidence of the controls implemented by the enterprise management to monitor and support risk management procedures and practices in order to mitigate social media risks. The findings in Chapter 4, section 4.3.3.7.3, confirm that 85% of the enterprises' employees mostly agreed that the enterprises' management managed social media risks well in their enterprises. Furthermore, with the positive response and perception provided by enterprises that their enterprises managed social media well, which is cognisant of the statistics in Chapter 4, section 4.3.3.4.1, it is revealed that 63% of the enterprises do have a social media policy in place to support risk management practices and procedures for mitigating social media risks in the enterprise.

It can then be perceived that social media risks can be managed well without having formalised risk management practice and procedures in place. However, findings in Chapter 4, section 4.3.3.7.5, further reveal that social media risks have negative effects on enterprises. The following negative effects on enterprises could be the result of having no formalised risk management practice and procedures in place:

- 86% of the respondents confirmed that social media could negatively affect the enterprise's external reputation among enterprise partners such as customers, suppliers and competitors;

- 84% of the respondents confirmed that social media could negatively affect the reputation of the enterprise's brand, credibility, trust and loyalty, should a service or product be affected;
- 83% of the respondents confirmed that social media could negatively affect the enterprise's internal reputation among key stakeholders, employees and shareholders;
- 69% of the respondents agreed that the risk of social media could lead to the imposition of non-adherence regulatory and legislative requirements which can negatively impact on the enterprise; and
- 66% of the respondents stated that social media could negatively affect the financial performance and position of the enterprise.

Therefore, it is evident from the above that having formalised risk management practices and procedures and adequate internal control frameworks in place, could control the residual risk and impact that social media risks could have on an enterprise.

#### **5.4 Sub-research questions revisited**

The main research question was investigated by designing the following sub-research questions (SRQs) to support the research study as indicated in Chapter 2:

SRQ 1: "How do employees use social media in the enterprise?"

SRQ 2: "What social media policy exists in the enterprise?"

SRQ 3: "What risk management procedures are in place to control social media risks in the enterprise?"

SRQ 4: "What controls are in place to mitigate social media risks in the enterprise?"

According to the analysis of the survey's findings in Chapter 4, the following observations were evident in relation to the above subresearch questions.

##### **5.4.1 Social media platforms used (accessed) by enterprises and employees**

According to the literature in Chapter 2, enterprises and employees use various social media platforms for business purposes and objectives in the enterprise. With reference to Chapter 4, the social media platforms used by enterprises, and employees were assessed by identifying the purpose and type of social media platforms accessed by enterprises (5.4.1.1) and employees (5.4.1.2).

The social media platforms used by enterprises and employees were categorised into: “enterprise” purposes, “enterprise & social” purposes, “social” purposes and also where the platform was not used “N/A”.

#### **5.4.1.1 Purpose and usage of social media platforms accessed by the enterprise**

According to the literature in Chapter 2, enterprises mostly access Facebook, LinkedIn and Twitter to perform business activities with customers such as recruitment, advertising and communication platforms.

The majority (88%) of the enterprises in this research study have been using social media platforms for business purposes in the enterprise for 0 - 3 years (35%), 4 - 6 years (20%), 7 - 10 years (15%) and 11 years and more (9%), as indicated in Chapter 4.

The most popular social media platforms used by enterprises are Facebook (69%), Twitter (59%) and LinkedIn (58%). The findings for the top three social media platforms accessed by the enterprise for business and social purposes are as follows:

- Business - LinkedIn (36%), Facebook (30%) and Twitter (26%);
- Business & social - LinkedIn (20%), Facebook (31%) and Twitter (24%); and
- Social - Twitter (9%), Facebook (9%) and YouTube (7%).

The most popular social media platforms accessed by enterprises are LinkedIn, Facebook and Twitter while the least popular social media platforms accessed by enterprises are Myspace, Blackboard Messenger and Mxit. Further findings also reveal that 83% of the employees access these social media platforms for business purposes at their enterprises for between 0 - 3 hours daily. Furthermore, the frequency of social media platforms used for enterprise purposes such as marketing (recruitment), forums, blogging and advertising revealed that marketing (73%) is the primary enterprise purpose social media platforms are used for in enterprises. This finding is supported by the literature sources reviewed in Chapter 2.

#### **5.4.1.2 Purpose and usage of social media platforms accessed by the employee**

Results from Chapter 4 reveal that 70% of the employees at the enterprises use social media platforms for business purposes. The findings for the top three social media platforms accessed by the employees are categorised into the following purposes:

- Business - LinkedIn (18%), Twitter (5%) and YouTube (3%);

- Business & social - LinkedIn (34%), WhatsApp (28%) and Facebook (24%); and
- Social - Facebook (42%), WhatsApp (41%) and YouTube (26%).

The most popular social media platforms accessed by employees are LinkedIn, Twitter and YouTube while the least popular social media platforms accessed by employees are Myspace, Mxit and Skype. Moreover, 51% of the enterprises allow employees to access social media platforms for personal/social use during enterprise hours, of which 59% of these enterprises feel that employees should have access to social media platforms during enterprise hours.

According to the research study, 63% of employees access social media platforms using the enterprise's internet and computer facilities/workstations, of which 92% of these employees spend 0 - 3 hours a day accessing social media platforms at their enterprises for personal/social use.

With reference to the above findings discussed in sections 5.4.1.1 and 5.4.1.2 and the literature discussed in Chapter 2, sections 2.3 and 2.4, an analogy can be drawn that enterprises and employees are actively using social media platforms in the enterprise for enterprise and social purposes.

#### **5.4.2 Social media policies in enterprises**

As discussed in Chapter 2, social media policies are an important risk management practice and procedure for enterprises to have in place in order to mitigate social media risks. In Chapter 4, findings revealed that 63% of the enterprises had social media policies in place. This indicates that the majority of the enterprises have implemented social media policies; however, there is still an opportunity for the remaining enterprises to implement social media policies in their enterprises to ensure social media risks are being mitigated.

In addition to this, 64% of the enterprises have restrictions drafted in social media policy for employees to be aware of when accessing social media platforms. Further findings reveal that 59% of the enterprises have social media policies in place which are aligned to the enterprise's social media activity.

According to literature, enterprises should have social media policies in place. In comparison to the findings, it is clear that only two-thirds have social media policies in

place. This is an indication that a third of enterprises which formed part of the survey could be exposed to social media risks.

In order to gain a better understanding of the employee's awareness of the social media policies which are in place in the enterprise, the following statements were agreed on by respondents:

- Employees of the enterprises understood the content in their social media policies (90% agreed);
- Employees adhered to the enterprise's social media policies and procedures (89% agreed);
- Employees accessed social media platforms after working hours (89% agreed);
- Employees had access to view social media policies (88% agreed);
- Employees communicated internally with fellow colleagues via social media platforms (82% agreed);
- Employees used enterprise workstations, laptops and mobile devices to access personal social media platforms accounts (75% agreed);
- Employees reported inappropriate social media usage and activities (74% agreed);
- Employees communicated externally with clients, competitors and customers via social media platforms (72% agreed); and
- Employees shared enterprise-related material via social media platforms (60% agreed).

With reference to the above findings extracted from Chapter 4, an analogy can be drawn that enterprises have social media policies in place. The social media policies are aligned to social media activities which include access restrictions to social media platforms in the social media policies. However, enterprises can enhance their social media policies by adjusting and aligning social media activities to the social media policies in place.

#### **5.4.3 Enterprise risk management procedures**

As mentioned in Chapter 2, social media policies support risk management procedures which provide governance and guidance in mitigating enterprise risks. With reference to the key points noted in section 5.2, 63% of the enterprises have social media policies in place. This indicates that most enterprises have social media policies in place to support risk management procedures and practices, which are necessary for risk management.

A finding noted in Chapter 4 stated that only 44% of the enterprises have risk management functions in place to assess and monitor social media risks. Further findings revealed that 55% of the enterprises either did not have or were not sure if an enterprise risk management function was in place.

Respondents were required to identify the type of risk management function their enterprise had in place. The findings for the type of risk management functions enterprises had in place are listed below in descending order:

- 19% have in-house enterprise risk management functions;
- 11% have co-sourced enterprise risk management functions; and
- 5% have outsourced enterprise risk management functions.

In relation to the above findings, it is evident that most of the enterprises need to consider developing and implementing a risk management function in their enterprise to support risk management practices and procedures for mitigating social media risks in the enterprise.

#### **5.4.4 Enterprise controls for social media**

In Chapter 2, it was evident that enterprises develop social media strategies that provide clear processes and controls for governing social media usage in the enterprise. These strategies are developed to perform frequent review, substantive checks and audits to further enhance enterprise controls and risk management practices and procedures in the enterprise.

Respondents were provided with statements to determine the type of controls their enterprise implemented to monitor and manage social media risks. The statements below have been extracted from Chapter 4 and are arranged in descending order to indicate the controls implemented by enterprises:

- Data protection and security protection controls on enterprise computer hardware laptops/mobile devices/workstations used by employees (88% agreed);
- Disciplinary measures in place to address employee misconduct on social media platforms (82% agreed);
- Social media policy governing employees' social media usage (81% agreed);
- Disciplinary measures in place to address employee non-compliance with social media policy (80% agreed);



- Exception reports of employees accessing restricted social media platforms (78% agreed);
- Monitoring employee usage of social media platforms (78% agreed);
- Social media policy updates communicated to employees (69% agreed); and
- Training for employees on social media policy content (53% agreed).

Based on the above findings, it is evident that the majority of enterprises have controls in place to mitigate social media risks; however, enterprises can enhance their control environment in their enterprise by implementing dual controls to support the risk management procedures and practices in the enterprise. Potential control enhancements based on the above findings could be the improvement of training and communication updates to the social media policy.

In Chapter 2, social media risks are regarded as an emerging risk in enterprises that need to be closely monitored as social media can potentially cause unintended consequences to enterprises and magnify the threat of other risks to the enterprise, including reputational, legislative, operational and financial risks.

Three-quarters (75%) of the respondents stated that social media risks have a moderate to very high level of impact on an enterprise. Furthermore, respondents were required to provide a measurement of the negatives effect social media risks can have on enterprises. The negative effects agreed upon by the respondents are arranged in descending order as follows:

- External reputation among customers and competitors (86% agreed);
- Reputation - brand, credibility, trust, loyalty (84% agreed);
- Internal reputation among employees, shareholders and stakeholders (83% agreed);
- Regulatory requirements (69% agreed); and
- Financial performance and position (66% agreed).

With reference to the above findings an analogy can be drawn that social media risks can have a very high and negative level of impact on an enterprise's reputation and costs, should social media risks not be managed effectively through risk management practices and procedures.

## **5.5 Research objectives revisited**

The primary research objective as indicated in Chapter 1, section 1.3.1 were to determine whether enterprises have formalised risk management practices and procedures in place mitigate social media risks that were achieved by following the secondary research objectives indicated in Chapter 1, section 1.3.2 of this research study.

The research objectives relating to the respective SRQs designed and indicated in Chapter 1, section 1.3.3.2, of this research study were stated as follows:

- Objective 1 - To determine the extent to which enterprises make use of social media;
- Objective 2 - To determine whether a social media policy exists and provides compliance for the use of social media;
- Objective 3 - To identify the risk management procedures used by the enterprise to assess and control risks; and
- Objective 4 - To determine the existing controls used by the enterprise to mitigate social media risks.

### **5.5.1 Social media platforms used (accessed) by enterprises and employees**

It was determined that enterprises use certain social media platforms more often than others for mostly business purposes at the enterprise. The purpose and usage of social media platforms by employees and enterprises were discussed in detail in sections 5.4.1.1 and 5.4.1.2 above.

### **5.5.2 Social media policies in enterprises**

Most of the enterprises have implemented social media policies that are aligned to social media activities, and their employees have an understanding of the policy content. Employees are also aware of the restrictions and limitations enforced by the social media policy.

Moreover, there are some enterprises that would need to implement social media policies and align these to social media activities in their enterprises. This would ensure social media risks are mitigated as most of the enterprises allow their employees to access social media platforms at the enterprise for enterprise and social purposes. This was presented in section 5.4.2 above.

### **5.5.3 Enterprise risk management procedures**

It was evident that not all enterprises have risk management functions in place which involves all relevant departments to support in mitigating social media risks, more specifically to monitor and manage adherence to social media policies and procedures for enterprises that have such policies and procedures in place. This was presented in section 5.4.3 above.

### **5.5.4 Enterprise controls for social media**

It was identified that most of the enterprises have internal controls in place to mitigate social media risks; however, there is an opportunity for enterprises to continuously enhance and maintain internal controls for the use of social media platforms by the enterprise and employees as there is a lack of focus on training and communicating updates on social media policies in the enterprise. This was presented in section 5.4.4 above.

It was also noted that social media risks have a moderate to very high impact on the enterprise, should social risks materialise, which will negatively affect the enterprise's reputation among customers, suppliers, competitors and brand. This was presented in section 5.4.4 above.

## **5.6 Recommendations**

Based on the research study results, the following findings identified and summarised in Chapter 4, section 4.4, require suitable solutions, action plans and controls to mitigate risks:

- Most enterprises and employees understand the use (social media platforms accessed) and purpose of social media platforms; (refer to section 4.4.2.2 & 4.4.3.2)
- Confidential information shared on social media platforms by the enterprise and employees for enterprise and social purposes are not monitored by all enterprises; (refer to section 4.4.6.2)
- Social media policies are not all aligned to the enterprise's social media activities and not all enterprises have access restrictions drafted in social media policies; (refer to section 4.4.4.2)
- Not all enterprises provide training to employees on social media policies and practices in place; (refer to section 4.4.6.2)

- Not all enterprises have structured and formalised risk management functions in place which involves all relevant departments to support in mitigating social media risks; (refer to section 4.4.5.2)
- There is a lack of awareness by employees as to whether there are risk management functions in place; (refer to section 4.4.5.2)
- Enterprises do not have dual controls in place to support risk management procedures and practices and to enhance the control environment; (refer to section 4.4.6.2)
- Social media risks could have a very high negative impact on the enterprise. (refer to section 4.4.7.2)

The key findings below were noted for this research study and are summarised under individual sub-headings to suggest solutions and action plans.

#### **5.6.1 Social media platforms used (accessed) by enterprise and employees**

As employees use different social media platforms for both enterprise and personal (social) purposes, enterprises should ensure that all employees understand the use and purpose of social media platforms. This could be achieved by conducting regular workshops on the social media platforms used by employees.

Employees should be educated and trained on social media platforms accessed and used in the enterprise. Online training could also be developed for employees to complete on an annual basis to ensure they are informed of mandatory updates and communication regarding the use of social media platforms.

With employees frequently accessing social media platforms, the enterprise's risk management function should implement enterprise controls to monitor the enterprise and employees' social media activity. Social media activities include blocking and restricting prohibited social media platforms that the enterprise and employees should not be allowed to access during enterprise hours.

Further social media activities include reviews of log reports of social media platforms accessed by employees and the enterprise in order to provide variance analysis and trends in using social media platforms.

The enterprise's resources used by the employee should to be monitored in order to ensure the employee uses these for its intended purposes and that they are aligned to the enterprise's social media policy and practices. For example, confidential information shared by employees and the enterprise on social media platforms should be monitored to ensure enterprise information is shared on social media platforms for its intended purpose.

### **5.6.2 Social media policies in enterprises**

The use of social media in enterprises by employees is continuing to increase, and should be controlled and governed by the latest practices and procedures in the various industries. Enterprises should implement social media policies that are aligned to the enterprises' social media activities, the reasons why the employees and enterprise are using social media, restrictions and prohibited use of social media platforms, disciplinary procedures to follow for non-adherence to the social media policy and contactable resources from the enterprises to query practices and anonymously report non-adherence to the policy. It should also be kept in mind that the social media policy should be designed and documented in a simple, clear and concise manner so that all the enterprise's employees would be able to easily understand the content of the enterprise's social media policy.

The enterprise should ensure that the responsible function that governs, controls and monitors the social media policy, provides training to the employees on the social media policy at least once a year. The enterprise should keep evidence of the function's social media training of employees as proof and to confirm that there is an acknowledgement and understanding of the social media policy.

In cases where there are changes to the social media policy, depending on the significance and materiality of these changes, the function responsible should either provide refresher training on the social media policy or formally communicate the changes to the entire enterprise electronically.

### **5.6.3 Enterprise risk management procedures**

Enterprises should manage social media risks in a formalised and adequate manner. Enterprises should implement structured and formalised risk management functions to ensure social media risks are mitigated, controlled and monitored in the most effective

manner. The risk management function responsible for providing governance over social media risks should have an approved and documented mandate which outlines the strategy, roles and responsibility, policy and procedures and purpose and support provided by the function to provide governance over social media risks.

The enterprise's risk management procedures and practices should be aligned and administered according to internationally approved enterprise risk management (ERM) frameworks to ensure best practices are followed in managing social media risks.

In addition, the enterprise's social media policy should support the risk management function and be aligned to the enterprise's risk management framework requirements, practices and procedures that should be followed by the enterprise and employees.

The enterprise's risk management framework requirements and practices and procedures should be formally communicated and relevant training provided to the employees to ensure they are aware and understand the role they play in adhering to and supporting the enterprise's risk management function.

#### **5.6.4 Enterprise controls for social media**

The enterprise controls that should be in place to mitigate social media risks should not be supported by key controls only, but rather dual (preventative and detective) controls across the enterprise's functions in order to enhance the enterprise's control environment and provide support to the enterprise's risk management practices and procedures. It is imperative that enterprises should ensure that all enterprise functions involved in managing social media control activities and risk management practices and procedures, are properly informed and collectively involved in establishing adequate functional and operational controls to achieve the enterprise's strategic objectives.

Employees and the enterprise may not essentially understand the entire potential impact and effect of social media risks on the enterprise's reputation, regulatory requirements, financial and operational goals. Enterprises should, therefore, ensure that social media training and workshops are provided to employees. Employees should be educated on the impact and effect social media risks could have on the enterprise. The impact and effect of social media risks should be included in the enterprise's social media policy. By including the impact and effect of social media risks in the social media policy, employees would

understand the impact and effect social media could have on the enterprise, should prohibited information be accessed.

## **5.7 Conclusion**

Enterprises do not all have risk management functions in place which involve all relevant departments to support in mitigating social media risks, more specifically to monitor and manage adherence to social media policies and procedures. The literature study revealed that enterprises should have risk management practices and procedures in place to mitigate social media risks. Enterprises' risk management mitigates social media risks by implementing, managing and monitoring a social media policy for non-adherence by employees within the enterprise. This provides assurance to the enterprises that social media usage by the employees and enterprises are being controlled. The empirical study supports the above; however, there is an opportunity for enterprises to improve, enhance and further develop existing risk management practices and procedures in their enterprises.

As recommended, enterprises could improve the awareness of risk management functions and controls required by enterprises and the employees. Enterprises could provide employees with more frequent social media training and communication updates. This could improve the employees' level of understanding of social media risks in the enterprise and enhance the understanding of the social media policy.

As a final word: The researcher has drawn the conclusion that most enterprises have implemented risk management practices and procedures. Additionally, enterprises could be exposed to social media risks which can impact and negatively affect the enterprise and employees. As a result, enterprises have to enhance their control environments and improve existing risk management functions, practices and procedures on a continuous basis before such risks materialise and potentially damage their enterprise.

## **5.8 Further research opportunities**

The researcher suggests that the following opportunities be researched further:

- Investigating what social media risk management strategies and internal control frameworks enterprises have in place;
- Evaluating the Information System (IS) security and access controls enterprises have in place to secure social media usage;

- Performing a case study on how enterprises conduct internal audit and internal control reviews of social media key controls, processes and practices; and
- Investigating how enterprises perform risk assessments of social media risks in enterprises.

## **5.9 Value of the research**

This research study contributes to the existing social media literature and emphasises the importance of social media practices and risk management procedures for enterprises of all sizes. As the majority of employees already use social media for business and private use in enterprises, the use of social media by employees in enterprises can only increase over time, exposing the enterprise to more and more risks, which necessitates management to implement in advance, risk management and mitigating controls before allowing employees to use social media.



## REFERENCES

- Abor, J. & Quartey, P. 2010. Issues in SME Development in Ghana and South Africa. *International Research Journal of Finance and Economics*. Euro Journals Publishing, Inc. [Online] <http://www.eurojournals.com/finance.htm> [18 July 2016].
- Accenture. 2011a. *Executive Summary: The Social Media Management Handbook, Everything You Need to Know to Get Social Media Working in Your Business*. [Online] <http://www.socialmediamanagementhandbook.accenture.com> [17 July 2013].
- Accenture. 2014b. *Executive Summary: A comprehensive approach to managing social media risk and compliance*. [Online] <http://www.accenture.com> [24 August 2015].
- Addison, C. 2006. Web 2.0: A new chapter in development in practice? *Development in Practice*, 16:623.
- Andersen, K. & Terp, A. 2006. Risk Management. In: Andersen, T.J. (ed.). *Perspectives on Strategic Risk Management*. Denmark: Copenhagen Business School Press.
- Aula, P. 2010. Social media, reputation risk and ambient publicity management. *Strategy and Leadership*, 38(6):45.
- Bannock, G. & Manser, W. 2003. *International Dictionary of Finance*. 4<sup>th</sup> ed. London: Profile Books.
- Bartkiewicz, D. 2008. *Arming Businesses for the Hidden Risks of Social Media & Networking Initiatives*, 112(41):27.
- Baruah, T.D. 2012. Effectiveness of Social Media as a tool of communication and its potential for technology enabled connections: A micro-level study. *International Journal of Scientific and Research Publications*, 2(5):4.
- Bezuidenhout, P. 2012. *Benefits, risks and controls related to social media*. *Auditing SA*. [Online] [http://www.saiga.co.za/home\\_htm\\_files/6%20Bezuidenhout.pdf](http://www.saiga.co.za/home_htm_files/6%20Bezuidenhout.pdf) [17 July 2013].
- Bhanot, S. 2013. *A study on impact of social media on company performance*. SIES College of Management Studies. Navi Mumbai.
- Birla Institute of Technology and Science (BITS). 2011. *Social media risks and mitigation*. [Online] <http://www.bits.org> [17 July 2013].
- Boulos, M. & Wheeler, S. 2007. The emerging Web 2.0 social software: an enabling suite of sociable technologies in health and health-care education. *Health Information Libraries Journal*, 24, 22-23.
- Bray, L. 2012. Monitor Risks as Employees Use Social Media. *Credit Union Directors Newsletter*, 37(5):4.
- Brenan, V. 2010. Navigating social media in the business world. *The Licensing Journal*: 8-12, January.

Briers, S. 2000. The development of an integrated model of risk: PhD Dissertation. Pretoria: University of South Africa.

Brussee, R. & Hekman, E. 2009. *Social media are highly accessible media*. [Online] [http://crossmedialab.nl/files/Social Media are highly accessible media.pdf](http://crossmedialab.nl/files/Social_Media_are_highly_accessible_media.pdf) [23 December 2013].

Burns, N. & Grove, S. K. 2009. Strategies for promoting evidence-based nursing practice. In *The practice of nursing research: Appraisal, synthesis, and generation of evidence*. 6<sup>th</sup> ed. pp. 616-640. St. Louis, MO: Saunders/ Elsevier.

Cain, A. 2012. The social media scene. *Internal Auditor*, 69(4):44.

Cassell, J. & Young A. 2002. Why we should not seek individual informed consent for participation in health service research. *Journal of Medical Ethics*, 28:313-317.

Chartered Institute of Internal Auditors. 2013. *Effective Internal Audit in the Financial Services Sector*. [Online] <http://www.iaa.org.uk> [17 July 2013].

Chin, W.W., Johnson, N. & Schwars, A. 2008. A fast form approach to measuring technology acceptance and other constructs. *MIS Quarterly*, 32(4):687-703.

City of Cape Town. n.d. [Online] [www.capetown.gov.za](http://www.capetown.gov.za) [20 June 2016].

Coetzee, P., Du Bruyn, R., Fourie, H. & Plant, K. 2012. *Internal Auditing: An Introduction*. LexisNexis, Durban.

Cohen, L., Manion, L. & Morrison, K. 2007. *Research methods in education*. 6<sup>th</sup> ed. London: Routledge.

Collins, J. & Hussey, R. 2009. *Business Research: A practical guide for undergraduate and postgraduate students*. 3<sup>rd</sup> ed. Hampshire, U.K.: Palgrave Macmillan.

Committee of Sponsoring Organisations of the Treadway Commission (COSO). 2004a. *Enterprise Risk Management – Integrated Framework. Executive Summary*. [Online] <http://www.theiaa.org/guidance/additionalresources/coso-related-resources/> [17 July 2013].

Committee of Sponsoring Enterprise of Treadway Commission (COSO). 2011b. *Internal Control- Integrated Framework*. [Online] [http://kontrol.bumko.gov.tr/Eklenti/6877\\_cosodraftinternal-control-framework-draft-dec-2011.pdf?0](http://kontrol.bumko.gov.tr/Eklenti/6877_cosodraftinternal-control-framework-draft-dec-2011.pdf?0) [23 December 2013].

Committee of Sponsoring Organisations of the Treadway Commission (COSO). 2013c. *The 2013 COSO Framework & SOX Compliance*. [Online] [http://www.coso.org/documents/coso%20mcnallytransition%20article-final%20coso%20version%20proof\\_5-31-13.pdf](http://www.coso.org/documents/coso%20mcnallytransition%20article-final%20coso%20version%20proof_5-31-13.pdf) [20 June 2016].

Cooper, D.R. & Emory, C.W. 1995. *Business Research Methods*, 5<sup>th</sup> ed. Chicago: Irwin.

Cooper, D.R. & Schindler, P.S. 2001a. *Business Research Methods*, Seventh/Eight Edition. New York, NY: McGraw-Hill.

Cooper, D.R. & Schindler, P.S. 2006b. *Business Research Methods*, 9<sup>th</sup> ed. Singapore: McGraw-Hill.

Cormack, D. (ed.) 2000. *The Research Process in Nursing*, 4<sup>th</sup> ed. Blackwell Publishing, Oxford.

Corporate Board. 2013. *Lack of social media policy and process raise risk for companies*, 34(200):29.

Creswell, U. W. 2003. *Research design: Quantitative, qualitative and mixed approaches*. London: Sage Publications.

De Vaus, D. 2001. *Research Design in Social Research*. Sage, Thousand Oaks and London.

De Vos, A.S. 2002. *Scientific theory and professional research*.

Deloitte. 2012a. *Internal Audit (IA) for Social Media*. (discussion document). [Online] <http://www.isaca.org/Education/Upcoming-Events/Documents/ISACA-Social-Media-Assessment-Discussion-Document.pdf> [23 December 2013].

Deloitte. 2013b. *The post digital grapevine: Social media and the role of internal audit*. [Online] <http://deloitteblog.co.za/wp-content/uploads/2013/07/Social-media-and-the-role-of-internal-audit.pdf> [23 December 2013].

Dysart, J. 2013. *Dead Duck: Don't let the next flap over social media be yours*, 69(5):30.

Erasmus, L. 2012. *The increased application of social media in the South African public relations industry*, MCom dissertation, University of Pretoria, Pretoria. [Online] <http://upetd.up.ac.za/thesis/available/etd-11202012-172105/> [17 July 2013].

Ernst & Young. 2011a. *Into the cloud, out of the fog*. [Online] <http://www.ey.com/> [23 December 2013].

Ernst & Young. 2012b. *Managing risk in the age of sustainability and social media*. [Online] <http://www.ey.com/> [23 December 2013].

Ernst & Young. 2012c. *Protecting and strengthening your brand*. [Online] <http://www.ey.com/> [14 June 2013].

Ernst & Young. 2012d. *Social media strategy, policy and governance*. [Online] <http://www.ey.com/> [14 June 2013].

Ernst & Young. 2012e. *Ten IT risks to address in your 2013 IT internal audit plan*. [Online] <http://www.ey.com/> [14 June 2013].

Ernst & Young. 2012f. *Turning risk into results*. [Online] <http://www.ey.com/> [14 June 2013].

Ernst & Young. 2013g. *Exploring dual perspectives on the top 10 risks and opportunities in 2013 and beyond*. [Online] <http://www.ey.com/> [23 December 2013].

Ernst & Young. 2013h. *Ten key IT considerations for internal audit*. [Online] <http://www.ey.com/> [14 June 2013].

Farley, A. 2011. Building a Social Media Policy. *ABA Bank Marketing*, 43(8):18.

Field, J. & Chelliah, J. 2012. Social-media misuse a ticking time-bomb for employers: robust policies and procedures needed to reduce the risks. *Human resource management international digests*, 20(7):36.

Flick, U. 2009. *An Introduction to Qualitative Research*. London: SAGE Publications Ltd.

Fox, A. & Ritchie, E. (n.d.). *Ethical Research Guidelines for Staff and Students*. Faculty of Arts and Architecture, University of Brighton.

Fraenkel, J.R. & Wallen, N.E. 2000. *How to design and evaluate research in education*. London: McGraw Hill.

Friesen, B.K. 2010. Designing and conducting your first interview project. *Research methods for the social science*. Vol. 17. Canada: John Wiley and Sons.

George, G. R. 2009. *Contemporary Management*, 6<sup>th</sup> ed. McGraw-Hill/Irwin. New York.

Giltrow, T., Kwak, E. & Johnson, N. 2013. *Auditing social media risk for financial institutions*. [Online] <http://www.theiia.org/fsa/2013-features/auditing-social-media-risks-for-financial-institutions/?staticReset&hardreset> [23 December 2013].

Gleim, I.M. 2001. *Gleim's CIA Review*. Gleim Publications, Inc. Florida.

Goldberg, D.M. 2011. *Responsible Socializing: Social Media Concerns for Organizations and Internal Audit*. [Online] <http://sunera.com/wp-content/uploads/Sunera-DGoldberg-Social-Media-Questions-and-Concerns.pdf> [23 December 2013].

Hall, R. 2008. *Applied Social Research: Planning, Designing and Conducting Real-World Research*. South Yarra: Macmillan.

Hegel JR, K.C. 2011. *To Tweet or Not To Tweet - Understanding the Risks in Social Media, Global Cosmetic Industry*, 179(6):56-58.

Hissom, A. 2009. Management. *Introduction to Management Technology*. BMRT 11009 – Section 300. Kent State University.

Hollman, K.W. & Forrest, J.E. 1991. Risk Management in a Service Business. *International Journal of Service Industry Management*, 2(2):49-65.

Holloway, I. & Wheeler, S. (1996). *Qualitative Research for Nurses*. Oxford: Blackwell Science.

Howard, C. & Van Buskirk, L. 2010. Social media and blogging: *What's your policy?*. *New Hampshire Business Review*, 32(7):25.

Hoy, J.S. 2012. *Employee behaviour in social media environments impacting corporate reputational risk*. MBA dissertation, University of Pretoria, Pretoria. [Online] <http://upetd.up.ac.za/thesis/available/etd-02232013-104429/> [17 July 2013].

Institute of Directors (IOD) in Southern Africa, 2009. *Draft Code of Governance. Principles for South Africa*. King Committee on Governance. [Online] <http://www.lodsa.co.za> [22 July 2013]

Information Systems Audit and Control Association. 2010a. *Social Media: Business Benefits and Security, Governance and Assurance Perspective*. [Online] <http://www.isaca.org/Groups/Professional-English/security-trend/GroupDocuments/Social-Media-Wh-Paper-26-May10-Research.pdf> [23 December 2013].

Information Systems Audit and Control Association. 2012b. *Social Media Risk and Mitigation Guidance*. [Online] <http://www.isaca.org/> [14 June 2013].

Jackson, R.D.C. & Stent, W.J. 2010. *Auditing notes for South African students*. Durban: LexisNexis.

Johansson, M. 2010. Social media and brand awareness. *A case study in the fast moving consumer goods sector*. Bachelor thesis, Lulea University of Technology.

Kapcio, P. 2011. *Social Media Isn't Smooth Sailing: Strategies to Avoid Capsizing*. *Business Journal (Central New York)*, 25(1):7.

Kaplan, A.M. & Haenlein, M. 2010. Users of the world, unite! The challenges and opportunities of Social Media. *Business Horizons*: 60.

Kelly, M. 2012. Minimising risk from social media. *Education Journal*, 139:5.

Kim, H.J. 2012. *Online Social Media networking And Assessing Its Security Risks*. *International Journal of Security and its Applications*. [Online] [http://www.sersc.org/journals/IJSIA/vol6\\_no3\\_2012/2.pdf](http://www.sersc.org/journals/IJSIA/vol6_no3_2012/2.pdf) [23 December 2013].

Knowledge Management Terms. 2009. *Stuhlman Management Consultants*. [Online] <http://home.earthlink.net/~ddstuhlman/defin1.htm> [23 December 2013].

KPMG. 2012a. *Emerging Technology Risks. Social Media. Internal Audit's response*. [Online] <http://www.kpmg.co.uk> [23 December 2013].

KPMG. 2015b. *Stay one step ahead with social media risk analytics*. [Online] <http://www.kpmg.com.au> [18 August 2015].

Lasky, M. 2012. *The rewards and risks of social media engagement*, *PR Week*. [Online] <http://www.prweekus.com> [14 June 2013].

Law, J. 2004. *After Method: mess in social science research*. Routledge: London.

Lee, G., Benoit-Bryan, J. & Johnson, T.P. 2011. *Assessing mainstream journals with a total survey error framework*. *Public Administration Review*, 72(1):87-97.

Liebenberg, A.P. & Hoyt, R.E. 2003. *The Determinants of Enterprise Risk Management: Evidence from the Appointment of Chief Risk Officers*. *Risk Management and Insurance Review*, 6(1):37-53.

Luker, K. 2008. *Salsa dancing into the social sciences – research in an age of info-glut*. Harvard University Press. Cambridge, Mass and London.

McDaniel, C.D. & Gates, R.H. 2006. *Marketing research essentials*. Hoboken, NJ: John Wiley & Sons.

Mckinsey Global Institute. 2012. *The social economy: Unlocking value and productivity through social technologies*. [Online] <http://www.mckinsey.com/mgi> [15 June 2013].

McMillan, J. & Schumacher, S. 2008. *Research in education: Evidence-based inquiry*. Sixth edition. Boston: Pearson.

Merriam, S.B. 1998. *Qualitative Research and Case Study Applications in Education*. San Francisco: Jossey – Bass.

Miccolis, J.A., Hively, K. & Merkley, B.W. S.a. *Enterprise Risk Management: Trends and Emerging Practices*. S.l.: Tillinghast – Towers Perrin.

Millage, A. 2011. A Focus on Risk. *Internal Auditor*, 68(3):7.

Mills, H. 2010. *Social Media Presents Both Risks, Opportunities*, 114(36):34.

Miskin, D. 2010. *Editors Desk. Treasury & Risk*, February.

Mitchel, T. 2015. *Social Media – Compliance Risk Management Considerations*. *NSCP Currents. June 2015 Special Report*. National Society of Compliance Professionals. [Online] <http://www.corecls.com> [30 October 2015].

NCSS 9 Statistical Software. 2013. *NCSS, LLC. Kaysville, Utah, USA*. [Online] <http://www.ncss.com/software/ncss> [Accessed 19 February 2015].

Neelankavil, J.P. 2007. *International business research*. New York: Library of Congress Cataloging-in-Publication Data.

Nguyen, J. 2011. *Internet Privacy Class Actions: How to Manage Risks from Increasing Attacks against Online and Social Media*. *Computer & Internet Lawyer*, 28(9):8-11.

Nieuwenhuis, J. 2007. Qualitative research designs and data gathering techniques. In Maree, K. (ed). *First Steps in Research*, pp. 70-97. Pretoria: Van Schaik.

Nunnally, J.C. 1978. *Psychometric theory*. 2<sup>nd</sup> ed. New York: McGraw-Hill.

Oppenheim, A.N. 2000. *Questionnaire Design, Interviewing and Attitude Measurement*. New York: Basic Books.

Patino, A., Pitta, D.A. & Quinones, R. 2012. *Social media's emerging importance in market*.

- Pawar, M. 2004. *Data Collecting Methods and Experiences: A Guide for Social Researchers*. New Delhi: New Dawn Press Group.
- Picket, K.H.S. 2011. *The essential guide to Internal Auditing*. UK: John Wiley & Sons.
- Polit, D.F. & Hungler, B.P. 1993. *Nursing research: Principles and methods*. 3<sup>rd</sup> edition. Philadelphia: Lippincott.
- Polit, D.F. & Beck, C.T. 2008. *Nursing research: Generating and assessing evidence for nursing practice*. Philadelphia: Donnelley.
- Polonski, M.J. & Waller, D.S. 2010. *Designing and Managing a Research Project: a business student's guide*. California: SAGE Publications.
- Protiviti. 2013a. *Assessing the Top Priorities for Internal Audit Functions*. 2013 Internal Audit Capabilities and Needs Survey Report. [Online] <http://www.protiviti.com> [15 June 2013].
- Protiviti. 2013b. *Auditing Social Media*. [Online] <http://www.protiviti.com> [15 June 2013].
- Pry, C.G. 2010. *Social Media: The Less-Noticed Risks*. *Aba Bank Marketing*. [Online] <http://www.ababankmarketing.com> [15 June 2013].
- PWC. 2010a. *Reaching Security for social networking*. [Online] <http://www.pwc.com/Advisory> [15 June 2013].
- PWC. 2013b. *Reaching greater heights: Are you prepared for the journey?* [Online] <http://www.pwc.com/Advisory> [15 June 2013].
- PWC. 2015c. *Turnaround and transformation in cybersecurity*. [Online] <http://www.pwc.com/Advisory> [20 November 2016].
- Reilly, A.H. & Weirup, A.R. 2010. *Sustainability initiatives, social media activity, and organisational culture: An exploratory study*. *Journal of Sustainability and Green Business*.
- Rodrigues, C.A. 2001. *Fayol's 14 principles of management then and now: a framework for managing today's organisations effectively*. *Management Decision*, 39/10: 880-889.
- Ritchie, B. & Brindley, C. 2007. Supply chain risk management and performance: A guiding framework for future development. *International Journal of Operations & Production Management* 27(3): 305-307.
- Ruane, J.M. 2004. *Essentials of research methods: A guide to social research*. London: Wiley-Blackwell.
- Saunders, M., & Lewis, P. 2012. *Doing research in business & management. An essential guide to planning your project*. London: Prentice Hall Pearson Education.
- Saunders, M., Lewis, P. & Thornhill, A. 1997a. *Research Methods for Business Students*.
- Saunders, M., Lewis, P. & Thornhill, A. 2000b. *Research Methods for Business Students*. Essex: Financial Times Prentice Hall.

- Saunders, M., Lewis, P. & Thornhill, A. 2009c. *Research Methods for Business Students*. 5<sup>th</sup> ed. Essex, England: Pearson Education Limited.
- Schlinke, J., & Crain, S. 2013. *Social Media from an Integrated Marketing and Compliance Perspective*, *Journal of Financial Service Professionals*, 67(2):85-92.
- Schulich, R. 2012. *Risk Assessment of Social Media*. The SANS Institute Infosec Reading Room.
- Sherer, A. J., & McLellan, M. L. 2015. *Social Media's Not For You - It's About You: Risk Considerations for Organizations and Practitioners in Yet Another Age of Uncertainty*. Baker & Hostetler LLP. [Online] <http://www.pli.edu> [15 June 2015].
- Shih, C. 2009. *The Facebook Era: A Handbook*. Crowfordsville: Prentice-Hall.
- Singleton, T.W. 2012. What Every IT Auditor Should Know About Auditing Social Media. *ISACA Journal*, 5:13.
- Smit, Y. 2012. *A structured approach to risk management for South African SME's*. Doctor of Technology, Cape Peninsula University of Technology.
- Smith, N., Wollam, R. & Zhou, C. 2011. *The Social Media Management Handbook*. Ottawa: John Wiley & Sons.
- Social Fish & Croydon Consulting. 2010. *Social Media, Risk, and Policies for Associations*. [Online] <http://www.socialfish.org> & <http://www.croydonconsult.com> [15 June 2013].
- Steffee, S.S. 2011. Reputational Damage a Top Digital Risk. *Internal Auditor*. 68(6):16.
- Steinman, M. & Hawkins, M. 2010. When Marketing Through Social Media, Legal Risks Can Go Viral. *Intellectual Property & Technology Law Journal*, 22(8):1-9.
- Strickland, M. 2011. *Managing Social-Media Risks - A Critical Task for 2012*, 115(42):33.
- Stroud, R. 2010. *Reducing Social Media Risks, Baseline*, 107:13.
- Tabone, J. 2012. *Seeing risk in social media*, *CA Magazine*, 145(9):12.
- Tarley, P.D. 2012. *Say it right*, *Internal Auditor Magazine*, 62-66.
- Tchankova, L. 2002. *Risk identification – basic stage in risk management*. *Environmental Management and Health*, 13(3):290-297.
- Terre Blanche, M. & Durrheim, K. 1999. *Research in Practice: Applied methods for the social sciences*. Cape Town: University of Cape Town Press.
- Tziahanas, G.T. & Crespolini, E.T. 2011. *Social Media and the Shifting Information Compliance Landscape*, *White Autonomy Paper*. Autonomy Inc.
- UK Corporate Governance Code. 2010. [Online] [http://www.ecgi.org/codes/all\\_codes.php](http://www.ecgi.org/codes/all_codes.php) [13 June 2013].



Valsamakis, A.C., Vivian, R.W., & Du Toit, G.S. 2000. *Risk Management*. 2<sup>nd</sup> ed. Sandton: Heinemann Higher and Further Education.

Walaski, P. 2013. Professional Safety. *Social Media Powerful Tools for SH&E Professionals*. [Online] <http://www.asse.org> [13 June 2013].

Wellman, J.C. & Kruger, S.J. 2001. *Research Methodology for business and administrative sciences*. 2<sup>nd</sup> ed. Cape Town. Oxford University Press.

White, H. 2002. Combining quantitative and qualitative approaches in poverty analysis. *World Development*, 30 (3): 511-522.

Wiersma, W. 2000. *Research methods in education*. Needham Heights, MA: Allyn and Bacon.

Woodall, G., & Colby, C. 2011. *Social media vs. focus groups for qualitative research, Alert! Vol. 51 No. 3*. [Online] <http://www.greenbook.org/marketing-research.cfm/social-media-versus-focus-groups-qualitative-research-03914> [22 July 2013]

World Medical Association. 2008. *WMA Declaration of Helsinki - Ethical Principles for Medical Research Involving Human Subjects*. [Online] <http://www.wma.net/en/30publications/10policies/b3/index.html> [22 July 2013].

Yin, R. 1989. *Case Study Research: Design and Methods*. Sage, Beverly Hills and London.

Zhou, L., Vasconcelos, A. & Nunes, M. 2008. Supporting decision making in risk management through an evidence-based information systems project risk checklist. *Information Management and Computer Security*. 16(2), 166-186.

# APPENDIX A: QUESTIONNAIRE



RESEARCHER DETAILS	
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RESEARCH TITLE
The management of social media risks in small, medium and large enterprises in the Cape Metropole

SOCIAL MEDIA
Kaplan and Haenlein (2010:60), defines social media as "a group of internet based applications that build on the ideological and technological foundations of Web 2.0, and that allow the creation and exchange of user-generated content".

PRIMARY OBJECTIVES OF THE SURVEY
<ul style="list-style-type: none"> <li>It is perceived that the use of social media exposes enterprises to risks that management are not even aware of as a result of poor monitoring and management of social media usage.</li> <li>This study will investigate the social media risk management practices followed by enterprises and evaluate the procedures in place to mitigate social media risks enterprises are exposed to.</li> </ul>

HOW TO COMPLETE THIS SURVEY
<ul style="list-style-type: none"> <li>This survey mostly comprises of close ended questions which requires the respondent to filling in a numerical digit and/or mark an 'x' in the most appropriate box most of the time.</li> <li>Clear instructions for each question are given under each section.</li> <li>If you do not understand the question, please feel free to contact the writer, researcher and/or supervisor indicated on this front-page.</li> </ul>

CONFIDENTIALITY AND ANONYMITY
Please note that ALL information provided by any respondent will be kept strictly confidential and that the anonymity of the respondent is guaranteed. The information provided will strictly be used for research purposes only.

SECTION A – BUSINESS IDENTIFICATION																
1) In what <b>industry</b> can your enterprise be classified in? (Tick the best answer)																
<table border="0"> <tr> <td>Automotive <input type="checkbox"/></td> <td>Health care <input type="checkbox"/></td> </tr> <tr> <td>Construction <input type="checkbox"/></td> <td>Manufacturing <input type="checkbox"/></td> </tr> <tr> <td>Consumer goods <input type="checkbox"/></td> <td>Pharmaceutical <input type="checkbox"/></td> </tr> <tr> <td>Consumer services <input type="checkbox"/></td> <td>Printing and publishing <input type="checkbox"/></td> </tr> <tr> <td>Consulting <input type="checkbox"/></td> <td>Transportation <input type="checkbox"/></td> </tr> <tr> <td>Education <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Financial services <input type="checkbox"/></td> <td></td> </tr> <tr> <td>Food and beverage <input type="checkbox"/></td> <td></td> </tr> </table>	Automotive <input type="checkbox"/>	Health care <input type="checkbox"/>	Construction <input type="checkbox"/>	Manufacturing <input type="checkbox"/>	Consumer goods <input type="checkbox"/>	Pharmaceutical <input type="checkbox"/>	Consumer services <input type="checkbox"/>	Printing and publishing <input type="checkbox"/>	Consulting <input type="checkbox"/>	Transportation <input type="checkbox"/>	Education <input type="checkbox"/>	Other <input type="checkbox"/>	Financial services <input type="checkbox"/>		Food and beverage <input type="checkbox"/>	
Automotive <input type="checkbox"/>	Health care <input type="checkbox"/>															
Construction <input type="checkbox"/>	Manufacturing <input type="checkbox"/>															
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Consumer services <input type="checkbox"/>	Printing and publishing <input type="checkbox"/>															
Consulting <input type="checkbox"/>	Transportation <input type="checkbox"/>															
Education <input type="checkbox"/>	Other <input type="checkbox"/>															
Financial services <input type="checkbox"/>																
Food and beverage <input type="checkbox"/>																
1.1) If other, please specify																
_____																
2) How would you classify your enterprise in terms of the number of employees your organisation employs																
<input type="checkbox"/> Small (0 – 99 employees) <input type="checkbox"/> Large (200+ employees) <input type="checkbox"/> Medium (100 – 200 employees)																
3) What staffing level can you be classified in? (Tick the best answer)																
<input type="checkbox"/> Executive Management <input type="checkbox"/> Senior Management <input type="checkbox"/> Middle Management <input type="checkbox"/> Non Managerial/Specialist																
4) What is your current job title?																
_____																
5) How <b>long</b> have you been in this <b>position</b> ? (years)																
<input type="checkbox"/> 0 – 3 years <input type="checkbox"/> 4 – 6 years <input type="checkbox"/> 7 – 10 years <input type="checkbox"/> 11 years and more																



SECTION B – Social Media Usage (Enterprise)
6) Does your enterprise use social media platforms? Yes <input type="checkbox"/> No <input type="checkbox"/>

7) What type of social media platforms does your enterprise use and what are they used for? (Please tick 1 answer for each platform listed)					
Platforms	Business	Social	Business & Social	Not Sure	Do not use
Twitter	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Youtube	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
LinkedIn	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Facebook	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mxit	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
MySpace	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
WhatsApp	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Blackberry Messenger	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other (Please Specify)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

8) How many years has your enterprise been using social media platforms (Estimated figures are acceptable)
<input type="checkbox"/> 0 – 3 years <input type="checkbox"/> 4 – 6 years <input type="checkbox"/> 7 – 10 years <input type="checkbox"/> 11 years and more <input type="checkbox"/> Not sure

9) How frequently does your enterprise make use of social media platforms for business purposes such as advertising, marketing, blogging and forums? (Please tick the most appropriate answer)					
Frequency of platforms	Never	Daily	Weekly	Monthly	Other (Please specify)
9.1) Advertising	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9.2) Marketing (Recruitment)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9.3) Blogging	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9.4) Forums	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

SECTION C – Social Media Usage (Employee)		
Answer the following statements by selecting "Yes" or "No" in the appropriate space	Yes	No
10) Does your enterprise allow employees to use social media platforms for <b>business</b> purposes?	<input type="checkbox"/>	<input type="checkbox"/>
11) Does your enterprise allow employees to access social media platforms for <b>personal use during business hours</b> ?	<input type="checkbox"/>	<input type="checkbox"/>
12) Do you think that employees should be allowed to access social media platforms during business hours?	<input type="checkbox"/>	<input type="checkbox"/>
13) Do you access social media platforms at your enterprise using the enterprises' internet and computer facilities/workstations?	<input type="checkbox"/>	<input type="checkbox"/>

14) How many hours do you spend accessing social media platforms at your enterprise on average per day for <b>business purposes</b> ?
<input type="checkbox"/> 0 – 3 hours <input type="checkbox"/> 4 – 6 hours <input type="checkbox"/> 7 – 10 hours <input type="checkbox"/> 11 hours and more <input type="checkbox"/> Not sure

15) How many hours do you spend accessing social media platforms at your enterprise on average per day for social use?

0 - 3 hours	<input type="checkbox"/>
4 - 6 hours	<input type="checkbox"/>
7 - 10 hours	<input type="checkbox"/>
11 hours and more	<input type="checkbox"/>
Not sure	<input type="checkbox"/>

16) What type of social media platforms do you access at your enterprise and what purpose would you access them for? (Please tick 1 answer for each platform listed)

Platforms	Business	Social	Business & Social	Don't access at all
Twitter				
YouTube				
LinkedIn				
Facebook				
Mxit				
My space				
Whatsapp				
Blackberry Messenger				
Other (Please Specify)				

**SECTION D – Social Media (Enterprise)**

17) Does your enterprise have a social media policy in place that guides the use of social media?

Yes  No

18) If you answered "Yes" in Question 17, Are social media activities aligned to the social media policy?

Yes  No  N/A

19) Answer the following statements by writing a number in the appropriate space [1 = strongly disagree, 2 = disagree, 3 = undecided, 4 = agree, 5 = strongly agree]

Statement: Employees in your enterprise.....	Answer
19a) Adhere to company social media policies and procedures	
19b) Access social media platforms after working hours	
19c) Use company workstations, laptops, mobile devices to access personal social media platform accounts	
19d) Understand the content in the social media policy	
19e) Report inappropriate social media usage and activities	
19f) Have access to view the social media policy	
19g) Share company related material via social media platforms	
19h) Communicate internally with fellow colleagues via social media platforms	
19i) Communicate externally with clients/competitors/customers via social media platforms	

20) Does your enterprise have access restrictions to general social media platforms listed in the social media policy?

Yes  No

**SECTION E – Social Media (risk management)**

21) Does your enterprise have a risk management function to assess and monitor social media risks?

Yes  No  Unsure

22) If you answered "Yes" in Question 21, please indicate if this function is outsourced, co-sourced or in-house?

Out-sourced	<input type="checkbox"/>
Co-sourced (Internal and external)	<input type="checkbox"/>
In-house	<input type="checkbox"/>
Not sure	<input type="checkbox"/>
N/A	<input type="checkbox"/>

23) To what extent do the following departments in your enterprise play a role in reducing and managing the risks associated with social media use? (Tick 1 answer per department)

Department	Less Extent	Moderate	Great Extent	None/ N/A
Sales				
Marketing				
Logistics/SCM				
Human Resources				
Finance & Auditing				
Information & Technology				
Communication & Public Relations				
Law/Corporate Affairs/Compliance				
Other (Specify)				

**SECTION F – Social Media (controls)**

24) Answer the following statements by writing a number in the appropriate space [1 = strongly disagree, 2 = disagree, 3 = undecided, 4 = agree, 5 = strongly agree]

Statement: Your enterprise has the following controls in place.....	Answer
24a) Monitoring employee usage of social media platforms	
24b) Exception reports of employees accessing restricted social media platforms	
24c) Social media policy governing social media use by employees	
24d) Disciplinary measures in place to address employee non-compliance to social media policy	
24e) Disciplinary measures in place to address employee misconduct on social media platforms	
24f) Data protection and security protection controls on enterprise computer hardware/ laptops/ mobile devices/ workstations used by employees	
24g) Training for employees on social media policy content	
24h) Social media policy updates communicated to employees	

**SECTION G – Social Media Risks**

25) Do you have a reasonable understanding of what risks relate to social media within your enterprise?

Yes  No

26) Do you have a reasonable understanding of what risks relate to social media within your function/department/business unit?

Yes  No

27) Answer the following statement by ticking the box on the right:  
**Social media risks are managed well in your enterprise?**

Strongly Agree	
Agree	
Undecided	
Disagree	
Strongly Disagree	

28) Answer the following statement by ticking the box on the right:  
**What level of impact would social media risks have on your enterprise?**

<b>Very High</b> – Business Closure, Liquidation, Bankruptcy, Loss of Investors/Stakeholders, Excessive media publicity	
<b>High</b> – Financial Losses/Penalties, Legal Implications/Law suits, Reputational damage, Share price drops	
<b>Moderate</b> – Operational back logs, Poor credibility, Loss of Customers, No trust in quality of brand/services/organisation	
<b>Low</b> – Customer Complaints, Poor enterprise values	
<b>Very Low</b> – Spamming, blogging, excessive use of forums, bantering	

29) Answer the following statements by **writing a number** in the appropriate space [1 = **strongly disagree**, 2 = **disagree**, 3 = **undecided**, 4 = **agree**, 5 = **strongly agree**]

Statement: Social Media risks could negatively affect your enterprises.....	Answer
29a) Financial performance and position	
29b) Regulatory requirements	
29c) External reputation (with customers and Competitors)	
29d) Internal reputation (amongst employees, shareholders and stakeholders)	
29e) Reputation (brand, credibility, trust, etc.)	



SECTION H – THANK YOU	
Thank you for your time and effort in filling this survey for the benefit of academic research in the field of social media and internal auditing. Please complete the below details for validation of the questionnaire completed. You may indicate if you would like feedback of the research studies results.	
<b>Name:</b>	
<b>Surname:</b>	
<b>E-mail:</b>	
<b>Telephone:</b>	
<b>Business name:</b>	
<b>Suburb:</b>	

Would you like <b>e-mail feedback</b> of this study?
Yes <input type="checkbox"/> No <input type="checkbox"/>

## APPENDIX B: PARTICIPANT LETTER



Date: \_\_\_\_\_

Dear Survey Participant

### RE: REQUEST FOR YOUR PARTICIPATION IN A QUESTIONNAIRE SURVEY

I am a master's student in the Department of Internal Auditing and Information Systems at the Cape Peninsula University of Technology. Under the supervision of Dr A. Van Den Berg, my research topic is '**Social media risk management in small, medium and large enterprises in the Cape Metropole**'. The main objective of the research is to determine how small, medium and large enterprises control and monitor social media risks in their organisation and what risk management procedures are in place to mitigate social media risks.

As an employee and specialist within your enterprise, your valuable insights, experience and knowledge on the use, management or restriction of social media platforms within your organisation will help in achieving the research objectives. Participation is voluntary and you may withdraw should it be to your best interest. Furthermore, privacy and anonymity will be maintained throughout the study and even on publication of the results. As a participant you have the privilege to view the results of the study should you request them. Completion of the questionnaire will require 10-15 minutes.

While there are no known effects of the study, the researcher bears no liability of unforeseen effects. Should there be further questions or queries please feel free to contact me at 207010722@mycput.ac.za. If you agree to the above, please indicate by signing the consent form attached.

Thank you in advance for participating in this research study.

Yours Sincerely

Lyndon Young (Research candidate, MTech Internal Auditing)

## APPENDIX C: CONSENT FORM



Keizersgracht and Tennant Street  
P. O. Box 652  
Zonnebloem, Cape Town  
Tel: (+27) 21 460 3911

### SURVEY PARTICIPATION CONSENT FORM

I have read and understood the terms of participating in this research. I have been granted the opportunity to ask for clarification in areas of concern and declare that there was no undue influence, coercion or threat in forming my opinion to participate.

I further understand that if any circumstances change during the research, I will be informed of such and the possible impacts. It is my right to withdraw from the study should it be in my best interest to do so. Furthermore, I understand that confidentiality and anonymity will be maintained although certain elements may be used in the thesis or publication. I may be contacted by research monitors to verify my declaration.

With full knowledge I therefore agree  or disagree  to participate in this study.

Research Participant \_\_\_\_\_ (Print Name/ Signature)

Contact Number \_\_\_\_\_

Company Name (**optional**) \_\_\_\_\_

Date \_\_\_\_\_

Witnessed By \_\_\_\_\_ (Print Name/ Signature)

Contact Number \_\_\_\_\_

## APPENDIX D: CRONBACH'S ALPHA COEFFICIENTS REPORT

Statements	Variable number & statement	Cronbach's alpha coefficient	Correlation with total
<b>SECTION B – Social media usage by the enterprise</b>			
7. What type of social media platforms does your enterprise use and what are they used for?	Q7_1 TSMTwitter	0.4745	0.5395
	Q7_2 TSMYoutube	0.5125	0.4604
	Q7_3 TSMLinkedIn	0.5618	0.3238
	Q7_4 TSMFacebook	0.554	0.3443
	Q7_5 TSMMySpace	0.6316	-0.0215
	Q7_6 TSMWhatsapp	0.6145	0.0244
	Q7_7 TSMBlackbMess	0.5554	0.3387
	Q7_8 TSMBlackbMess	0.5837	0.2535
	<b>Cronbach's alpha 0.600111</b>		
<b>Std. Cronbach's alpha 0.556964</b>			
<b>SECTION C – Social media usage by the employee</b>			
16. What type of social media platforms do you access at your enterprise and what purpose would you access them for?	Q16_1 TSM PurTwitter	0.4489	0.418
	Q16_2 TSM PurYoutube	0.446	0.4313
	Q16_3 TSM PurLinkedIn	0.5922	0.0855
	Q16_4 TSM PurFacebook	0.4485	0.4126
	Q16_5 TSM PurMxit	0.5651	-0.0584
	Q16_6 TSM PurMySpace	0.5586	0.0294
	Q16_7 TSM PurWhatsapp	0.4583	0.3893
	Q16_8 TSM PurBlackbMess	0.5284	0.2103
	Q16_9 TSM PurOther	0.5462	0.2530
	<b>Cronbach's alpha 0.571390</b>		
<b>Std. Cronbach's alpha 0.516642</b>			
<b>SECTION D – Social media enterprise policies and restrictions</b>			
19. Employees in your enterprise:	Q19_1 AdherCoPolicy	0.6349	0.2972
19.1 Adhere to company social media policies and procedures			
19.2 Access social media platforms after working hours	Q19_2 AccSocMedAfrHrs	0.6353	0.2955
19.3 Use company workstations, laptops, mobile devices to access personal social media platform accounts	Q19_3 CoEquipPersUse	0.6725	0.1444
19.4 Understand the contents of the social media policy	Q19_4 UndesContMedPol	0.5972	0.4952

19.5 Report inappropriate social media usage and activities	Q19_5 ReplnappUse	0.6212	0.3585
19.6 Have access to view the social media policy.	Q19_6 ViewSocMedPolic	0.6336	0.3036
19.7 Share company-related material via social media platforms	Q19_7 ShareCoViaSocMed	0.5925	0.4668
19.8 Communicate internally with fellow colleagues via social media platforms	Q19_8 CommIntViaSocMed	0.6272	0.3329
19.9 Communicate externally with clients/competitors/customers via social media platforms	Q19_9 CommExternViaSocMed	0.6271	0.3343
	<b>Cronbach's alpha 0.654779</b> <b>Std. Cronbach's alpha 0.662052</b>		
<b>SECTION E – Social media (risk management)</b>			
23. To what extent do the following departments in your enterprise play a role in reducing and managing the risks associated with social media use?	Q23_1 RiskManSales	0.8272	0.6610
	Q23_2 RiskManMarketing	0.8359	0.5839
	Q23_3 RiskManLogistics_SCM	0.8310	0.6474
	Q23_4 RiskManHR	0.8365	0.5762
	Q23_5 RiskManFinAudit	0.8485	0.4679
	Q23_6 RiskManIT	0.8432	0.5225
	Q23_7 RiskManCommPubRel	0.8252	0.6663
	Q23_8 RiskManLaw_CorpAff_Comp	0.8286	0.6410
	<b>Cronbach's alpha 0.852328</b> <b>Std. Cronbach's alpha 0.854693</b>		
<b>SECTION F – Social media (controls)</b>			
24.1 Monitoring employee usage of social media platforms	Q24_1 MonitEmpUse	0.8937	0.6885
24.2 Exception reports of employees accessing restricted social media platforms	Q24_2 ExceptRepEmp	0.8886	0.7489
24.3 Social media policy governing social media use by employees	Q24_3 SocMedPolicyUseEmp	0.8904	0.7283
24.4 Disciplinary measures in place to address employee non-compliance to social media policy	Q24_4 DiscipEmpNonComp	0.8826	0.8119
24.5 Disciplinary measures in place to address employee misconduct on social media platforms	Q24_5 DiscipEmpMisuse	0.8791	0.8513
24.6 Data protection and security protection controls on enterprise computer hardware/laptops/mobile	Q24_6 Security	0.8970	0.6491



devices/workstations used by employees			
24.7 Training for employees on social media policy content	Q24_7 TraiSocMedPolicy	0.9119	0.4973
24.8 Social media policy updates communicated to employees	Q24_8 SocMedPolUpdComm	0.8981	0.6463
	<b>Cronbach's alpha 0.905021</b> <b>Std. Cronbachs alpha 0.907484</b>		
<b>SECTION G – Social media risks</b>			
29. Social media risks could negatively affect your enterprises: 29.1 Financial performance and position	Q29_1 RiskFinPerfPos	0.8528	0.5879
29.2 Regulatory requirements	Q29_2 RiskRegRequir	0.8501	0.5860
29.3 External reputation (with customers and competitors)	Q29_3 RiskExtReput	0.8136	0.7303
29.4 Internal reputation (amongst employees, shareholders and stakeholders)	Q29_4 RiskIntReput	0.8230	0.6960
29.5 Reputation (brand, credibility, trust, loyalty)	Q29_5 RiskReputBrand	0.7974	0.7879
	<b>Cronbach's alpha 0.857340</b> <b>Std. Cronbach's alpha 0.860778</b>		
<b>Cronbach's alpha coefficient for standardised variable</b>			0.809095
<b>Cronbach's alpha coefficient for raw variables</b>			0.812818

## APPENDIX E: FREQUENCY TABLES

Variable	Categories	Frequency	Percentage of total
<b>SECTION A – Business identification</b>			
1. What industry can your enterprise be classified in?	Automotive	3	3.41%
	Construction	1	1.14%
	Consulting	6	6.82%
	Consumer goods	8	9.09%
	Consumer services	1	1.14%
	Education	4	4.55%
	Financial services	27	30.68%
	Food and beverage	2	2.27%
	Health care	2	2.27%
	Manufacturing	6	6.82%
	Pharmaceutical	2	2.27%
	Printing and publishing	4	4.55%
	Telecommunications	1	1.14%
	Transportation	1	1.14%
Other	20	22.73%	
2. How would you classify your enterprise in terms of the number of employees your enterprise employs?	Large	54	61.36%
	Medium	3	3.41%
	Small	31	35.23%
3. What staffing level can you be classified in?	Executive management	4	4.55%
	Middle management	29	32.95%
	Non managerial/specialist	43	48.86%
	Senior management	12	13.64%
4. What is your current job title?	Refer to Appendix F		
5. How long have you been in this position? (years)	0 – 3 years	58	65.91%
	4 – 6 years	16	18.18%
	7 – 10 years	8	9.09%
	11 years and more	6	6.82%
<b>SECTION B – Social media usage by the enterprise</b>			
6. Does your enterprise use social media platforms?	No	11	12.50%
	Yes	77	87.50%
7. What type of social media platforms does your enterprise use and what are they used for?			
7.1 Twitter	Business	23	26.14%
	Business & social	21	23.86%
	Not sure (N/A)	36	40.91%
	Social	8	9.09%
7.2 YouTube	Business	14	15.91%

	Business & social	10	11.36%
	Not sure (N/A)	58	65.91%
	Social	6	6.82%
7.3 LinkedIn	Business	32	36.36%
	Business & social	18	20.45%
	Not sure (N/A)	37	42.05%
	Social	1	1.14%
7.4 Facebook	Business	26	29.55%
	Business & social	27	30.68%
	Not sure (N/A)	27	30.68%
	Social	8	9.09%
7.5 Mxit	Business	5	5.68%
	Business & social	2	2.27%
	Not sure (N/A)	80	90.91%
	Social	1	1.14%
7.6 Myspace	Business & social	1	1.14%
	Not sure (N/A)	86	97.73%
	Social	1	1.14%
7.7 WhatsApp	Business	4	4.55%
	Business & social	15	17.05%
	Not sure (N/A)	65	73.86%
	Social	4	4.55%
7.8 Blackboard Messenger	Business	1	1.14%
	Business & social	3	3.41%
	Not sure (N/A)	80	90.91%
	Social	4	4.55%
7.9 Other - Skype	Business	6	6.82%
	Business & social	7	7.95%
	Not sure (N/A)	75	85.23%
8. How many years has your enterprise been using social media platforms	0 – 3 years	31	35.23%
	4 – 6 years	18	20.45%
	7 – 10 years	8	9.09%
	11 years and more	5	5.68%
	Not sure	26	29.55%
9. How frequently does your enterprise make use of social media platforms for business purposes such as advertising, marketing, blogging and forums?			
9.1 Advertising	Daily	32	36.36%
	Weekly	11	12.50%
	Monthly	19	21.59%
	Never (N/A)	24	27.27%

	Occurrence-based	1	1.14%
	Other (quarterly)	1	1.14%
9.2 Marketing (recruitment)	Daily	32	36.36%
	Weekly	12	13.64%
	Monthly	18	20.45%
	Never (N/A)	24	27.27%
	Occurrence-based	1	1.14%
	Other (quarterly)	1	1.14%
9.3 Blogging	Daily	22	25.00%
	Weekly	4	4.55%
	Monthly	13	14.77%
	Never (N/A)	46	52.27%
	Occurrence-based	2	2.27%
	Other (quarterly)	1	1.14%
9.4 Forums	Daily	25	28.41%
	Weekly	8	9.09%
	Monthly	13	14.77%
	Never (N/A)	39	44.32%
	Occurrence-based	2	2.27%
	Other (quarterly)	1	1.14%
<b>SECTION C – Social media usage by the employee</b>			
10. Does your enterprise allow employees to use social media platforms for business purposes?	No	26	29.55%
	Yes	62	70.45%
11. Does your enterprise allow employees to access social media platforms for personal use during business hours?	No	43	48.86%
	Yes	45	51.14%
12. Do you think that employees should be allowed to access social media platforms during business hours?	No	36	40.91%
	Yes	52	59.09%
13. Do you access social media platforms at your enterprise using the enterprise's internet and computer facilities/workstations?	No	33	37.50%
	Yes	55	62.50%
14. How many hours per day on average do you spend accessing social media platforms at your enterprise for business purposes?	0 – 3 hours	73	82.95%
	4 – 6 hours	3	3.41%
	7 – 10 hours	2	2.27%
	Not sure	10	11.36%
15. How many hours per day on average do you spend accessing social media platforms at your enterprise for social use?	0 – 3 hours	81	92.05%
	4 – 6 hours	3	3.41%
	Not sure	4	4.55%

16. What type of social media platforms do you access at your enterprise and what purpose would you access them for?			
16.1 Twitter	Business	4	4.55%
	Business & social	12	13.64%
	Don't access at all (N/A)	58	65.91%
	Social	14	15.91%
16.2 YouTube	Business	4	4.55%
	Business & social	11	12.50%
	Don't access at all (N/A)	50	56.82%
	Social	23	26.14%
16.3 LinkedIn	Business	15	17.05%
	Business & social	30	34.09%
	Don't access at all (N/A)	25	28.41%
	Social	18	20.45%
16.4 Facebook	Business	1	1.14%
	Business & social	21	23.86%
	Don't access at all (N/A)	29	32.95%
	Social	37	42.05%
16.5 Mxit	Business	1	1.14%
	Don't access at all (N/A)	85	96.59%
	Social	2	2.27%
16.6 Myspace	Business & social	1	1.14%
	Don't access at all (N/A)	87	98.86%
16.7 WhatsApp	Business	3	3.41%
	Business & social	25	28.41%
	Don't access at all (N/A)	24	27.27%
	Social	36	40.91%
16.8 Blackboard Messenger	Business	1	1.14%
	Business & social	7	7.95%
	Don't access at all (N/A)	59	67.05%
	Social	21	23.86%
16.9 Other - Skype	Business	3	3.41%
	Business & social	5	5.68%
	Don't access at all (N/A)	73	82.95%
	Social	7	7.95%
<b>SECTION D – Social media enterprise policies and restrictions</b>			
17. Does your enterprise have a social media policy in place that guides the use of social media?	No	33	37.50%
	Yes	55	62.50%
	N/A	33	37.50%
	No	3	3.41%

18. If you answered “Yes” in Question 17, are social media activities aligned to the social media policy?	Yes	52	59.09%
19. Employees in your enterprise:			
19.1 Adhere to company social media policies and procedures	Strongly disagree	5	5.68%
	Disagree	5	5.68%
	Undecided	24	27.27%
	Agree	31	35.23%
	Strongly agree	23	26.14%
19.2 Access social media platforms after working hours	Strongly disagree	7	7.95%
	Disagree	3	3.41%
	Undecided	13	14.77%
	Agree	29	32.95%
	Strongly agree	36	40.91%
19.3 Use company workstations, laptops, mobile devices to access personal social media platform accounts	Strongly disagree	15	17.05%
	Disagree	7	7.95%
	Undecided	15	17.05%
	Agree	32	36.36%
	Strongly agree	19	21.59%
19.4 Understand the content in the social media policy	Strongly disagree	4	4.55%
	Disagree	5	5.68%
	Undecided	30	34.09%
	Agree	29	32.95%
	Strongly agree	20	22.73%
19.5 Report inappropriate social media usage and activities	Strongly disagree	13	14.77%
	Disagree	10	11.36%
	Undecided	28	31.82%
	Agree	21	23.86%
	Strongly agree	16	18.18%
19.6 Have access to view the social media policy	Strongly disagree	7	7.95%
	Disagree	4	4.55%
	Undecided	19	21.59%
	Agree	25	28.41%
	Strongly agree	33	37.50%
19.7 Share company-related material via social media platforms	Strongly disagree	22	25.00%
	Disagree	13	14.77%
	Undecided	15	17.05%
	Agree	27	30.68%
	Strongly agree	11	12.50%
19.8 Communicate internally with fellow colleagues via social media platforms	Strongly disagree	9	10.23%
	Disagree	7	7.95%

	Undecided	11	12.50%
	Agree	38	43.18%
	Strongly agree	23	26.14%
19.9 Communicate externally with clients/competitors/customers via social media platforms	Strongly disagree	12	13.64%
	Disagree	13	14.77%
	Undecided	19	21.59%
	Agree	22	25.00%
	Strongly agree	22	25.00%
20. Does your enterprise have access restrictions to general social media platforms listed in the social media policy?	No	32	36.36%
	Yes	56	63.64%
<b>SECTION E – Social media (risk management)</b>			
21. Does your enterprise have a risk management function to assess and monitor social media risks?	No	25	28.41%
	Unsure	24	27.27%
	Yes	39	44.32%
22. If you answered “Yes” in Question 21, please indicate if this function is outsourced, co-sourced or in house?	Co-sourced (internal and external)	10	11.36%
	In house	17	19.32%
	N/A	48	54.55%
	Not sure	9	10.23%
	Outsourced	4	4.55%
23. To what extent do the following departments in your enterprise play a role in reducing and managing the risks associated with social media use?			
23.1 Sales	Great extent	13	14.77%
	Lesser extent	11	12.50%
	Moderate	10	11.36%
	None/N/A	54	61.36%
23.2 Marketing	Great extent	33	37.50%
	Lesser extent	8	9.09%
	Moderate	16	18.18%
	None/N/A	31	35.23%
23.3 Logistics/SCM	Greater extent	8	9.09%
	Lesser extent	16	18.18%
	Moderate	8	9.09%
	None/N/A	56	63.64%
23.4 Human Resources	Great extent	20	22.73%
	Lesser extent	11	12.50%
	Moderate	23	26.14%
	None/N/A	34	38.64%
23.5 Finance & Auditing	Great extent	13	14.77%
	Lesser extent	12	13.64%

	Moderate	19	21.59%
	None/N/A	44	50.00%
23.6 Information & Technology	Great extent	47	53.41%
	Lesser extent	4	4.55%
	Moderate	15	17.05%
	None/N/A	22	25.00%
23.7 Communication & Public Relations	Great extent	41	46.59%
	Lesser extent	7	7.95%
	Moderate	10	11.36%
	None/N/A	30	34.09%
23.8 Law/Corporate Affairs/Compliance	Great extent	30	34.09%
	Lesser extent	5	5.68%
	Moderate	17	19.32%
	None/N/A	36	40.91%
23.9 Other (Specify)	None/N/A	88	100.00%
<b>SECTION F – Social media (controls)</b>			
24. Your enterprise has the following controls in place:			
24.1 Monitoring employee usage of social media platforms	Strongly disagree	10	11.36%
	Disagree	9	10.23%
	Undecided	10	11.36%
	Agree	32	36.36%
	Strongly agree	27	30.68%
24.2 Exception reports of employees accessing restricted social media platforms	Strongly disagree	6	6.82%
	Disagree	13	14.77%
	Undecided	18	20.45%
	Agree	28	31.82%
	Strongly agree	23	26.14%
24.3 Social media policy governing social media use by employees	Strongly disagree	6	6.82%
	Disagree	11	12.50%
	Undecided	16	18.18%
	Agree	29	32.95%
	Strongly agree	26	29.55%
24.4 Disciplinary measures in place to address employee non-compliance to social media policy	Strongly disagree	7	7.95%
	Disagree	11	12.50%
	Undecided	15	17.05%
	Agree	25	28.41%
	Strongly agree	30	34.09%
24.5 Disciplinary measures in place to address employee misconduct on social media platforms	Strongly disagree	8	9.09%
	Disagree	8	9.09%
	Undecided	12	13.64%
	Agree	29	32.95%



	Strongly agree	31	35.23%
24.6 Data protection and security protection controls on enterprise computer hardware/laptops/mobile devices/workstations used by employees	Strongly disagree	7	7.95%
	Disagree	4	4.55%
	Undecided	4	4.55%
	Agree	27	30.68%
	Strongly agree	46	52.27%
24.7 Training for employees on social media policy content	Strongly disagree	23	26.14%
	Disagree	18	20.45%
	Undecided	20	22.73%
	Agree	13	14.77%
	Strongly agree	14	15.91%
24.8 Social media policy updates communicated to employees	Strongly disagree	18	20.45%
	Disagree	9	10.23%
	Undecided	15	17.05%
	Agree	29	32.95%
	Strongly agree	17	19.32%
<b>SECTION G – Social media risks</b>			
25. Do you have a reasonable understanding of what risks relate to social media within your enterprise?	No	13	14.77%
	Yes	75	85.23%
26. Do you have a reasonable understanding of what risks relate to social media within your function/department/business unit?	No	15	17.05%
	Yes	73	82.95%
27. Social media risks are managed well in your enterprise?	Strongly disagree	5	5.68%
	Disagree	8	9.09%
	Undecided	16	18.18%
	Agree	32	36.36%
	Strongly agree	27	30.68%
28. What level of impact would social media risks have on your enterprise?	Very high	5	5.68%
	High	29	32.95%
	Moderate	32	36.36%
	Low	10	11.36%
	Very Low	12	13.64%
29. Social media risks could negatively affect your enterprise's:			
29.1 Financial performance and position	Strongly disagree	16	18.18%
	Disagree	14	15.91%
	Undecided	15	17.05%
	Agree	31	35.23%
	Strongly agree	12	13.64%
29.2 Regulatory requirements	Strongly disagree	9	10.23%

	Disagree	18	20.45%
	Undecided	19	21.59%
	Agree	28	31.82%
	Strongly agree	14	15.91%
29.3 External reputation (among customers and competitors)	Strongly disagree	6	6.82%
	Disagree	6	6.82%
	Undecided	8	9.09%
	Agree	36	40.91%
	Strongly agree	32	36.36%
29.4 Internal reputation (among employees, shareholders and stakeholders)	Strongly disagree	5	5.68%
	Disagree	10	11.36%
	Undecided	9	10.23%
	Agree	43	48.86%
	Strongly agree	21	23.86%
29.5 Reputation (brand, credibility, trust, loyalty)	Strongly disagree	7	7.95%
	Disagree	7	7.95%
	Undecided	6	6.82%
	Agree	37	42.05%
	Strongly agree	31	35.23%

**APPENDIX F: FREQUENCY DATA REPORT**

21/10/2014 14:38:26

**Frequency Table Report**

Dataset C:\@Data\Research\MTech\CPUT\YoungLyndon\Data V3.NCSS

**Frequency Distribution of Suburb**

Suburb	Count	Cumulative Count	Percent	Cumulative Percent	Graph of Percent
Bellville	5	5	5.68%	5.68%	
Brackenfell	3	8	3.41%	9.09%	
Briza	1	9	1.14%	10.23%	
CBD	1	10	1.14%	11.36%	
Cape Town	29	39	32.95%	44.32%	
Century City	4	43	4.55%	48.86%	
Diep River	3	46	3.41%	52.27%	
Durbanville	1	47	1.14%	53.41%	
Eerste River	1	48	1.14%	54.55%	
Elsies River	1	49	1.14%	55.68%	
Foreshore	1	50	1.14%	56.82%	
Goodwood	1	51	1.14%	57.95%	
Kenilworth	2	53	2.27%	60.23%	
Kraaifontein	1	54	1.14%	61.36%	
Lansdowne	1	55	1.14%	62.50%	
Montague Gardens	2	57	2.27%	64.77%	
Mowbray	1	58	1.14%	65.91%	
Muizenberg	1	59	1.14%	67.05%	
Ndabeni	1	60	1.14%	68.18%	
Newlands	1	61	1.14%	69.32%	
Noordhoek	1	62	1.14%	70.45%	
Observatory	1	63	1.14%	71.59%	
Ottery	2	65	2.27%	73.86%	
Parow	3	68	3.41%	77.27%	
Pinelands	1	69	1.14%	78.41%	
Plumstead	2	71	2.27%	80.68%	
Retreat	1	72	1.14%	81.82%	
Rondebosch	2	74	2.27%	84.09%	
Somerset West	4	78	4.55%	88.64%	
Stikland	1	79	1.14%	89.77%	
Strandfontein	1	80	1.14%	90.91%	
Tableview	1	81	1.14%	92.05%	
Tokai	1	82	1.14%	93.18%	
Vredehoek	1	83	1.14%	94.32%	
Westlake	1	84	1.14%	95.45%	
Woodstock	3	87	3.41%	98.86%	
Wynberg	1	88	1.14%	100.00%	

**Frequency Distribution of Feedback**

Feedback	Count	Cumulative Count	Percent	Cumulative Percent	Graph of Percent
No	25	25	28.41%	28.41%	
Yes	63	88	71.59%	100.00%	

**Frequency Distribution of Industry**

Industry	Count	Cumulative Count	Percent	Cumulative Percent	Graph of Percent
Automotive	3	3	3.41%	3.41%	

Construction	1	4	1.14%	4.55%	
Consulting	6	10	6.82%	11.36%	
Consumer goods	8	18	9.09%	20.45%	
Consumer services	1	19	1.14%	21.59%	
Education	4	23	4.55%	26.14%	
Financial services	27	50	30.68%	56.82%	
Food and beverage	2	52	2.27%	59.09%	
Health care	2	54	2.27%	61.36%	
Manufacturing	6	60	6.82%	68.18%	
Other	20	80	22.73%	90.91%	
Pharmaceutical	2	82	2.27%	93.18%	
Printing and publishing	4	86	4.55%	97.73%	
Telecommunications	1	87	1.14%	98.86%	
Transportation	1	88	1.14%	100.00%	

**Frequency Distribution of NoEmploy**

NoEmploy	Count	Cumulative Count	Percent	Cumulative Percent	Graph of Percent
Large	54	54	61.36%	61.36%	
Medium	3	57	3.41%	64.77%	
Small	31	88	35.23%	100.00%	

**Frequency Distribution of Level**

Level	Count	Cumulative Count	Percent	Cumulative Percent	Graph of Percent
Executive Management	4	4	4.55%	4.55%	
Middle Management	29	33	32.95%	37.50%	
Non Managerial/Specialist	43	76	48.86%	86.36%	
Senior Management	12	88	13.64%	100.00%	

**Frequency Distribution of Job Title**

Job Title	Count	Cumulative Count	Percent	Cumulative Percent	Graph of Percent
Account Manager	1	1	1.14%	1.14%	
Accountant	3	4	3.41%	4.55%	
Administration Manager	1	5	1.14%	5.68%	
Analyst Developer	1	6	1.14%	6.82%	
Assistant	1	7	1.14%	7.95%	
Associate to Risk	1	8	1.14%	9.09%	
Audit Clerk	1	9	1.14%	10.23%	
Auditor	1	10	1.14%	11.36%	
Bank Official	1	11	1.14%	12.50%	
Bookkeeper	1	12	1.14%	13.64%	
Business Analyst	2	14	2.27%	15.91%	
Business Centre Leader	1	15	1.14%	17.05%	
Business Development Manager	1	16	1.14%	18.18%	
Communications Manager	1	17	1.14%	19.32%	
Corporate Communications & Marketing Co-ordinator	1	18	1.14%	20.45%	
Data Analyst- Team Leader	1	19	1.14%	21.59%	
Dealer Marketer	1	20	1.14%	22.73%	
Design Engineer	1	21	1.14%	23.86%	
Designer	1	22	1.14%	25.00%	
Director	1	23	1.14%	26.14%	
Executive Management	2	25	2.27%	28.41%	
Finance	4	29	4.55%	32.95%	
Finance Analyst	1	30	1.14%	34.09%	
Finance Broker	1	31	1.14%	35.23%	

Finance Process Analyst	1	32	1.14%	36.36%
Finance and office manager	1	33	1.14%	37.50%
Financial Accountant	1	34	1.14%	38.64%
Financial Administrator	2	36	2.27%	40.91%
Fitter & Turner	1	37	1.14%	42.05%
HR Administrator	1	38	1.14%	43.18%
Head of Marketing	1	39	1.14%	44.32%
Health officer/ Internal Auditor	1	40	1.14%	45.45%
IT Application Support Specialist	1	41	1.14%	46.59%
IT Engineer	1	42	1.14%	47.73%
IT Manager	1	43	1.14%	48.86%
In-Service Trainee	1	44	1.14%	50.00%
Information Management	1	45	1.14%	51.14%
Insights Analyst	1	46	1.14%	52.27%
Installation Manager	1	47	1.14%	53.41%
Internal Audit Clerk	1	48	1.14%	54.55%
Internal Auditor	3	51	3.41%	57.95%
Junior Internal Auditor	1	52	1.14%	59.09%
Junior Maintenance Engineer	1	53	1.14%	60.23%
Lecturer	1	54	1.14%	61.36%
Logistics Planner	1	55	1.14%	62.50%
Management Accountant	2	57	2.27%	64.77%
Marketing Administrator	1	58	1.14%	65.91%
Marketing Co-ordinator	1	59	1.14%	67.05%
News editor	1	60	1.14%	68.18%
Owner & Co-Contributor	1	61	1.14%	69.32%
PA/HR Administrator	1	62	1.14%	70.45%
PR manager & Tenant Liaison	1	63	1.14%	71.59%
Personal Assistant	1	64	1.14%	72.73%
Pharmacist	1	65	1.14%	73.86%
Planner	1	66	1.14%	75.00%
Planning Administrator	1	67	1.14%	76.14%
Portfolio Finance& Benefits Manager	1	68	1.14%	77.27%
Procurement Manager	1	69	1.14%	78.41%
Purchasing Agent	1	70	1.14%	79.55%
Regional Office Manager	1	71	1.14%	80.68%
Resource Administrator	1	72	1.14%	81.82%
Scoring Analyst	1	73	1.14%	82.95%
Senior Internal Auditor	2	75	2.27%	85.23%
Senior Software Engineer	1	76	1.14%	86.36%
Shop Assistant	1	77	1.14%	87.50%
Stock Controller	1	78	1.14%	88.64%
Store Manager	1	79	1.14%	89.77%
Supply Chain Practitioner	1	80	1.14%	90.91%
Team Leader	1	81	1.14%	92.05%
Team Leader Credit Support	1	82	1.14%	93.18%
Technical Sales representative	2	84	2.27%	95.45%
Tourism	1	85	1.14%	96.59%
Trainee Accountant	1	86	1.14%	97.73%
Transport & operations Intern	1	87	1.14%	98.86%
Treasury (Bulk Teller)	1	88	1.14%	100.00%

**Frequency Distribution of TimePos**

TimePos	Count	Cumulative Count	Percent	Cumulative Percent	Graph of Percent
00 – 3 years	58	58	65.91%	65.91%	
04 – 6 years	16	74	18.18%	84.09%	

07 – 10 years	8	82	9.09%	93.18%	
11 years and more	6	88	6.82%	100.00%	

**Frequency Distribution of FirmSocMed**

FirmSocMed	Count	Cumulative Count	Percent	Cumulative Percent	Graph of Percent
No	11	11	12.50%	12.50%	
Yes	77	88	87.50%	100.00%	

**Frequency Distribution of TSMTwitter**

TSMTwitter	Count	Cumulative Count	Percent	Cumulative Percent	Graph of Percent
Business	23	23	26.14%	26.14%	
Business & Social	21	44	23.86%	50.00%	
Not Sure (N/A)	36	80	40.91%	90.91%	
Social	8	88	9.09%	100.00%	

**Frequency Distribution of TSMYoutube**

TSMYoutube	Count	Cumulative Count	Percent	Cumulative Percent	Graph of Percent
Business	14	14	15.91%	15.91%	
Business & Social	10	24	11.36%	27.27%	
Not Sure (N/A)	58	82	65.91%	93.18%	
Social	6	88	6.82%	100.00%	

**Frequency Distribution of TSMLinkedIn**

TSMLinkedIn	Count	Cumulative Count	Percent	Cumulative Percent	Graph of Percent
Business	32	32	36.36%	36.36%	
Business & Social	18	50	20.45%	56.82%	
Not Sure (N/A)	37	87	42.05%	98.86%	
Social	1	88	1.14%	100.00%	

**Frequency Distribution of TSMFacebook**

TSMFacebook	Count	Cumulative Count	Percent	Cumulative Percent	Graph of Percent
Business	26	26	29.55%	29.55%	
Business & Social	27	53	30.68%	60.23%	
Not Sure (N/A)	27	80	30.68%	90.91%	
Social	8	88	9.09%	100.00%	

**Frequency Distribution of TSMMySpace**

TSMMySpace	Count	Cumulative Count	Percent	Cumulative Percent	Graph of Percent
Business	5	5	5.68%	5.68%	
Business & Social	2	7	2.27%	7.95%	
Not Sure (N/A)	80	87	90.91%	98.86%	
Social	1	88	1.14%	100.00%	

**Frequency Distribution of TSMMySpace**

TSMMySpace	Count	Cumulative Count	Percent	Cumulative Percent	Graph of Percent
Business & Social	1	1	1.14%	1.14%	

Not Sure (N/A)	86	87	97.73%	98.86%	
Social	1	88	1.14%	100.00%	

#### Frequency Distribution of TSMWhatsapp

TSMWhatsapp	Count	Cumulative Count	Percent	Cumulative Percent	Graph of Percent
Business	4	4	4.55%	4.55%	
Business & Social	15	19	17.05%	21.59%	
Not Sure (N/A)	65	84	73.86%	95.45%	
Social	4	88	4.55%	100.00%	

#### Frequency Distribution of TSMBlackbMess

TSMBlackbMess	Count	Cumulative Count	Percent	Cumulative Percent	Graph of Percent
Business	1	1	1.14%	1.14%	
Business & Social	3	4	3.41%	4.55%	
Not Sure (N/A)	80	84	90.91%	95.45%	
Social	4	88	4.55%	100.00%	

#### Frequency Distribution of TSMOtherSocMed

TSMOtherSocMed	Count	Cumulative Count	Percent	Cumulative Percent	Graph of Percent
Business	6	6	6.82%	6.82%	
Business & Social	7	13	7.95%	14.77%	
Not Sure (N/A)	75	88	85.23%	100.00%	

#### Frequency Distribution of TimeSocMed

TimeSocMed	Count	Cumulative Count	Percent	Cumulative Percent	Graph of Percent
00 – 3 years	31	31	35.23%	35.23%	
04 – 6 years	18	49	20.45%	55.68%	
07 – 10 years	8	57	9.09%	64.77%	
11 years and more	5	62	5.68%	70.45%	
Not Sure	26	88	29.55%	100.00%	

#### Frequency Distribution of FrSMAdvertising

FrSMAdvertising	Count	Cumulative Count	Percent	Cumulative Percent	Graph of Percent
Daily	32	32	36.36%	36.36%	
Monthly	19	51	21.59%	57.95%	
Never (N/A)	24	75	27.27%	85.23%	
Occurrence based	1	76	1.14%	86.36%	
Other (Please specify)	1	77	1.14%	87.50%	
Weekly	11	88	12.50%	100.00%	

#### Frequency Distribution of FrSMMarketing

FrSMMarketing	Count	Cumulative Count	Percent	Cumulative Percent	Graph of Percent
Daily	32	32	36.36%	36.36%	
Monthly	18	50	20.45%	56.82%	
Never (N/A)	24	74	27.27%	84.09%	
Occurrence based	1	75	1.14%	85.23%	
Other (Please specify)	1	76	1.14%	86.36%	
Weekly	12	88	13.64%	100.00%	

**Frequency Distribution of FrSMBlogging**

FrSMBlogging	Count	Cumulative Count	Percent	Cumulative Percent	Graph of Percent
Daily	22	22	25.00%	25.00%	
Monthly	13	35	14.77%	39.77%	
Never (N/A)	46	81	52.27%	92.05%	
Occurrence based	2	83	2.27%	94.32%	
Other (Please specify)	1	84	1.14%	95.45%	
Weekly	4	88	4.55%	100.00%	

**Frequency Distribution of FrSMForums**

FrSMForums	Count	Cumulative Count	Percent	Cumulative Percent	Graph of Percent
Daily	25	25	28.41%	28.41%	
Monthly	13	38	14.77%	43.18%	
Never (N/A)	39	77	44.32%	87.50%	
Occurrence based	2	79	2.27%	89.77%	
Other (Please specify)	1	80	1.14%	90.91%	
Weekly	8	88	9.09%	100.00%	

**Frequency Distribution of EmpSocMedBus**

EmpSocMedBus	Count	Cumulative Count	Percent	Cumulative Percent	Graph of Percent
No	26	26	29.55%	29.55%	
Yes	62	88	70.45%	100.00%	

**Frequency Distribution of EmpSocMedPersonal**

EmpSocMedPersonal	Count	Cumulative Count	Percent	Cumulative Percent	Graph of Percent
No	43	43	48.86%	48.86%	
Yes	45	88	51.14%	100.00%	

**Frequency Distribution of EmpAlowSocMed**

EmpAlowSocMed	Count	Cumulative Count	Percent	Cumulative Percent	Graph of Percent
No	36	36	40.91%	40.91%	
Yes	52	88	59.09%	100.00%	

**Frequency Distribution of AccUseInternCompfac**

AccUseInternCompfac	Count	Cumulative Count	Percent	Cumulative Percent	Graph of Percent
No	33	33	37.50%	37.50%	
Yes	55	88	62.50%	100.00%	

**Frequency Distribution of HrsDaySocMedBus**

HrsDaySocMedBus	Count	Cumulative Count	Percent	Cumulative Percent	Graph of Percent
0 – 3 hours	73	73	82.95%	82.95%	
4 – 6 hours	3	76	3.41%	86.36%	
7 – 10 hours	2	78	2.27%	88.64%	
Not sure	10	88	11.36%	100.00%	

**Frequency Distribution of HrsDaySocMedPersuse**

HrsDaySocMedPersuse	Count	Cumulative Count	Percent	Cumulative Percent	Graph of Percent
0 – 3 hours	81	81	92.05%	92.05%	



4 – 6 hours	3	84	3.41%	95.45%	
Not sure	4	88	4.55%	100.00%	

**Frequency Distribution of TSMPurTwitter**

TSMPurTwitter	Count	Cumulative Count	Percent	Cumulative Percent	Graph of Percent
Business	4	4	4.55%	4.55%	
Business & Social	12	16	13.64%	18.18%	
Don't access at all (N/A)	58	74	65.91%	84.09%	
Social	14	88	15.91%	100.00%	

**Frequency Distribution of TSMPurYoutube**

TSMPurYoutube	Count	Cumulative Count	Percent	Cumulative Percent	Graph of Percent
Business	4	4	4.55%	4.55%	
Business & Social	11	15	12.50%	17.05%	
Don't access at all (N/A)	50	65	56.82%	73.86%	
Social	23	88	26.14%	100.00%	

**Frequency Distribution of TSMPurLinkedIn**

TSMPurLinkedIn	Count	Cumulative Count	Percent	Cumulative Percent	Graph of Percent
Business	15	15	17.05%	17.05%	
Business & Social	30	45	34.09%	51.14%	
Don't access at all (N/A)	25	70	28.41%	79.55%	
Social	18	88	20.45%	100.00%	

**Frequency Distribution of TSMPurFacebook**

TSMPurFacebook	Count	Cumulative Count	Percent	Cumulative Percent	Graph of Percent
Business	1	1	1.14%	1.14%	
Business & Social	21	22	23.86%	25.00%	
Don't access at all (N/A)	29	51	32.95%	57.95%	
Social	37	88	42.05%	100.00%	

**Frequency Distribution of TSMPurMxit**

TSMPurMxit	Count	Cumulative Count	Percent	Cumulative Percent	Graph of Percent
Business	1	1	1.14%	1.14%	
Don't access at all (N/A)	85	86	96.59%	97.73%	
Social	2	88	2.27%	100.00%	

**Frequency Distribution of TSMPurMySpace**

TSMPurMySpace	Count	Cumulative Count	Percent	Cumulative Percent	Graph of Percent
Business & Social	1	1	1.14%	1.14%	
Don't access at all (N/A)	87	88	98.86%	100.00%	

**Frequency Distribution of TSMPurWhatsapp**

TSMPurWhatsapp	Count	Cumulative Count	Percent	Cumulative Percent	Graph of Percent
Business	3	3	3.41%	3.41%	
Business & Social	25	28	28.41%	31.82%	
Don't access at all (N/A)	24	52	27.27%	59.09%	
Social	36	88	40.91%	100.00%	

**Frequency Distribution of TSM PurBlackbMess**

TSM PurBlackbMess	Count	Cumulative Count	Percent	Cumulative Percent	Graph of Percent
Business	1	1	1.14%	1.14%	
Business & Social	7	8	7.95%	9.09%	
Don't access at all (N/A)	59	67	67.05%	76.14%	
Social	21	88	23.86%	100.00%	

**Frequency Distribution of TSM PurOther**

TSM PurOther	Count	Cumulative Count	Percent	Cumulative Percent	Graph of Percent
Business	3	3	3.41%	3.41%	
Business & Social	5	8	5.68%	9.09%	
Don't access at all (N/A)	73	81	82.95%	92.05%	
Social	7	88	7.95%	100.00%	

**Frequency Distribution of SMPolicy**

SMPolicy	Count	Cumulative Count	Percent	Cumulative Percent	Graph of Percent
No	33	33	37.50%	37.50%	
Yes	55	88	62.50%	100.00%	

**Frequency Distribution of Activ\_Policy**

Activ_Policy	Count	Cumulative Count	Percent	Cumulative Percent	Graph of Percent
N/A	33	33	37.50%	37.50%	
No	3	36	3.41%	40.91%	
Yes	52	88	59.09%	100.00%	

**Frequency Distribution of AdherCoPolicy**

AdherCoPolicy	Count	Cumulative Count	Percent	Cumulative Percent	Graph of Percent
1 = strongly disagree	5	5	5.68%	5.68%	
2 = disagree	5	10	5.68%	11.36%	
3 = undecided	24	34	27.27%	38.64%	
4 = agree	31	65	35.23%	73.86%	
5 = strongly agree	23	88	26.14%	100.00%	

**Frequency Distribution of AccSocMedAftrHrs**

AccSocMedAftrHrs	Count	Cumulative Count	Percent	Cumulative Percent	Graph of Percent
1 = strongly disagree	7	7	7.95%	7.95%	
2 = disagree	3	10	3.41%	11.36%	
3 = undecided	13	23	14.77%	26.14%	
4 = agree	29	52	32.95%	59.09%	
5 = strongly agree	36	88	40.91%	100.00%	

**Frequency Distribution of CoEquipPersUse**

CoEquipPersUse	Count	Cumulative Count	Percent	Cumulative Percent	Graph of Percent
1 = strongly disagree	15	15	17.05%	17.05%	
2 = disagree	7	22	7.95%	25.00%	
3 = undecided	15	37	17.05%	42.05%	
4 = agree	32	69	36.36%	78.41%	
5 = strongly agree	19	88	21.59%	100.00%	

**Frequency Distribution of UndesContMedPol**

UndesContMedPol	Count	Cumulative Count	Percent	Cumulative Percent	Graph of Percent
1 = strongly disagree	4	4	4.55%	4.55%	
2 = disagree	5	9	5.68%	10.23%	
3 = undecided	30	39	34.09%	44.32%	
4 = agree	29	68	32.95%	77.27%	
5 = strongly agree	20	88	22.73%	100.00%	

**Frequency Distribution of ReplnappUse**

ReplnappUse	Count	Cumulative Count	Percent	Cumulative Percent	Graph of Percent
1 = strongly disagree	13	13	14.77%	14.77%	
2 = disagree	10	23	11.36%	26.14%	
3 = undecided	28	51	31.82%	57.95%	
4 = agree	21	72	23.86%	81.82%	
5 = strongly agree	16	88	18.18%	100.00%	

**Frequency Distribution of ViewSocMedPolic**

ViewSocMedPolic	Count	Cumulative Count	Percent	Cumulative Percent	Graph of Percent
1 = strongly disagree	7	7	7.95%	7.95%	
2 = disagree	4	11	4.55%	12.50%	
3 = undecided	19	30	21.59%	34.09%	
4 = agree	25	55	28.41%	62.50%	
5 = strongly agree	33	88	37.50%	100.00%	

**Frequency Distribution of ShareCoViaSocMed**

ShareCoViaSocMed	Count	Cumulative Count	Percent	Cumulative Percent	Graph of Percent
1 = strongly disagree	22	22	25.00%	25.00%	
2 = disagree	13	35	14.77%	39.77%	
3 = undecided	15	50	17.05%	56.82%	
4 = agree	27	77	30.68%	87.50%	
5 = strongly agree	11	88	12.50%	100.00%	

**Frequency Distribution of CommIntViaSocMed**

CommIntViaSocMed	Count	Cumulative Count	Percent	Cumulative Percent	Graph of Percent
1 = strongly disagree	9	9	10.23%	10.23%	
2 = disagree	7	16	7.95%	18.18%	
3 = undecided	11	27	12.50%	30.68%	
4 = agree	38	65	43.18%	73.86%	
5 = strongly agree	23	88	26.14%	100.00%	

**Frequency Distribution of CommExternViaSocMed**

CommExternViaSocMed	Count	Cumulative Count	Percent	Cumulative Percent	Graph of Percent
1 = strongly disagree	12	12	13.64%	13.64%	
2 = disagree	13	25	14.77%	28.41%	
3 = undecided	19	44	21.59%	50.00%	
4 = agree	22	66	25.00%	75.00%	
5 = strongly agree	22	88	25.00%	100.00%	

**Frequency Distribution of CompAccRestrict**

CompAccRestrict	Count	Cumulative Count	Percent	Cumulative Percent	Graph of Percent
No	32	32	36.36%	36.36%	

Yes	56	88	63.64%	100.00%	
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**Frequency Distribution of RiskManSocMed**

RiskManSocMed	Count	Cumulative Count	Percent	Cumulative Percent	Graph of Percent
No	25	25	28.41%	28.41%	
Unsure	24	49	27.27%	55.68%	
Yes	39	88	44.32%	100.00%	

**Frequency Distribution of RiskManOutscInhous**

RiskManOutscInhous	Count	Cumulative Count	Percent	Cumulative Percent	Graph of Percent
Co-sourced (Internal and external)	10	10	11.36%	11.36%	
In-house	17	27	19.32%	30.68%	
N/A	48	75	54.55%	85.23%	
Not sure	9	84	10.23%	95.45%	
Out-sourced	4	88	4.55%	100.00%	

**Frequency Distribution of RiskManSales**

RiskManSales	Count	Cumulative Count	Percent	Cumulative Percent	Graph of Percent
Great Extent	13	13	14.77%	14.77%	
Less Extent	11	24	12.50%	27.27%	
Moderate	10	34	11.36%	38.64%	
None/ N/A	54	88	61.36%	100.00%	

**Frequency Distribution of RiskManMarketing**

RiskManMarketing	Count	Cumulative Count	Percent	Cumulative Percent	Graph of Percent
Great Extent	33	33	37.50%	37.50%	
Less Extent	8	41	9.09%	46.59%	
Moderate	16	57	18.18%	64.77%	
None/ N/A	31	88	35.23%	100.00%	

**Frequency Distribution of RiskManLogistics\_SCM**

RiskManLogistics_SCM	Count	Cumulative Count	Percent	Cumulative Percent	Graph of Percent
Great Extent	8	8	9.09%	9.09%	
Less Extent	16	24	18.18%	27.27%	
Moderate	8	32	9.09%	36.36%	
None/ N/A	56	88	63.64%	100.00%	

**Frequency Distribution of RiskManHR**

RiskManHR	Count	Cumulative Count	Percent	Cumulative Percent	Graph of Percent
Great Extent	20	20	22.73%	22.73%	
Less Extent	11	31	12.50%	35.23%	
Moderate	23	54	26.14%	61.36%	
None/ N/A	34	88	38.64%	100.00%	

**Frequency Distribution of RisManFinAudit**

RisManFinAudit	Count	Cumulative Count	Percent	Cumulative Percent	Graph of Percent
Great Extent	13	13	14.77%	14.77%	
Less Extent	12	25	13.64%	28.41%	
Moderate	19	44	21.59%	50.00%	
None/ N/A	44	88	50.00%	100.00%	

**Frequency Distribution of RiskManIT**

RiskManIT	Count	Cumulative Count	Percent	Cumulative Percent	Graph of Percent
Great Extent	47	47	53.41%	53.41%	
Less Extent	4	51	4.55%	57.95%	
Moderate	15	66	17.05%	75.00%	
None/ N/A	22	88	25.00%	100.00%	

**Frequency Distribution of RiskManCommPubRel**

RiskManCommPubRel	Count	Cumulative Count	Percent	Cumulative Percent	Graph of Percent
Great Extent	41	41	46.59%	46.59%	
Less Extent	7	48	7.95%	54.55%	
Moderate	10	58	11.36%	65.91%	
None/ N/A	30	88	34.09%	100.00%	

**Frequency Distribution of RiskManLaw\_CorpAff\_Comp**

RiskManLaw_CorpAff_Comp	Count	Cumulative Count	Percent	Cumulative Percent	Graph of Percent
Great Extent	30	30	34.09%	34.09%	
Less Extent	5	35	5.68%	39.77%	
Moderate	17	52	19.32%	59.09%	
None/ N/A	36	88	40.91%	100.00%	

**Frequency Distribution of RiskManOther**

RiskManOther	Count	Cumulative Count	Percent	Cumulative Percent	Graph of Percent
None/ N/A	88	88	100.00%	100.00%	

**Frequency Distribution of MonitEmpUse**

MonitEmpUse	Count	Cumulative Count	Percent	Cumulative Percent	Graph of Percent
1 = strongly disagree	10	10	11.36%	11.36%	
2 = disagree	9	19	10.23%	21.59%	
3 = undecided	10	29	11.36%	32.95%	
4 = agree	32	61	36.36%	69.32%	
5 = strongly agree	27	88	30.68%	100.00%	

**Frequency Distribution of ExceptRepEmp**

ExceptRepEmp	Count	Cumulative Count	Percent	Cumulative Percent	Graph of Percent
1 = strongly disagree	6	6	6.82%	6.82%	
2 = disagree	13	19	14.77%	21.59%	
3 = undecided	18	37	20.45%	42.05%	
4 = agree	28	65	31.82%	73.86%	
5 = strongly agree	23	88	26.14%	100.00%	

**Frequency Distribution of SocMedPolicyUseEmp**

SocMedPolicyUseEmp	Count	Cumulative Count	Percent	Cumulative Percent	Graph of Percent
1 = strongly disagree	6	6	6.82%	6.82%	
2 = disagree	11	17	12.50%	19.32%	
3 = undecided	16	33	18.18%	37.50%	
4 = agree	29	62	32.95%	70.45%	
5 = strongly agree	26	88	29.55%	100.00%	

**Frequency Distribution of DiscipEmpNonComp**

DiscipEmpNonComp	Count	Cumulative Count	Percent	Cumulative Percent	Graph of Percent
1 = strongly disagree	7	7	7.95%	7.95%	
2 = disagree	11	18	12.50%	20.45%	
3 = undecided	15	33	17.05%	37.50%	
4 = agree	25	58	28.41%	65.91%	
5 = strongly agree	30	88	34.09%	100.00%	

**Frequency Distribution of DiscipEmpMisuse**

DiscipEmpMisuse	Count	Cumulative Count	Percent	Cumulative Percent	Graph of Percent
1 = strongly disagree	8	8	9.09%	9.09%	
2 = disagree	8	16	9.09%	18.18%	
3 = undecided	12	28	13.64%	31.82%	
4 = agree	29	57	32.95%	64.77%	
5 = strongly agree	31	88	35.23%	100.00%	

**Frequency Distribution of Security**

Security	Count	Cumulative Count	Percent	Cumulative Percent	Graph of Percent
1 = strongly disagree	7	7	7.95%	7.95%	
2 = disagree	4	11	4.55%	12.50%	
3 = undecided	4	15	4.55%	17.05%	
4 = agree	27	42	30.68%	47.73%	
5 = strongly agree	46	88	52.27%	100.00%	

**Frequency Distribution of TraiSocMedPolicy**

TraiSocMedPolicy	Count	Cumulative Count	Percent	Cumulative Percent	Graph of Percent
1 = strongly disagree	23	23	26.14%	26.14%	
2 = disagree	18	41	20.45%	46.59%	
3 = undecided	20	61	22.73%	69.32%	
4 = agree	13	74	14.77%	84.09%	
5 = strongly agree	14	88	15.91%	100.00%	

**Frequency Distribution of SocMedPolUpdComm**

SocMedPolUpdComm	Count	Cumulative Count	Percent	Cumulative Percent	Graph of Percent
1 = strongly disagree	18	18	20.45%	20.45%	
2 = disagree	9	27	10.23%	30.68%	
3 = undecided	15	42	17.05%	47.73%	
4 = agree	29	71	32.95%	80.68%	
5 = strongly agree	17	88	19.32%	100.00%	

**Frequency Distribution of UUnderstRisk**

UUnderstRisk	Count	Cumulative Count	Percent	Cumulative Percent	Graph of Percent
No	13	13	14.77%	14.77%	
Yes	75	88	85.23%	100.00%	

**Frequency Distribution of UUnderstRiskDept**

UUnderstRiskDept	Count	Cumulative Count	Percent	Cumulative Percent	Graph of Percent
No	15	15	17.05%	17.05%	
Yes	73	88	82.95%	100.00%	

**Frequency Distribution of SocMedRiskWellMan**

SocMedRiskWellMan	Count	Cumulative Count	Percent	Cumulative Percent	Graph of Percent
1 = strongly disagree	5	5	5.68%	5.68%	
2 = disagree	8	13	9.09%	14.77%	
3 = undecided	16	29	18.18%	32.95%	
4 = agree	32	61	36.36%	69.32%	
5 = strongly agree	27	88	30.68%	100.00%	

**Frequency Distribution of ImpactSocMedRisk**

ImpactSocMedRisk	Count	Cumulative Count	Percent	Cumulative Percent	Graph of Percent
High	29	29	32.95%	32.95%	
Low	10	39	11.36%	44.32%	
Moderate	32	71	36.36%	80.68%	
Very High	5	76	5.68%	86.36%	
Very Low	12	88	13.64%	100.00%	

**Frequency Distribution of RiskFinPerfPos**

RiskFinPerfPos	Count	Cumulative Count	Percent	Cumulative Percent	Graph of Percent
1 = strongly disagree	16	16	18.18%	18.18%	
2 = disagree	14	30	15.91%	34.09%	
3 = undecided	15	45	17.05%	51.14%	
4 = agree	31	76	35.23%	86.36%	
5 = strongly agree	12	88	13.64%	100.00%	

**Frequency Distribution of RiskRegRequir**

RiskRegRequir	Count	Cumulative Count	Percent	Cumulative Percent	Graph of Percent
1 = strongly disagree	9	9	10.23%	10.23%	
2 = disagree	18	27	20.45%	30.68%	
3 = undecided	19	46	21.59%	52.27%	
4 = agree	28	74	31.82%	84.09%	
5 = strongly agree	14	88	15.91%	100.00%	

**Frequency Distribution of RiskExtReput**

RiskExtReput	Count	Cumulative Count	Percent	Cumulative Percent	Graph of Percent
1 = strongly disagree	6	6	6.82%	6.82%	
2 = disagree	6	12	6.82%	13.64%	
3 = undecided	8	20	9.09%	22.73%	
4 = agree	36	56	40.91%	63.64%	
5 = strongly agree	32	88	36.36%	100.00%	

**Frequency Distribution of RiskIntReput**

RiskIntReput	Count	Cumulative Count	Percent	Cumulative Percent	Graph of Percent
1 = strongly disagree	5	5	5.68%	5.68%	
2 = disagree	10	15	11.36%	17.05%	
3 = undecided	9	24	10.23%	27.27%	
4 = agree	43	67	48.86%	76.14%	
5 = strongly agree	21	88	23.86%	100.00%	

**Frequency Distribution of RiskReputBrand**

	Cumulative Count	Percent	Cumulative Percent	Graph of Percent
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RiskReputBrand	Count	Count	Percent	Percent	Percent
1 = strongly disagree	7	7	7.95%	7.95%	
2 = disagree	7	14	7.95%	15.91%	
3 = undecided	6	20	6.82%	22.73%	
4 = agree	37	57	42.05%	64.77%	
5 = strongly agree	31	88	35.23%	100.00%	

**Frequency Distribution of ConsForm**

ConsForm	Count	Cumulative Count	Percent	Cumulative Percent	Graph of Percent
No	83	83	94.32%	94.32%	
Yes	5	88	5.68%	100.00%	