



RISK MANAGEMENT OF SMMEs

by

HELENE GESIKA OUMBAHOUI BOUBALA

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Supervisor: Prof. Dr. J. A Watkins

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DECLARATION

I declare that “Risk Management of SMMEs” is my own work, that it has not been submitted before for any degree or assessment in any other university, and that all the sources I have used or quoted have been indicated and acknowledged by means of complete references.

Signed:

Date:

ABSTRACT

Developing countries face the great challenge of balancing growth with equity and justice. Growth, in all its fairness, should translate into equitable opportunity for all, but as is observed, the distributional effect of growth often does not filter down to the majority of the socially and economically disadvantaged communities. It is imperative in these situations to embark on a process of developmental change to improve the quality of life of the majority of the disadvantaged community.

South Africa used this strategy to endeavour to encounter or reverse the political history of the country, by encouraging entrepreneurs of previously disadvantaged racial groups through the Department of Trade and Industry (DTI) to open small businesses. The South African Government believes that the development, growth and sustainability of the Small, Medium and Micro Enterprise (SMME) sector will help the country to decrease the high unemployment rate, and lead the country as a whole to a sustainable economical development. Research has shown that this aim can no longer be achieved by only facilitating access to finance to entrepreneurs. They argue that some management strategies such as risk management should be introduced, understood and applied by small business owners, in order for their businesses to go beyond their actual estimated survival period referred as 3 to 5 years maximum.

This research provides background to which risk management techniques are applied within the ambit of small enterprises. The data were collected from eighty eight companies drawn from a possible of 150 small enterprises found in the Cape Metropole. The analysis of data of those who responded has shown that very few SMME owners, managers, entrepreneurs or key designated employees make use of risk management tools and techniques within their businesses, to achieve growth and sustainability. However, the majority agreed to the high importance of risk management in the success of a business enterprise.

DEDICATION

This research study is dedicated to my mother Agathe Nguimi for her love and unending support.

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ACRONYMS

| | |
|---------|---|
| AIRMIC | Association of Insurance and Risk Managers. |
| ALARM | National Forum for Risk Management. |
| CAS | Casualty Actuarial Society. |
| COSO | Committee of Sponsoring Organisations of the Treadway Commission. |
| DTI | Department for Trade and Industry. |
| ERM | Enterprise Risk Management. |
| GRA | Global Risk Alliance. |
| ICAEW | Institute of Chartered Accountants in England and Wales. |
| ICSB | International Council for Small Business World Conference |
| IRM | Institute of Risk Management. |
| IRMSA | Institute of Risk Management South Africa. |
| KonTraG | German Control and Transparency Act. |
| NSW | New South Wales Department of State and Regional Department. |
| OECD | Organisation for Economic Co-operation and Development. |
| RM | Risk Management. |
| RMF | Risk Management Framework. |
| RMP | Risk Management Process/Plan. |
| SMEs | Small and Medium-sized Enterprises. |
| SMMEs | Small, Medium and Micro Enterprises. |
| SWOT | Strength, Weaknesses, Opportunities and Threats. |

CHAPTER ONE

BACKGROUND AND SCOPE OF THE RESEARCH

Growth of SMMEs will benefit the economy.

Deputy Minister Elisabeth Thabethe

1.1 INTRODUCTION

The importance of the small enterprise economy to economic and social development in Africa is undisputed. Throughout the continent, the small enterprise economy is high on the policy agenda for African development. Its most significant contributions lie in the areas of employment creation, the enhancement of growth, and poverty alleviation (Rogerson, 2001:115).

Internationally, Small, Medium and Micro Enterprises (SMMEs) are noted for their contribution to innovation and their ability to impact on growth. Small and medium-sized enterprises account for 60 to 70 per cent of jobs in most OECD (Organisation for Economic Co-operation and Development) countries; they also account for a disproportionately large share of new jobs (AFREC, 2005: **Online** citing OECD, 1997). However, in this respect the OECD study notes that many start-ups do not survive for more than five years, and fewer develop into high-growth firms.

In South Africa, the SMME sector has been promoted since 1995, in order to meet the Government's national economic growth objectives. The Small Business Act was enacted in 1996 with institutions such as the National Small Business Council and Ntsika Enterprise Promotion Agency being established. Conversely, despite ongoing government initiatives such as the formal launching of the Small Enterprise Development Agency by the Department of Trade and Industry (DTI) in 2004, the situation of most SMMEs remains highly problematic (AFREC, 2005:**Online**), which is confirmed by the high rate of failure experienced by those SMMEs. Researchers believe that SMMEs in South Africa mostly fail because of their owner managers' lack of managerial skills, such as risk management (A³Consulting, 2006:**Online**).

1.2 BACKGROUND TO THE RESEARCH PROBLEM

The promotion of SMMEs is the focus of considerable policy interest not only in South Africa, but also in many other countries. In its 'White paper on National Strategy for the Development and Promotion of Small Business in South Africa', the South African Government has explicitly identified the promotion of SMMEs as a policy imperative for addressing the challenges of unemployment and poverty (Mahadea, 2008:3). Clearly, SMMEs are viewed as mechanisms for economic development and job creation in South Africa. As a result, a need for SMME sustainability and constant growth exists to achieve such goals.

The South African Government since 1995 is actively promoting small businesses; however they are not meeting expectations. Their contributions are not yet sufficient to claim that the country's economy is currently minimising the high unemployment rate experienced, or that they contribute to poverty alleviation, economic growth or international competitiveness (Berry, Von Blottnitz, Cassim, Kesper, Rajaratnam & Van Seventer 2002:1). The South African Government has specifically designated the DTI to help SMMEs achieve these aims, however with little or no tangible results.

To clarify this phenomenon, several research studies have been conducted to understand why SMMEs fail, despite the support infrastructures being provided. It was found that many SMME owners and entrepreneurs attributed SMME failure primarily to the lack of access to finance. However, the interpretation of data from a survey conducted in 2006 for the Institute of Risk Management South Africa (IRMSA), by A³ Consulting, emphasized that 80% of SMME failures are as a result of management failure, and not from factors external to the organisation environment. Respondents even stated that there is a need to improve corporate governance and the link to risk management (A³ Consulting, 2006:Online).

In today's changing business environment, it is not sufficient to have just the technical understanding of how to start a business venture (Mahadea, 2008:6). As a result, the focus of SMME owner managers, managers and entrepreneurs should be orientated on enhancing their results through risk management, to adequately use the financial support infrastructures provided to them, as well as to enable their businesses to enjoy sustainable growth. Moreover, all these objectives could be best approached if a

proper introduction, execution and monitoring of risk management principles and strategies are well understood and applied by SMME owner managers, managers and entrepreneurs.

The purpose of this study is to determine which risk management methods are deployed by SMME owner managers, managers and entrepreneurs to risk manage their organisations, and to what extent SMME are considered viable as a result of such risk management.

1.3 STATEMENT OF THE RESEARCH PROBLEM

SMME owner managers, managers and entrepreneurs are perceived to not make use of risk management methods, to control the risk within their organisation. Research has shown that the absence of a structured risk management approach within SMME's, ultimately lead to the demise of many SMME.

1.4 RESEARCH QUESTION, SUB-QUESTIONS, AND OBJECTIVES

In Table 1.1, the research question, sub-questions and objectives of the research have been tabulated for ease of reference.

Table 1.1 Research question, sub-questions and objectives.

| | | |
|--|--|---|
| Research question | What risk management methods and techniques are currently used to determine, examine and monitor risks within SMMEs in the Cape Metropolitan area? | |
| Research sub-questions | Research method(s) | Objectives |
| How do SMME owner managers perceive risk management? | Literature review Interviews Research survey | To provide an overview of risk management and its benefits for the development of SMMEs. To encourage SMME owner managers who do not use structured risk management to adopt the concept for better business management. |
| How do SMME owner managers/entrepreneurs manage risks? | Literature review Interviews Research survey | To provide SMME owners/managers with guidelines on how to implement and use risk management principles and strategies. To identify the techniques used by SMME managers to manage risk. |
| How often do SMME owner managers/entrepreneurs manage risks? | Interviews Research survey | To highlight the necessity to constantly manage SMME's to avoid failure. |
| Where do they get the information from to risk manage? | Interviews Research survey | To check the validity of the data utilised for risk management. |
| Which of this information is sourced from the accounting system? | Interviews Research survey | To verify whether SMME managers obtain data from their accounting systems to manage risk. |

1.5 RESEARCH DESIGN

This study will be based on the quantitative research paradigm. Maree (2007:145), stated that quantitative research is a process that is systematic and objective in its ways of using numerical data from only a selected subgroup of a universe (or population), to generalise the findings to the universe that is being studied. Under quantitative research, there are a number of research options such as experimental, quasi-experimental and non-experimental research (Welman, Kruger & Mitchell, 2005:78). For the purpose of this research, a survey will be conducted. According to Pinsonneault and Kraemer (1993:80), survey research is defined as, “the gathering of information to advance scientific knowledge about the characteristics, actions, or

opinions of a large group of people, referred to as a population”. The author defines a survey design by the following characteristics:

- Survey research is used to quantitatively describe specific aspects of the research population.
- The main method of collecting information is by asking respondents structured and predefined questions.
- Data is collected from only a fraction of the research population, called a sample, but it is collected in such a way as to be able to generalise the findings to the population.

The population for this research will be owner managers, managers, and entrepreneurs of SMMEs. According to Thomas (2004:105), units of analysis (population) can comprise individual people, groups, organisations, industries, documents, processes, events or even time periods. The project will use a sample of the above population to gather the necessary data.

Fink (1995:27), defines a sample as a ‘miniature version’ of the population, which is representative or a model of the population. The author identified two classes of sampling methods, namely ‘probability sampling’ and ‘non-probability sampling’. Non-probability sampling (purposive sampling) has been selected to determine the population of this study. Maree (2007:178), defines purposive sampling as, “a method of sampling, which is used in special situations where the sampling is done with a specific purpose in mind”.

One principle of sample size is that the smaller the population, the bigger the sampling ratio has to be for an accurate sample. Larger populations permit smaller sampling ratios for equally good samples (Neuman, 1997:222). For the purpose of the survey, 88 SMME’s drawn from a population of 150 found within the Cape Metropole will be used.

1.6 DELINEATION OF THE RESEARCH

This study will focus on SMMEs located in the Cape Metropolitan area. The research project will furthermore focus on the existence and ongoing review of risk management strategies or techniques used by SMME owners to support the growth and sustainability of their companies, pertaining to how they manage risks and where they obtain the information from to do so.

1.7 CONTRIBUTION OF THE RESEARCH

- This study will provide guidelines for SMME managers who are currently using risk management, however who do not monitor it on a sustained basis.
- SMMEs' owners who do not practice risk management or who are in the process of implementing risk management within their entities, could have a better understanding of its importance and how to attempt the implementation thereof and constant monitoring of their enterprise success.
- It will also help SMME's to understand that a risk management process needs to be constantly reviewed or updated due to changes created by new technologies.
- The research project will also provide for existing risk management methods, customized for small businesses, to help them become sustainable, to ensure the creation of permanent jobs.

1.8 CONCLUSION

In this chapter the problem statement of the research, its significance, objectives, delineation and research design and methodology were examined. In the next chapter concepts such as risk, risk management, and enterprise risk management will be discussed to provide an expanded understanding of the concepts.

CHAPTER TWO

RISK MANAGEMENT - A LITERATURE REVIEW

“Before you take chances make sure the odds are in your favour”.

Ernst & Young

2.1 INTRODUCTION

In a world of increasing complexity and uncertainty, companies must manage risk more rigorously than ever. It is an essential aspect of good corporate governance (Reuvid, 2005:xv). Growth and profitability are exciting words for investors and stakeholders all over the world. However, they can be destructive measures of performance in the absence of risk control and risk management (Crouhy, Galai & Mark, 2006:vii).

In times of prosperity it is easy to forget about risk. Optimism is abounding when markets are growing and revenue and profits are up. Businesses are hiring new people, increasing the scale of operations, and searching out new and existing opportunities for growth. In such boom periods, in particular, managers need to be most watchful for signs of impending danger as a result of poor risk control and risk management to the organisation (Simons, 2009:86).

The need of securing ones business has increased due to changes caused by social, environmental and economical complexities faced by companies worldwide. Many of the world’s largest companies have suffered exponential losses in market value over the last ten years, because they failed to anticipate the interaction and associated complexity of multiple risks. Most major losses resulted from a series of high impact, low likelihood events. In many instances, the consequences were so dire that the affected companies never recovered (Deloitte & Touche, 2006:**Online**). Not all risk is detrimental to the organisation, as most organisations do take risks in order to make progress (Simons, 2009:87). Reuvid (2007:5), believes that without risk, there would be no reward.

2.2 BALANCING RISK AND REWARD

The balance between risk and reward is the very essence of business, which is based on the analogy that one has to take risks in order to generate returns (Reuvid, 2005:xv). Risk is an unavoidable feature of human existence. Neither man nor the organisations and societies to which he belongs can survive without taking risks (Ansell & Wharton, 1992:ix).

More specifically, higher returns involve greater risks. However, there is a difference between risk taken as a result of careful judgement, and risk ventures taken unwittingly (Reuvid, 2005:xv). Organisations struggling to survive in today's increasingly sophisticated and competitive economies must of necessity be concerned about problems of business risk management. To survive they must constantly reinvest in the development of new products and the use of new technologies (Ansell & Wharton, 1992:iv).

Companies who take a logical and structured approach to business risks are much more likely to survive and prosper. They can also benefit from a reduction in costs and insurance premiums (Reuvid, 2005:xv). Accomplishment is rarely possible without taking risks (Heldman, 2005:2). Risk, being part and parcel of business management, is pervasive and not completely unavoidable in the quest of seeking profit and prosperity (Mudeliar, 2007:13).

2.3 THE CONCEPT OF RISK

2.3.1 Risk defined

The origin of the word *risk* is thought to be either the Arabic word *risq* or the Latin word *risicum* (Ansell & Wharton, 1992:4 citing Kedar, 1970). The Arabic *risq* signifies 'anything that has been given to you [by God] and from which you draw profit' and has connotations of a fortuitous and favourable outcome. The Latin *risicum* however, has connotations of an equally fortuitous but unfavourable event. Furthermore, a Greek derivative of the Arab *risq*, which was used in the twelfth century would appear to relate to chance outcomes in general and have neither positive nor negative implications (Ansell & Wharton., 1992:4).

Most people tend to think of risk in terms of negative consequences. It is also generally accepted that risks are potential events that pose threats to organisations, however they could also be viewed as potential opportunities (Heldman, 2005:1). Risk can be broadly defined as, ‘any issue that can impact the objectives of a business entity, be it financial service or commercial’ (Raghavan, 2005:Online). Nieman (2006:224), stated that risk constitutes any event that may alter the expected outcome of operating the venture and it implies that there is uncertainty of what the outcome may be. However, a more clearer and complete explanation of risk, the following: “Uncertainty presents both risks and opportunities, with the potential to erode or enhance value” (COSO, 2004:2).

Shimell (2002:1) cites, the following authoritative authors in their definition associated to the concept of risk:

- The Association of Insurance and Risk Managers (AIRMIC, 2002), defines business risk as, “the activity of protecting and profiting from corporate resources and assets”.
- Ernst & Young (2002) attaches the following interpretation to risk, “an event or action that may adversely affect an organisation’s ability to maximise stakeholder value and to achieve its business objectives”.
- KPMG (2002) defines risk as, “anything that prevents your organisation from achieving a corporate objective”.

2.3.2 Types of Risk

Shimell (2002:151-152), identifies risk management as falling within the ambit of two types of risks, namely, macro and micro risk.

➤ Macro risks

Macro risks are external factors, which have the potential to affect the overall viability of the organisation. They include:

- External financial risks,
- legislative and regulatory risks, and
- political risks.

➤ **Micro risks**

Micro risks are internal factors, which have the potential to affect the overall viability of the organisation. They include:

- Operational or process risks,
- financial risks,
- environmental and ethical risks,
- branding and reputation risks, and
- people risks.

The United Kingdom - Institute of Risk Management (IRM), the Association of Insurance and Risk Managers (AIRMIC) and the National Forum for Risk Management (ALARM) (2002:**Online**), supports the view of Shimell (2002:151-152), all agree that risks facing an organisation and its operations can result from factors both external and internal to the organisation. Furthermore, they can be grouped to facilitate their identification. In theory, the more all-encompassing the categorisation and the more detailed the decomposition, the more closely the company's risk will be captured. In practice, this process is limited by the level of model complexity that can be handled by the available technology, and by the cost and availability of internal and market data (Crouhy *et al.*, 2006:25).

All risk types discussed above must clearly, “always be managed in a disciplined and systematic way” (Reuvid, 2007:5), in order to minimise their impact within enterprises. Organisations identify and mitigate these risks through active risk management (Flynn, 2008:1).

2.4 RISK MANAGEMENT

Risk management is a central part of any organisation's strategic management. It is the process whereby organisations methodically address the risks associated to their activities with the goal of achieving sustained benefit within each activity, and across the portfolio of all activities. Furthermore, it should be a continuous and developing process, which runs throughout the organisation's strategy and the implementation of that strategy. It should also address systematically all the risks pertaining to the organisation's activities past, present and in particular, the future. Moreover, it must

be integrated into the culture of the organisation with an effective policy and a programme led by senior management. It must translate the strategy into tactical and operational objectives, assigning responsibility throughout the organisation with each manager and employee responsible for the management of risk as part of their job description. This supports accountability, performance measurement and reward, thus promoting operational efficiency at all levels (IRM, 2002:**Online**).

2.4.1 Risk management defined

Bannock and Manser (2003:231-232), define risk management as, “the identification and acceptance or offsetting of the risks threatening the profitability or existence of an organisation”. The definition is expanded upon as the, “management by a company of events and activities, so as to minimize the degree to which damage or loss may occur, so reducing dependence on insurance”.

A further definition of risk management points to applying skills, knowledge, and risk management tools and techniques to ones projects, to reduce threats to an acceptable level, while maximising opportunities (Heldman, 2005:6).

The Global Risk Alliance (GRA) and the State of New South Wales (NSW) (2005:9), attach the following definition to risk management in their Departments of States and Regional Development: “Risk management is the way in which adverse effects from risk are managed and potential opportunities are realised. Therefore, risk management involves:

- Minimising those things that may negatively impact upon a business, and
- identifying and harnessing those things that will help to achieve the goals and objectives of a business”.

The New York Federal Reserve according to Shimell (2002:5), defines risk management as, “a co-ordinated process for measuring and managing risk on a firm wide basis”.

According to Shimell (2002:5), KPMG attaches the following interpretation to the concept of risk management, namely: Risk management is, “about taking risks

knowingly not unwittingly. An effective risk management structure allows an organisation to understand the risks in any initiative and take informed decisions on whether and how the risks should be managed. Corporate governance and risk management is about how an organisation can better understand its risk to improve its performance and deliver its objectives”.

2.4.2 The purpose of risk management

The goal of risk management is to identify potential risks, to analyse risks to determine those that have the greatest probability of occurring, identifying the risks that have the greatest impact on the entity if they should occur, and defining plans that help mitigate or lessen the risk’s impact or avoid the risks while making the most of the opportunity (Heldman, 2005:6).

Heldman (2005:6), furthermore believes that risk management more specifically concerns the following five areas:

- Identifying and documenting risks.
- Analysing and prioritising risks.
- Performing risk planning.
- Monitoring risk plans and applying controls.
- Performing risk audits and reviews.

Reuvid (2007:5-6), summarises the objectives of the above five areas when he points to the fact that risk management must be a disciplined and consistent process that should imperatively include all the areas outlined below.

- **Risk identification and assessment:** Identification of the significant risks that face the organisation and include development of risk registers and risk mapping, along with both quantitative and qualitative analysis of the exposures.
- **Risk mitigation strategies:** The development of risk mitigation strategies is the key to the management of risk issues, and action plans need to be included in the overall business plans of the organisation to ensure successful implementation.
- **Residual risk transfer:** Once all risk mitigation strategies have been evaluated and implemented as appropriate, the residual risk has to be effectively managed through a combination of insurance, hedging and other alternative techniques to ensure the best possible coverage at the lowest possible transfer cost.

- **Risk reporting:** The organisation needs the ability to report on risks internally, specifically to senior management and the board of directors.
- **Monitoring:** This part of the process is designed to ensure adherence to and effectiveness and relevance of policies and procedures relating to risk management.

Ernst & Young cited by Shimell (2002:6), is of the opinion that, “a critical attribute of a successful business is the effectiveness of its risk management process: the better the process, the more certainty there is of prosperity and potential long-term competitive advantage”.

2.4.3 The risk management process

Modern economies are distinguished from those of the past due to the new ability to identify and measure risk, to appreciate its consequences, and then to take action accordingly, such as transferring or mitigating the risk (Crouhy *et al.*, 2006:1). “The risk management process consists of a series of steps that when undertaken in sequence, enable continual improvement in decision-making” (GRA & NSW, 2005:21).

Figure 2.1 below illustrates the risk management process. It gives an overview on how the process should be approached within an organisation.

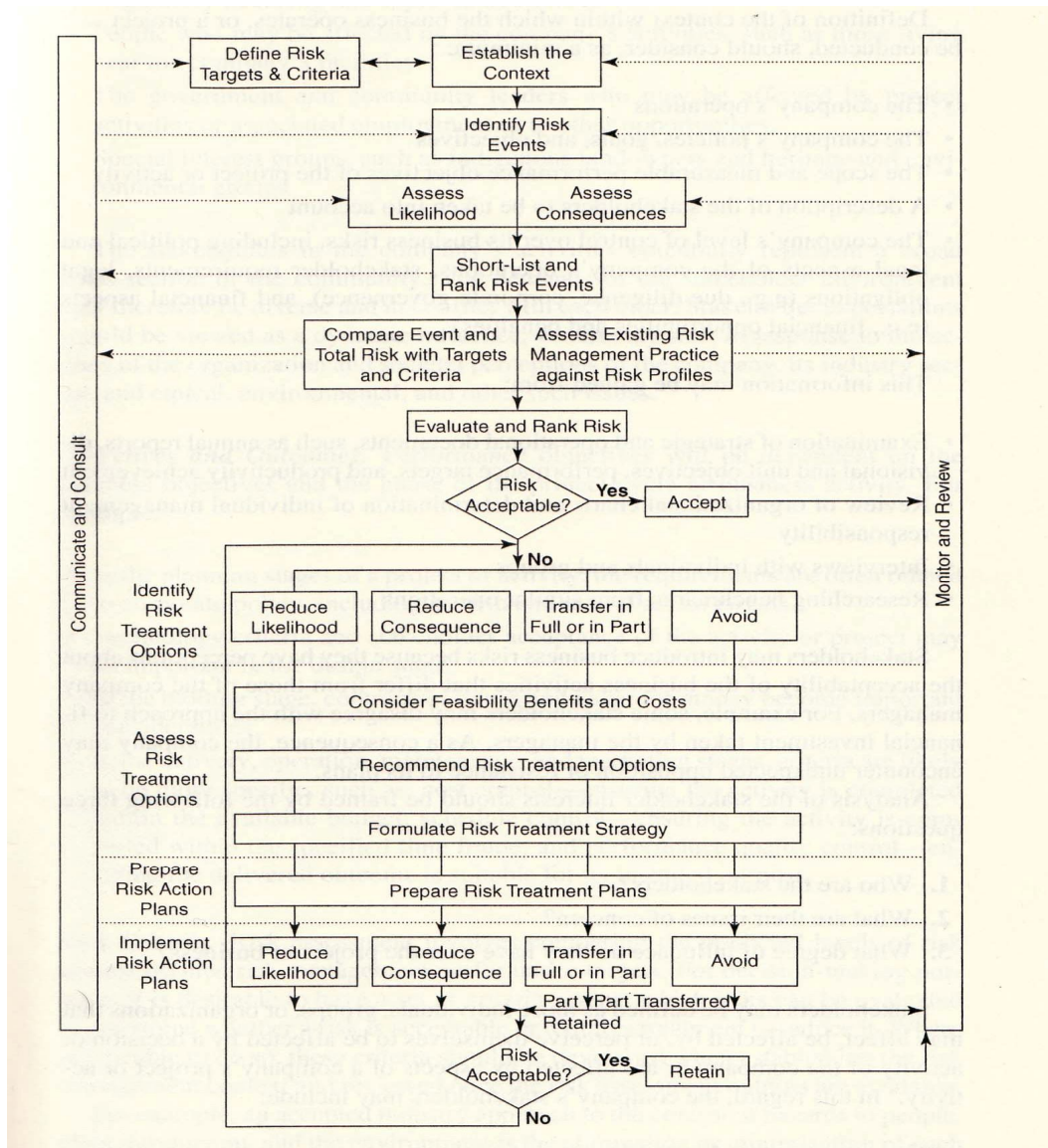


Figure 2.1: Overview of the risk management process (Source: Bowden, Lane & Martin., 2001:9).

According to Bowden, Lane and Martin (2001:8-15), the risk management process comprises the following five steps, which are expanded upon below:

Step1: Define the context and risk management criteria: The objectives of this step are to:

- Establish the organisational context within which risk assessment is to take place.
- Specify the main objectives and outcomes required.
- Identify a set of criteria against which the identified risks can be evaluated.
- Define a set of key elements for structuring the risk identification and assessment process.

Step 2: Identify the risks: The risk identification process involves three key elements:

- Identification of risk events.
- Estimation of likelihood of occurrence.
- Description of the consequences.

Step 3: Assess the significance of those risks: The term “risk assessment” collectively refers to the steps of risk analysis and risk evaluation. The aim of risk assessment is to partition risks into prioritised groups that assist in the development of a risk management strategy. Furthermore, risk analysis is a systematic process to determine how often events may occur and the magnitude of the likely consequences. The risk analysis process generates a set of risk factors, levels, or quotients that are used to set risk treatment priorities.

Risk evaluation is the process used to determine risk management priorities by comparing the level of risk against predetermined standards, target risk levels, or other criteria established as part of the strategic and organisational context analysis.

Step 4: Identify, select, and implement risk treatment options: In this step the most beneficial risk treatment option is chosen, the option that will reduce the risk to an acceptable level and/or treat or transfer the risk (also referred to as laying off risk). Furthermore, treatments are commonly chosen on the basis of relevance, effectiveness, and cost (Bowden *et al.*, 2001:14).

Figure 2.2 below, summarises how the risk treatment should be done. The following risk treatment options according to GRA and NSW (2005:34), may be applied to develop a risk treatment strategy:

- **Risk avoidance:** Controlling measures do not exist or cannot reduce the risk to an acceptable level, thus the risk should be avoided.
- **Changing the consequences:** When selecting this treatment, gains and losses are increased and reduced respectively.
- **Risk sharing:** Involves transferring the risk to another party to share responsibilities.
- **Risk retaining:** The option of keeping certain risks, which have been deemed to be of no important harm to the business as they are considered to have an acceptable level. When using this treatment option, an appropriate treatment

should be selected, a cost-benefit analysis should be conducted, and a risk treatment plan and recovery should be executed.

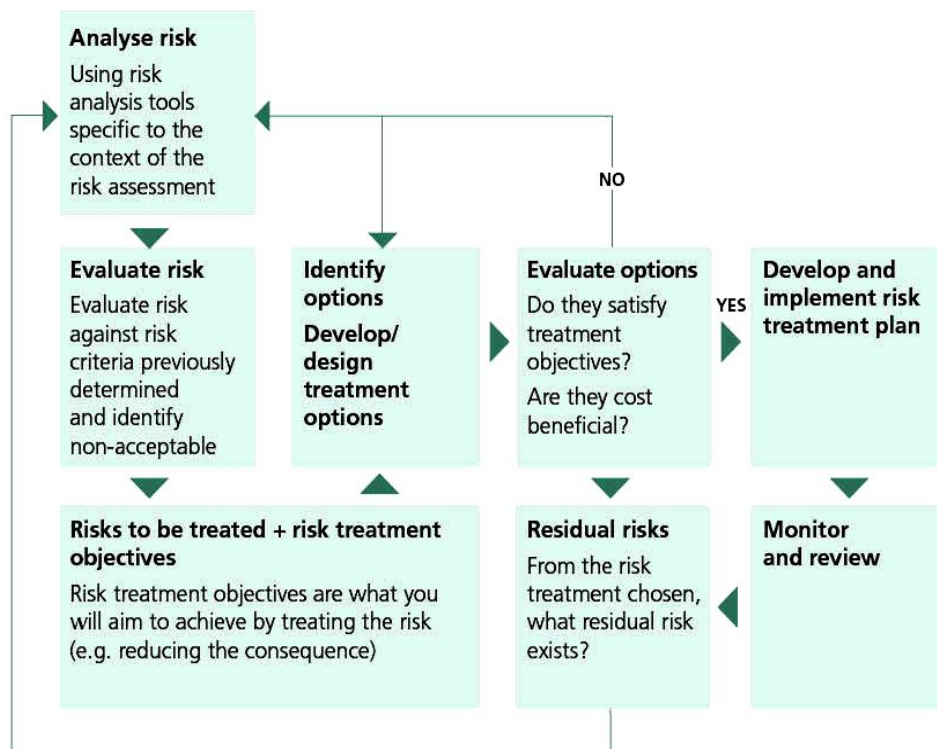


Figure 2.2 Treating risks (Source: GRA & NSW, 2005:34).

Step 5: Perform monitoring, review, and corrective actions: The final steps that complete the process cycle are establishment of mechanisms to measure the level of implementation effectiveness of the risk treatment controls. Typical monitoring mechanisms include:

- Internal and external audits,
- regular investigations,
- regular reporting and review, and
- organisational management reviews.

2.4.4 The importance of risk management

According to IRM (2002:Online), risk management protects and add value to the organisation and its stakeholders, through supporting the organisation’s objectives by:

- Providing a framework for an organisation that enables future activity to take place in a consistent and controlled manner.

- Improving decision making, planning and prioritisation by comprehensive and structured understanding of business activity, volatility and project opportunity/threat.
- Contributing to more efficient use/allocation of capital and resources within the organisation.
- Reducing volatility in the non essential areas of the business.
- Protecting and enhancing assets and company image.
- Developing and supporting people and the organisation's knowledge base.
- Optimising operational efficiency.

2.4.5 Risk management limitations

Reuvid (2007:39-40), is of the opinion that small to large businesses owners, managers, and entrepreneurs should acknowledge that risk management has limitations equal to any other management process. These weaknesses comprise the following:

- **Risk management will not make decisions or take resolutions for the company:** It can facilitate the owner to build decisions, but these resolutions will be restricted by the profundity of the research and examination of risk and the experience and risk management skill of anyone involved in the risk assessment.
- **Freedom from all risk is not guaranteed when using risk management:** Risk management does not intend to eliminate risk, but rather to prioritise the suitable application of insufficient resources and time.
- **Risk management cannot assure that adverse events will not happen:** It does however provide for important warning of likely problems and a focus on techniques to defend reputation and business continuity.
- **Risk assessments will not be all-inclusive and are consequently not fail-safe** (GRA & NSW, 2005:13). Risk assessment will attempt to identify all significant risks, but they are limited by the resources available, including information availability, staff capability, time and budget.

2.4.6 Risk management framework

According to GRA and NSW (2005:47), “a Risk Management Framework (RMF) is the set of elements in the business management system concerned with managing risk. It describes the systems, processes, attitudes and commitment needed to successfully integrate risk management with existing business management processes, to ensure that the risk management program can assist a business to achieve its corporate objectives”.

In spite of the size of a business, a risk management framework will facilitate the mechanism of how the application of risk management can be done. The Enterprise Risk Management (ERM), Integrated Framework, developed by the Committee of Sponsoring Organisations of the Treadway Commission (COSO), serves as an example of the worldwide used risk management framework (GRA & NSW, 2005:47).

2.5 ENTERPRISE RISK MANAGEMENT

The Risk Management Association (RMA) stated after a survey conducted in January 2007, that many organisations “are moving toward a fully integrated enterprise risk management approach where a myriad of risk types are measured and many of the processes automated and standardised” (Gould, 2008:1). The concept of ERM enables management to effectively deal with uncertainty and associated risk opportunity, and enhance the capacity to build value. The concept of ERM furthermore provides for a framework for risk management, which typically involves setting strategy and objectives to strike an optimal balance between growth and return goals and related risks, and efficiently and effectively deploy resources in pursuit of the entity’s objectives (COSO, 2004:1). By identifying and proactively addressing risks and opportunities, business enterprises protect and create value for their stakeholders (GRA & NSW, 2005:12-13).

2.5.1 Enterprise risk management defined

Risk management is defined as, “the culture, processes and structures that are directed towards realizing potential opportunities whilst managing adverse effects” (Province of British Columbia, 2008:**Online**). Furthermore, the Province of British Columbia (2008:**Online**), believes that ERM signifies:

- The management of risk not only in conventional hazard categories, but in the full spectrum of strategic and operational risk, and
- the adoption of risk management throughout the organisation.

From the above the analogy can be drawn that ERM enables management to effectively deal with uncertainty and associated risk opportunity, enhancing the capacity to build value. The COSO “Enterprise Risk Management-Integrated Framework” published in 2004 defines ERM as, “a process effected by an entity’s board of directors, management and other personnel, applied in a 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” (COSO, 2004:2).

The Casualty Actuarial Society (CAS) (2003:8), Committee on Enterprise Risk Management attaches the following interpretation to ERM, “ERM is the discipline, by which an organisation in any industry assesses, controls, exploits, finances, and monitors risks from all sources for the purpose of increasing the organisation’s short- and long-term value to its stakeholders”.

2.5.2 The role of ERM

Enterprise Risk Management is the process whereby organisations methodically address the risks relating to their activities, with the goal of achieving sustained benefits across the portfolio of activities. Its objective is to add maximum value to these activities (Reuvid, 2007:5). ERM, as mentioned earlier provides a framework for risk management, which typically involves setting strategy and objectives to strike an optimal balance between growth and return goals and related risks, and efficiently and effectively deploys resources in pursuit of the entity’s objectives (COSO, 2004:1).

As a result, the enterprise risk management framework is geared to achieving an organisation's objectives, set forth in four categories, namely:

- **Strategic:** High-level goals, aligned with and supporting its mission.
- **Operations:** Effective and efficient use of its resources.
- **Reporting:** Reliability of reporting.
- **Compliance:** Compliance with applicable laws and regulations.

2.5.3 Enterprise risk management components

Enterprise risk management consists of eight interrelated components. These are derived from the way management runs an enterprise, and must be integrated with the management process (COSO, 2004:3). The interrelated elements are expanded upon below:

- **Internal Environment:** This determines the risk management philosophy, appetite for risk and risk culture of the entity.
- **Objective Setting:**
 - **Strategic:** High-level goals, aligned/ supporting the mission/ vision.
 - **Operations:** Effectiveness and efficiency of entity's operations.
 - **Reporting:** Internal/external reporting of financial/ non-financial risk.
 - **Compliance:** Compliance with applicable laws and regulations.
- **Event Identification:** External/internal factors that affect risk.
- **Risk Assessment:** Likelihood and impact events affecting objectives.
- **Risk response:** Risk avoidance, reduction, sharing, acceptance of risk.
- **Control Activities:** Policies, procedures to ensure proper execution of risk response.
- **Information and communication:** Communication and awareness of risk.
- **Monitoring:** Ongoing activities or separate evaluation.

COSO is of the opinion that the four objective categories discussed in Paragraph 2.5.2 and the above eight components are combined to create a matrix, as illustrated by Figure 2.3 below, with the entity and its organisational units (Reuvid, 2005:35).

The objectives are what an entity strives to achieve, and the ERM components represents what is needed to achieve them (COSO, 2004:4). To be deemed effective, all eight components must be present and functioning, but they do not need to function with the same level of maturity (Reuvid, 2005:35).

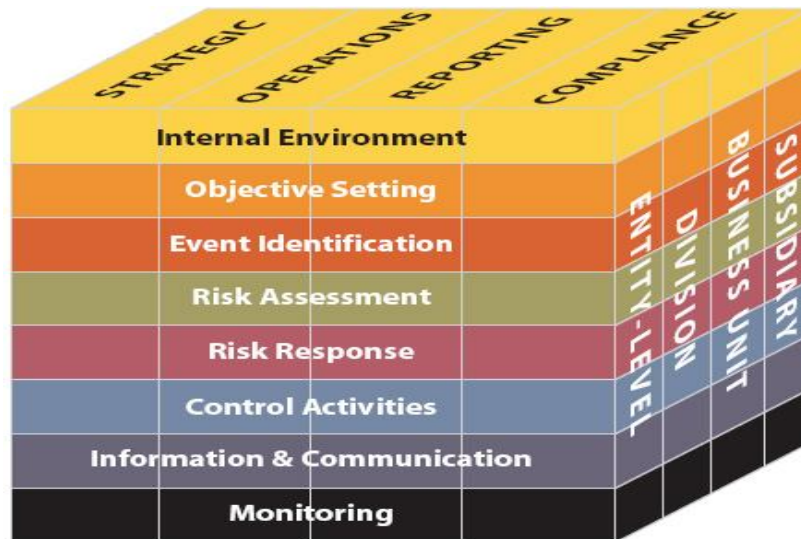


Figure 2.3 ERM objectives and components relationship (Source: COSO, 2004:5).

2.5.4 Enterprise risk management effectiveness

According to COSO (2004:5), determining whether an entity’s enterprise risk management is “effective”, is a judgment resulting from an assessment of whether the eight components are present and functioning effectively. As a result, the components also serve as criteria for effective enterprise risk management. For the components to be present and functioning properly, there can be no material weaknesses, and risk needs to have been brought within the entity’s risk ‘appetite’.

When enterprise risk management is determined to be effective in each of the four categories of objectives respectively, the board of directors and management have reasonable assurance that they understand the extent to which the entity’s strategic and operations objectives are being achieved, and that the entity’s reporting is reliable and applicable laws and regulations are being complied with. The eight components will not function identically in every entity. Application in small and mid-size entities for example, may be less formal and less structured. Notwithstanding, small entities

still can have effective enterprise risk management, as long as each of the components are present and functioning properly (COSO, 2004:5).

2.5.5 Role and responsibilities

Everyone in an entity has some responsibility for enterprise risk management. The chief executive officer is ultimately responsible and should assume ownership. Other managers support the entity's risk management philosophy, promote compliance with its risk appetite, and manage risks within their spheres of responsibility consistent with risk tolerances. A risk officer, financial officer, internal auditor, and others usually have key support responsibilities. Other entity personnel are responsible for executing enterprise risk management in accordance with established directives and protocols (COSO, 2004:6).

The board of directors provides important oversight to enterprise risk management, and is aware of and concurs with the entity's risk appetite. A number of external parties, such as customers, vendors, business partners, external auditors, regulators, and financial analysts often provide information useful in effecting enterprise risk management, but they are not responsible for the effectiveness of, nor are they a part of the entity's enterprise risk management (COSO, 2004:6).

2.6 INSTANCES OF RISK EXPOSURE

In the recent past, risk management was considered the domain of academics and consultants and not a priority for mainstream businesses. The bubble of complacency was burst through a succession of cataclysmic events: the dot.com bust, 9/11, the Asian financial crisis, and a wave of business scandals (Deloitte & Touche, 2006:**Online**).

Furthermore, in Europe, several cases of corporate scandals such as Shell Oil, Vivendi, Siemens, Parmalat, Royal Dutch Ahold and other examples have brought Governments to develop new laws and policies to prevent these kind of events in the future (Anonymous, 2009:**Online**). An example of these laws is the German Control and Transparency Act (KonTraG, 1998) approved on the 1st of May in 1998 by lawmakers due to a number of spectacular company crises, which according to them

were caused by a lack of risk awareness and sufficient control and information mechanisms (Henschel, 2008: **Online** citing Hornung *et al.*, 1999:317). Furthermore, many organisations have equated risk only with physical security and not with other aspects within their operational environments. This has left many organisations blindsided by sudden changes (Odendaal, 2003: **Online**).

The notorious business scandal involving Enron occurred eight years ago. The scandal involved the energy company Enron and the accounting, auditing, and consultancy partnership of Arthur Andersen. The corporate scandal eventually led to Enron's downfall, resulting in the largest bankruptcy in American history at the time. Arthur Andersen, which was one of the five largest accounting firms in the world, was dissolved. The Sarbanes-Oxley Act was passed as a result of the first admissions of fraudulent behavior made by Enron in 2002. The act expanded criminal penalties for destroying, altering, or fabricating records in federal investigations, or for any attempt to defraud shareholders (Anonymous, 2009:**Online**).

2.7 PERCEPTION OF RISK MANAGEMENT ABROAD

The Institute of Chartered Accountants in England and Wales (ICAEW, 2002:**Online**), pointed to the fact that it was due to a string of large and highly public corporate failures over the past 10 to 15 years that focused investors' and regulators' attention worldwide on the way in which company directors and managers are managing risk. Many companies have focused on value creation as a key goal. Without adequate procedures in place to manage both the upside and downside of risk, many of them have been unable to create real sustainable value. As a result, many countries are now issuing tighter guidelines in the way in which risk is monitored and publicly reported. There is a new appreciation of the wider scope of risks facing businesses, requiring them to look at risk in a more structured way. It is now important to have a company-wide, integrated procedure in place to monitor and control risk. As a result, risk management is now a core business process and should be planned accordingly and on a continuing basis, so as to reduce risk and volatility and improve returns.

Aon COFCO a Chinese company stated that there is a clear consensus that risk needs to be managed formally and adeptly. This means clearly defining responsibilities,

systemizing a process for identifying and quantifying risks, and establishing a reporting protocol. Management must be able to respond with informed “risk-weighted” decisions. The incorporation of risk management in business planning and standard operating procedures are integral. Management systems need to be scrutinized to guarantee they are sufficiently rigorous to this end, guidelines need to be established and training for management must make certain that duties can be effectively carried out (Aon COFCO, 2007:**Online**).

According to the International Council for Small Business World Conference (Henschel, 2008:**Online**), a study conducted on three European countries, namely, Germany, the United Kingdom and France has returned that in terms of the implementation of a company-wide risk management, the very large UK companies are significantly more advanced than companies in Germany and France. For instance, the study pointed that managers in Germany do not properly appreciate the actual benefits that risk management can particularly contribute towards a company’s value creation and preservation. This is why the KonTraG Law urged each German company to establish risk management process in accordance to its size, structure and complexity.

However, this aspect of the Law has made many German small businesses unsure on how such risk management should be designed and implemented (Henschel, 2008:**Online**, citing Gleibner *et al*, 2004:10; Munzel & Jenny, 2005; KonTraG, 1998). Furthermore, another uncertainty within SMEs has been provoked by Basel II, the new international equity capital regulations on lending by banks.

2.8 CONCLUSION

This chapter provided a literature background pertaining to the principles and concepts of risk management. Moreover, risk management process, implementation, tools, strategies and frameworks were discussed to provide an improved understanding of this research. The next chapter will focus on risk management within small businesses operating within the SMME sector. Furthermore, the perception of risk management within the SMME sector will be expanded upon. Finally, an overview of the SMME sector in South Africa, as well as how risk management should be approached within this economy, will be outlined.

CHAPTER THREE

RISK MANAGEMENT OF SMMEs

“A critical attribute of a successful business is the effectiveness of its risk management process: the better the process, the more certainty there is of prosperity and potential long-term competitive advantage”.

Ernst & Young

3.1 INTRODUCTION

In Chapter Two, risk management from a holistic and empirical perspective was elaborated upon. Due to the fact that the primary theme of this dissertation focuses on risk management within the context of SMMEs, the literature review in this chapter is specially designed to meet the demands of the research with respect to risk within SMME's.

The importance of small enterprises has been emphasised by politicians worldwide due to their mechanism for job creation, innovation and durable economic development (Nieman, 2006:3). Small and medium-sized enterprises account for 60 to 70 per cent of jobs in most OECD (Organisation for Economic Co-operation and Development) countries; they also account for a disproportionately large share of new jobs. However, the OECD study observed that many start-ups do not survive for more than five years and fewer still develop into high-growth firms (AFREC, 2005:**Online**).

In South Africa, the Small, Micro and Medium-sized Enterprise (SMME) sector has been promoted since 1995 in order to meet national economic growth objectives. The Small Business Act was enacted in 1996 and subsequently institutions such as the National Small Business Council and Ntsika Enterprise Promotion Agency were established. Despite ongoing Government initiatives such as the formal launching of the Small Enterprise Development Agency by the Department of Trade and Industry (DTI) in 2004, the situation of most SMMEs remains highly problematic (AFREC, 2005:**Online**). In August 2005, Trade and Industry Minister Mandisi said that, “Even if SMMEs get financial support, most collapse through mismanagement” (Anonymous, 2006:**Online**).

Furthermore, Labuschagne and Van Niekerk (2006:**Online**) citing (NATI, 2003), observed that SMMEs in South Africa contribute to over 40% to the gross domestic product. However, these organisations have a failure rate of 80% (Labuschagne & Van Niekerk, 2006:**Online**).

Researchers believe that the concept of Risk Management can help small business owners, managers or entrepreneurs to meet their business objectives as well as those of the South African economy as a whole. Winks (2009:**Online**), former president of the Institute of Risk Management South Africa (IRMSA), stated that every business or other venture needs to practice risk management; otherwise they have a high probability of failure. Furthermore, SMME's are more vulnerable than bigger outfits, but seldom take a structured approach to this critical area. This chapter gives a brief overview of the SMME sector, and discusses its importance to the South African economy.

3.2 UNDERSTANDING THE SMME SECTOR

3.2.1 Small Business Definition

There is no universally accepted definition of a small firm (Nieman, 2006:4 citing Storey, 1994:8). The definition of small business depends on the criteria for determining what is small and qualifies as a business (Nieman, 2006:4 citing Hatten, 1995:5). Commonly believed a business will be considered as small according to Nieman (2006:4), if it:

- Is independently owned, operated and financed, i.e. one or very few people manage it without a formalised management structure.
- Has a relatively small share of the market place or relatively little impact on its industry.
- Is independent and does not form part of a large enterprise.

In addition, the number of employees is an important aspect, which should be considered. The Amended National Small Business Act 102 of 1996 sets out the above criteria, plus the number of employees, all economical sectors and types of enterprises.

3.2.2 The South African definition

According to A³ Consulting (2006:**Online**) citing Vosloo (1994), some countries define SMMEs using only qualitative parameters, some use only quantitative variables, while others use a combination of both. In South Africa, both qualitative and quantitative aspects were taken into consideration to define the SMME Sector. The National Small Business Act Amendment of 1996 states that, “small business means a separate and distinct business entity, including co-operative enterprises and non-governmental organisations, managed by one owner or more which, including its branches or subsidiaries, if any, is predominantly carried on in any sector or subsector of the economy”.

The Schedule to the Act regarding the definition of small businesses in the South African context is provided in Annexure A.

3.2.3 Classifying Small Enterprises

The SMME sector can be divided into three components, namely:

- Micro-enterprises,
- Small enterprises, and
- Medium-sized enterprises.

As outlined by Nieman (2006:8) citing DTI (2003:28), micro-enterprises are the smallest in the small business sector. For most people, entry into the business world begins with a micro-enterprise. Within the micro sector there are subsectors: Survivalist and Very Small enterprises.

Survivalist enterprises are created out of necessity by individuals who could not get any alternative job opportunities. This type of venture is found mostly within the informal sector (Nieman, 2006:8). Thus, the need to survive forces them to open their own ventures, knowing that productivity would be low, and sub-income will not reward their time and effort (A³ Consulting, 2006:**Online**). Unlike survivalist enterprises, very small enterprises are created by individuals who are operating in the formal economy and have access to modern technology (Nieman, 2006:9 citing the DTI, 2003:14).

3.2.4 Importance of the SMME sector to South Africa

The previous section points to the importance of the SMME sector to the South African economy. Policy makers of the country consider the SMME sector important, because, *inter alia*, according to Nieman (2006:12):

- The labour-absorptive capacity is higher than that of other size-classes.
- The average capital cost of a job created is lower than in large firms.
- The SMME sector allows for more competitive markets.
- Small businesses adapt rapidly to changing taste and trends than bigger firms.
- The SMME sector often uses local recycled resources.
- It provides opportunities for aspiring entrepreneurs who are unemployed, under-employed or retrenched.
- Limited or no skills and training are not often required for workers as they gain the skills while working.
- Subcontracting by large enterprises to SMMEs lends flexibility to production processes.
- They play a vital role in technical and other innovation.

3.3 RISK MANAGEMENT IN THE SMME SECTOR

Risk management highlights the fact that the survival of a business entity depends heavily on its capabilities to anticipate and prepare for change, rather than wait for the change and then react to it. It should be clearly understood that the objective of risk management is not to prevent or prohibit taking risk, but to ensure that risks are consciously taken with complete knowledge and clear understanding so that it can be measured to help in the mitigation thereof. It is more so in the case of SMME's (Raghavan, 2005:**Online**).

In India, according to Khosla (2009:**Online**), it is a fact that financial risk, market risk, operational risk, strategic risk, and environmental risk are impossible for SMME's to avoid. What SMME's need to have is a strategy to minimize risks by monitoring the exposure of their businesses, so as to ensure that they do not derail business operations. Furthermore, the author believes that to minimize risks in business operations, SMME's need to first identify and rank business risks internally by the management through self-assessment. Once the risks are identified,

management should go for the most appropriate strategy to avoid these risks and implement controls to manage other potential risks (Khosla, 2009:Online).

Risk has always been part of the operational environment of organisations. It is something that neither the SMME owner, nor the large multinational can escape (Odendaal, 2003:Online).

3.3.1 Categories of risk in small businesses

Many areas or categories of risk relate to small businesses. This is why a careful distinction should be made between each specific area and topic as this will favour a structured approach to risk identification. It is sometimes done by means of a brainstorming exercise or SWOT analysis, which will be discussed later on in this chapter. Classifying risks into categories will enable business owners to do risk planning and communicating risk information more easily. In addition, they will be able to select appropriate tools and techniques for each category (GRA & NSW, 2005:15). Table 3.1 below reflects some common risk categories.

Table 3.1 Some categories of risk. (Source: GRA & NSW, 2005:15).

| Risk Category | | | |
|--|--|---|---|
| <ul style="list-style-type: none"> • Financial • Equipment • Organisational • Security | <ul style="list-style-type: none"> • Legal & regulatory compliance • Reputation • Operational | <ul style="list-style-type: none"> • Service delivery • Commercial • Project • Safety | <ul style="list-style-type: none"> • Stakeholder management • Strategic • Technology |

3.3.2 Incorporating risk management in small business

The risk management strategy should leave nothing to chance. There is a plethora of risk models, which ‘captures’ all significant risks and identifies, analyses, prioritises and manages those risks (Shimell, 2002:103). Therefore, risk management in a small business should not be used as a stand-alone program, as the latter is integrated with other management processes and techniques employed to guarantee the successful operations of a business (GRA & NSW, 2005:17). Figure 3.1 illustrates this integration.



Figure 3.1 The wheel of integration (Source: GRA & NSW, 2005:17).

The wheel of integration graphically depicted in Figure 3.1 in terms of its integrated parts, is elaborated upon below (GRA & NSW, 2005:17-19):

- **Business planning:** It is an important management technique in a business of any size. Risk management can assist the business to effectively manage the weaknesses and threats to achieve the objectives of the business, as well as recognising where opportunities exist and capitalising on these to help the business grow and develop.
- **Occupational Health and Safety (OH&S):** A duty is placed on employers towards their employees' health and safety at the workplace. Risk management ensures that risks and hazards related to employees' safety and health are identified, reported and kept as low as reasonably practicable.
- **Human resources management:** Risk management will assist the business owner identify risks associated with human resource management, and their appropriate treatment strategies to manage and monitor them on an ongoing basis.
- **Compliance:** Risk management can assist to develop a clear understanding of the areas of compliance that must be managed and monitored, including risks associated with potential breach and what can be done to avoid that breach.
- **Financial management:** Risk management assists to determine where both financial risks and opportunities exist to ensure the efficiency and effectiveness of the business financial management.
- **Client-customer relationship management:** Risk management assists to identify existing relationships with clients or customers, and to minimise their degradation. This could be achieved via a complaints management system.

- **Contract management:** Contracts are entered with suppliers, clients or sub-contractors. Risk management helps ensure the effective management of those contracts to protect a business and its staff.
- **Quality assurance:** It is an integral part of risk management. It is the process that continuous from risk treatment through monitoring and reviewing to a cycle of continuous improvement.

3.3.3 Risk management implementation

Table 3.2 presents how risk management should be approached within the management levels of a small business. More specifically, it illustrates how risk management could be part of the ongoing management of any small business and applied at all their management levels (GRA & NSW, 2005:41). Furthermore, two fundamental levels of management exist in a small business, namely:

- **Strategy and planning:** It also includes the identification business requirements and the direction it is taking.
- **Operational (product/service development and delivery):** It includes meeting customers' needs through efficient and effective delivery of goods and services.

Table 3.2 Application of risk management in small business. (Source: GRA & NSW, 2005:42).

| Management level | Area | Application of risk management |
|-----------------------|------------------------------|---|
| Strategy and planning | Business continuity planning | Business interruption procedures and strategies |
| | Emergency planning | Contingency planning Disaster planning and recovery Fire and life safety management |
| | Business planning | Business plan Strategic plan |
| | Human resources management | Training Culture Knowledge management Occupational health and safety |
| | Financial management | Budgeting Cashflow management Asset management Capital expenditure |
| | Outsourcing | Intellectual property protection Contract management |
| Operations | Product/service development | Insurance Equipment management Environmental management Resource allocation Housekeeping Emergency response Security Quality assurance Documentation Reporting Occupational health and safety Supply management Maintenance |
| | Product/service delivery | Project management Customer relationship management Post-sale service Guarantee management Occupational health and safety Hazard assessment/management Contract management Complaints management |

3.3.4 Risk management process

The Risk Management Process (RMP) discussed in chapter two also applies to small businesses. Figure 3.2 depicts how the RMP should be approached in a small business context. Furthermore, the process depicted in Figure 3.2 is underpinned by an analysis thereof interpreted by GRA and NSW (2005:22-39):

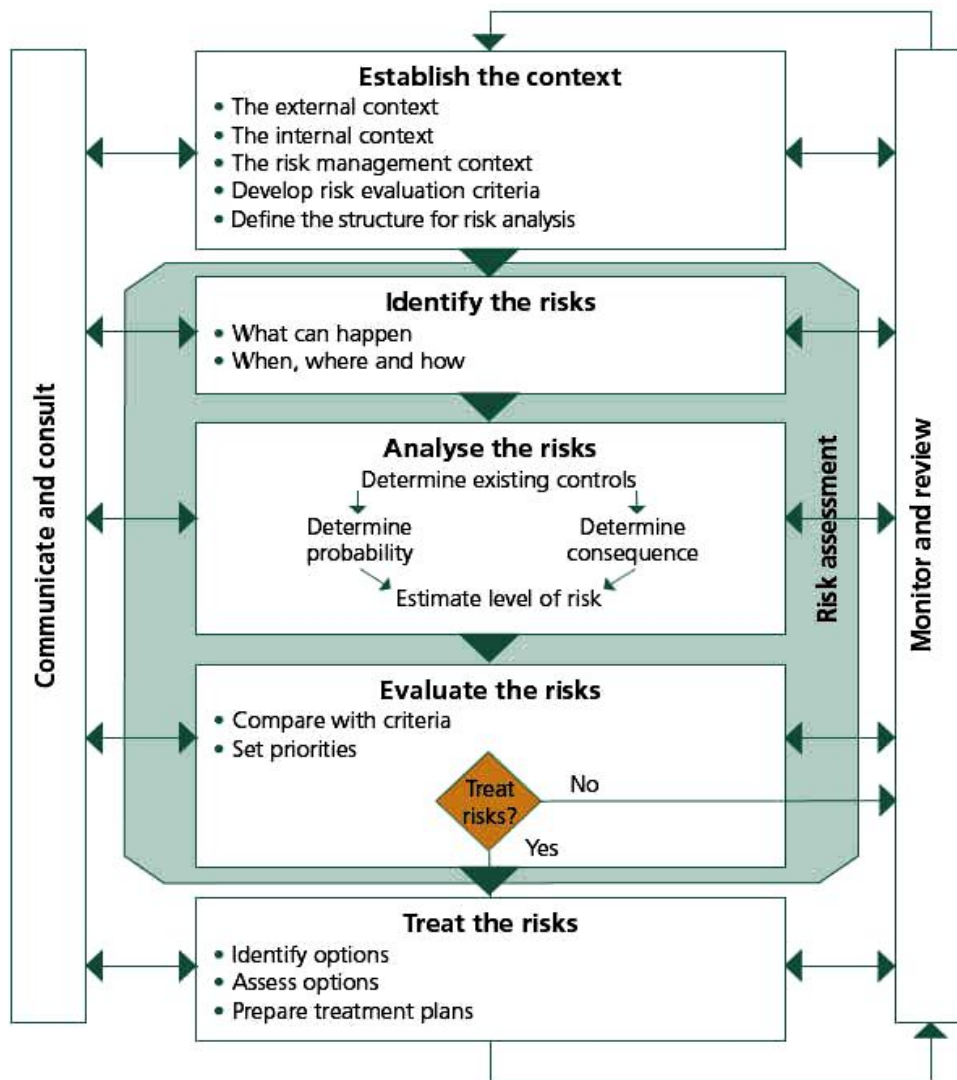


Figure 3.2: The Risk Management Process (Source: GRA & NSW, 2005:39)

Step 1: Communicate and consult

Communication and consultation aims to identify who should be involved in assessment of risk (including identification, analysis and evaluation), and it should engage those who will be involved in the treatment, monitoring and review of risk. As such, communication and consultation will be documented in each step of the process. There are two main aspects that should be identified in order to establish the requirements for the remainder of the process. This initial step aims at:

- **Eliciting risk information:** Communication and consultation may occur within the organisation or between the organisation and its stakeholders. It is very rare that only one person will hold all the information needed to identify the risks to a business or even to an activity or project. It is therefore important to identify the

range of stakeholders who will assist in making this information complete. To ensure effective communication, a business owner may decide to develop and implement a communication strategy and/or plan as early as possible in the process. This should identify internal and external stakeholders, and communicate their roles and responsibilities, as well as address issues relating to risk management. Consultation is a two-way process that typically involves talking to a range of relevant groups and exchanging information and views. It can provide access to information that would not be available otherwise.

- **Managing stakeholder perceptions for management of risk:** There will be numerous stakeholders within a small business and these will vary depending upon the type and size of the business. Stakeholder management can often be one of the most difficult tasks in business management. It is important that stakeholders are clearly identified and communicated with throughout the risk management process. They can have a significant role in the decision-making process, so their perceptions of risks, as well as their perceptions of benefits, should be identified, understood, recorded and addressed. Stakeholder communication should incorporate regular progress reports on the development and implementation of the risk management plan, and in particular provide relevant information on the proposed treatment strategies, their benefits and planned effectiveness.

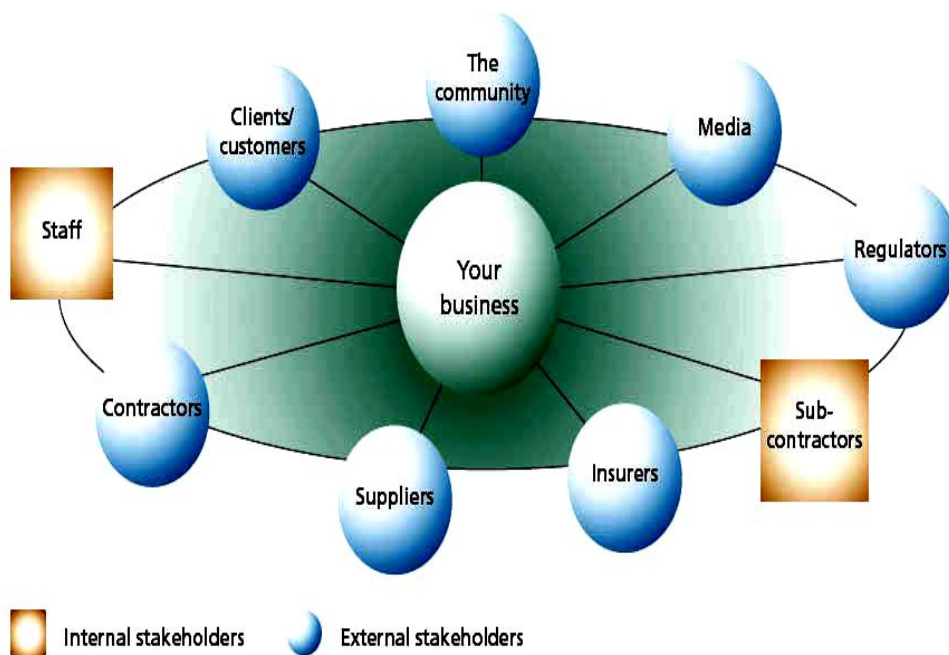


Figure 3.3: Stakeholders in small business (Source: GRA & NSW, 2005: 23).

Step 2: Establish the context

When considering risk management within a small business, it is important to first establish some boundaries within which the risk management process will apply. For example, the business owner may be only interested in identifying financial risks; as such the information collected will pertain only to that area of risk.

AS/NZS 4360 cited by (GRA & NSW, 2005:24-27) provides a five-step process to assist with establishing the context within which risk will be identified.

- **Establish the internal context.** As previously eluded to, risk is the chance of something happening that will impact on business objectives. As such, the objectives and goals of a business, project or activity must first be identified to ensure that all significant risks are understood. This will ensure that risk decisions always support the broader goals and objectives of the business. This approach encourages long-term and strategic thinking. In establishing the internal context, the business owner may also ask themselves the following questions:
 - Is there an internal culture that needs to be considered? For example, are staff resistant to change? Is there a professional culture that might create unnecessary risks for the business?
 - What staff groups are present?
 - What capabilities does the business have in terms of people, systems, processes, equipment and other resources?
- **Establish the external context:** This step defines the overall environment in which a business operates and includes an understanding of the clients' or customers' perceptions of the business. An analysis of these factors will identify the strengths, weaknesses, opportunities and threats to the business in the external environment. A business owner may ask the following questions when determining the external context:

What regulations and legislation must the business comply with?

 - Are there any other requirements the business needs to comply with?
 - What is the market within which the business operates? Who are the competitors?
 - Are there any social, cultural or political issues that need to be considered?

Establishing the external context should also involve examining relationships the business has with external stakeholders for risk and opportunity.

- **Establish the risk management context:** Before beginning a risk identification exercise, it is important to define the limits, objectives and scope of the activity or issue under examination. For example, in conducting a risk analysis for a new project, such as the introduction of a new piece of equipment or a new product line, it is important to clearly identify the parameters for this activity to ensure that all significant risks are identified. Establishing the parameters and boundaries of the activity or issue also involves the determination of:
 - Timeframe (e.g. how long will it take to integrate a new piece of equipment?)
 - Resources required.
 - Roles and responsibilities.
 - Additional expertise required.
 - Internal and external relationships (e.g. other projects, external stakeholders).
 - Record-keeping requirements.
 - Depth of analysis required.

The extent of analysis required for this step will depend on the type of risk, the information that needs to be communicated and the best way of doing this. To determine the amount of analysis required consider the:

- Complexity of the activity or issue.
 - Potential consequence of an adverse outcome.
 - Importance of capturing lessons learned so that corporate knowledge of risk associated with the activity can be developed.
 - Importance of the activity and the achievement of the objectives.
 - Information that needs to be communicated to stakeholders.
 - Types of risks and hazards associated with the activity.
-
- **Develop risk criteria:** Risk criteria allow a business to clearly define unacceptable levels of risk. Conversely, risk criteria may include the acceptable level of risk for a specific activity or event. In this step, the risk criteria may be broadly defined and then further refined later in the risk management process. It is against these criteria that the business owner will evaluate an identified risk to determine if it requires treatment or control. Where a risk exists that may cause

any of the objectives not to be met, it is unacceptable and a treatment strategy must be identified. Annexure B provides a table with a number of examples of risk criteria for a project.

- **Define the structure for risk analysis:** Categories of risk, which one wishes to manage should be categorised. This will provide greater depth and accuracy in identifying significant risks. The chosen structure for risk analysis will depend upon the type of activity or issue, its complexity and the context of the risks.

Step 3: Identify the risk

Risk cannot be managed unless it is first identified. Once the context of the business has been defined, the next step is to utilise the information to identify as many risks as possible. The aim of risk identification is to identify possible risks that may affect, either negatively or positively, the objectives of the business and the activity under analysis. There are two main ways to identify risk, namely retrospectively and prospectively which are elaborated upon below:

- **Retrospectively.** Retrospective risks are those that have previously occurred, such as incidents or accidents. Retrospective risk identification is often the most common way to identify risk, and the easiest. It is easier to believe something if it has happened before. It is also easier to quantify its impact and to see the damage it has caused. There are many sources of information about retrospective risk, which include:
 - Hazard or incident logs or registers.
 - Audit reports.
 - Customer complaints.
 - Accreditation documents and reports.
 - Past staff or client surveys.
 - Newspapers or professional media, such as journals or websites.
- **Prospectively.** Prospective risks are often harder to identify. These are incidents that have not yet happened, but might happen some time in the future. Identification should include all risks, whether or not they are currently being managed. The rationale here is to record all significant risks and monitor or

review the effectiveness of their control. Methods for identifying prospective risks include:

- Brainstorming with staff or external stakeholders.
- Researching the economic, political, legislative and operating environment.
- Conducting interviews with relevant people and/or organisations.
- Undertaking surveys of staff or clients to identify anticipated issues or problems.
- Flow charting a process.
- Reviewing system design or preparing system analysis techniques.

Risk categories will help break down the process for prospective risk identification. It is important to remember that risk identification will be limited by the experiences and perspectives of the person(s) conducting the risk analysis. Problem areas and risks can be identified with the help of reliable sources.

Step 4: Analysis of the risks

During the risk identification step, a business owner may have identified many risks and it is often not possible to try to address all those identified. The risk analysis step will assist in determining which risks have a greater consequence or impact than others. This will assist in providing a better understanding of the possible impact of a risk, or the likelihood of it occurring, in order to make a decision about committing resources to control the risk. Risk analysis involves combining the possible consequences, or impact, of an event, with the likelihood of that event occurring. The result is a 'level of risk'. This is known as the 'risk analysis equation':

$$\text{Risk} = \text{consequence} \times \text{likelihood}$$

Most commonly, the overall level of risk is determined by combining the identified consequence level, with the likelihood level in a matrix as illustrated in Figure 3.4.

| Consequence \ Likelihood | Significant | Major | Minor |
|--------------------------|----------------------|----------------------|----------------------|
| Frequent | High level of risk | High level of risk | Medium level of risk |
| Possible | High level of risk | Medium level of risk | Low level of risk |
| Rare | Medium level of risk | Low level of risk | Low level of risk |

High level of risk
 Medium level of risk
 Low level of risk

Figure 3.4: Risk analysis matrix for determining level of risk (Source: GRA & NSW, 2005:31).

The elements of a risk analysis include the following elements:

- Identify existing strategies and controls that act to minimise negative risk and enhance opportunities.
- Determine the consequences of a negative impact or an opportunity (these may be positive or negative).
- Determine the likelihood of a negative consequence or an opportunity.
- Estimate the level of risk by combining consequence and likelihood.
- Consider and identify any uncertainties in the estimates.

Analysis techniques

The purpose of risk analysis is to provide information to business owners to make decisions regarding priorities, treatment options, or balancing costs and benefits. Just as decisions differ, the information needed to make these decisions will also differ. Not all businesses or even areas within a business will use the same risk analysis method. As such, the risk analysis tools need to reflect these risk types to ensure that the risk levels estimated are appropriate to the context of the business.

Types of analysis

Three categories or types of analysis can be used to determine level of risk, namely:

- Qualitative,
- semi-quantitative, or
- quantitative.

The most common type of risk analysis is the qualitative method and as a result will be elaborated upon below. The type of analysis is usually based upon the area of risk being analysed. This form of risk analysis relies on subjective judgement of consequence and likelihood (i.e. what might happen in a worst case scenario). It produces a 'word picture' of the size of the risk and is a viable option where there is no data available. Qualitative risk analysis is simple and easy to understand. Disadvantages include the fact that it is subjective and are based on intuition, which can lead to the forming of bias and can degrade the validity of the results.

Methods for qualitative risk analysis include:

- Brainstorming.
- Evaluation using multi-disciplinary groups.
- Specialist and expert judgement.
- Structured interviews and/or questionnaires.
- Word picture descriptors and risk categories.

Step 5: Evaluate the risks

It is important to be able to determine how serious the risks are that the business is facing. The business owner must determine the level of risk that a business is willing to accept. Risk evaluation involves comparing the level of risk found during the analysis process with previously established risk criteria, and deciding whether these risks require treatment. The result of a risk evaluation is a prioritised list of risks that require further action. This step is about deciding whether risks are acceptable or need treatment.

Risk acceptance

Low or tolerable risks may be accepted. The term 'acceptable' means the business chooses to 'accept' that the risk exists, either because the risk is at a low level and the cost of treating the risk will outweigh the benefit, or there is no reasonable treatment that can be implemented. This is also known as ALARP, an acronym for 'as low as reasonably practicable'. A risk may be accepted for the following reasons:

- The cost of treatment far exceeds the benefit, so that acceptance is the only option (applies particularly to lower ranked risk).

- The level of the risk is so low that specific treatment is not appropriate with available resources.
- The opportunities presented outweigh the threats to such a degree that the risk is justified.
- The risk is such that there is no treatment available, for example the risk that the business may suffer storm damage.

Step 6: Treat the risk

Risk treatment is about considering options for treating risks that were not considered acceptable or tolerable during Step 5. Risk treatment involves identifying options for treating or controlling risk, in order to either reduce or eliminate negative consequences, or to reduce the likelihood of an adverse occurrence. Risk treatment should also aim to enhance positive outcomes. It is often either not possible or cost-effective to implement all treatment strategies. A business owner should aim to choose, prioritise and implement the most appropriate combination of risk treatments. Figure 2.2, in Chapter 2, depicted the risk treatment process, including what needs to be considered in choosing a risk treatment. Before a risk can be effectively treated, it is necessary to understand the ‘root cause’ of the risk, or how risks arise.

Identifying appropriate treatments

Once a treatment option has been identified, it is then necessary to determine the residual risk, meaning, *has the risk been eliminated?* Residual risk must be evaluated for acceptability before treatment options are implemented (refer to Figure 2.2, in Chapter 2).

Conducting a cost-benefit analysis

Business owners need to know whether the cost of any particular method of correcting or treating a potential risk is justified. Considerations include:

- The number of treatments required.
- Benefit to be gained from treatment.
- Other treatment options available, and why the chosen one has been recommended.
- Effectiveness of the treatment.

- Timeframe.
- Total cost of treatment option.
- Total reduction in residual risk
- Legislative requirements.

Business owners are required by law to provide a safe workplace. If existing work environments need to be upgraded to fully meet codes of practice and standards, a risk management approach should be adopted to demonstrate due diligence. A staged action or risk treatment plan can be used to document the risks, and to outline remedial actions. Appropriate consultation with stakeholders, should also occur.

Risk treatment plan

A risk treatment plan indicates the chosen strategy for treatment of an identified risk. It provides valuable information about the risk identified, the level of risk, the planned strategy, and the timeframe for implementing the strategy, resources required and individuals responsible for ensuring the strategy is implemented. The final documentation should include a budget, appropriate objectives and milestones on the way to achieving those objectives.

Risk recovery

Although uncertainty-based risks are problematic, if not impossible to predict, as there are ways in which businesses can prepare for a significant adverse outcome. This action is commonly referred to as risk recovery. Businesses should consider adopting a structured approach to planning for recovery. This planning may take many forms which could include the following:

- **Crisis or emergency management planning:** The business anticipates what might occur in a crisis or emergency, such as a fire or another physical threat, and then plans to manage this in the short term. This will include listing emergency contact details and training staff in evacuation and emergency response procedures.
- **Business continuity planning:** The business moves beyond the initial response of a crisis or emergency, and plans for recovery of business processes with minimal disruption. This might for example include ensuring that there is sufficient

documentation of processes if a key staff member is unavailable to return to work and another staff member is required to fulfil that role, identifying options for alternative premises if the existing premises are damaged, or documenting alternate suppliers for key supply material if a key supplier does not fulfil their contract.

- **Contingency planning:** Contingency planning can include a combination of the above. A contingency planning tool can help to identify what should be done to minimise the impact of a negative consequence on key business processes arising from an uncertainty-based risk. This would include the initial response (crisis management) and the delayed response (business continuity).

Step 7: Monitor and review

Monitor and review is an essential and integral step in the risk management process. A business owner must monitor risks and review the effectiveness of the treatment plan; strategies and management system that have been set up to effectively manage risk. Risks need to be monitored periodically to ensure changing circumstances do not alter the risk priorities. Very few risks will remain static, therefore the risk management process needs to be regularly repeated, so that new risks are captured in the process and effectively managed. A risk management plan at a business level should be reviewed at least on an annual basis. An effective way to ensure that this occurs, is to combine risk planning or risk review with annual business planning.

3.3.5 Recording the risk management process

Many different types of documentation can be used in the risk management process. It is easy to become confused about which documents to use and when. This section offers a simple way to record the risk management process in a small business. There are several types of risk documentation, which can be mapped to each situational risk situation. Documents used in the risk management process are graphically depicted in Figure 3.5 (GRA & NSW, 2005:31).

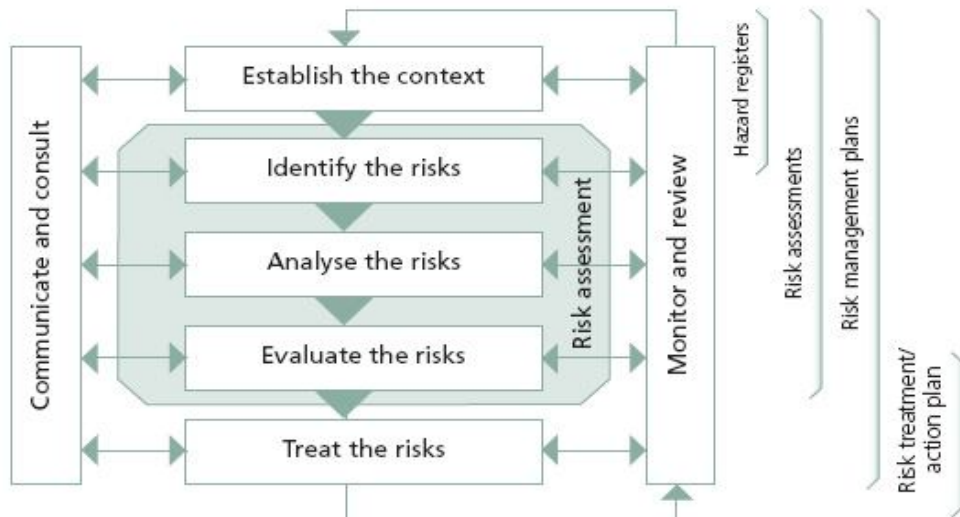


Figure 3.5: Documents used in the risk management process. (Source: GRA & NSW, 2005:31).

The risk documents and their associated application as depicted in Figure 3.5, are elaborated upon below (GRA & NSW, 2005:31).

- **Hazard registers.** They provide details about risks, incidents or hazard identified within the workplace, activity or situation. It is used when identifying risks retrospectively. Furthermore, it is useful when there is limited subject matter expertise available when conducting risk assessment.
- **Risk treatment/action plans.** Documentation of management controls or treatments adopted for each risk should state the following:
 - Individuals responsible for implementing the plan.
 - Resources to be used.
 - Budget allocation.
 - Timetable for implementation.
 - Details of the mechanism and frequency of review for compliance with, and effectiveness of, the treatment plan.

Risk management plans: It used for the formal documentation of the entire risk management process of a particular activity. It can be applied for any activity, in spite of its complexity or context.

3.4 RISK MANAGEMENT FRAMEWORK

A Risk Management Framework (RMF) is used to sustain the risk management process. More specifically, a risk management framework helps to visualise how risk management can be applied. Figure 3.6 graphically depicts which elements of an RMF can be found in a small business (GRA & NSW, 2005:47-49).

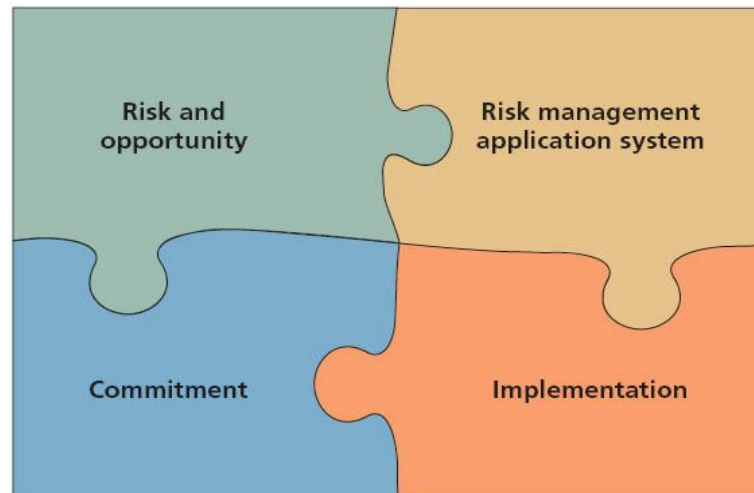


Figure 3.6: Elements of a RM framework for a small business. (Source: GRA & NSW, 2005:47).

The elements of a Risk Management framework graphically depicted in Figure 3.6, are expanded upon below.

- **Risk and opportunity:** Are considered at the following two levels:
 - **Business level:** Significant risks and opportunities that will affect the objectives and goals of the business are identified through annual risk profiling. Risk profiling can assist a business in implementing strategies to ensure the objectives of the project or activity are successfully attained. It is done using retrospective and prospective risks identification methods applied to the business risk management process.
 - **Operational level:** Refers to identifying risk and opportunity at a project, activity or speciality level, to ensure the project's objectives are successfully achieved.
- **Risk management application system:** It is everything that allows the successful execution of a risk management framework, namely:
 - The risk management process.

- Where risk management should be applied.
- Risk analysis tools.
- Risk reporting.
- Risk management techniques.
- Scale of risk escalation and acceptance.

It aims at ensuring that all resources needed to execute programme present, consistent and are clearly understood.

- **Commitment:** A statement of commitment will provide a clear understanding of the business approach to risk management. The risk management should be underpinned by:
 - The intentions and expectations for risk management.
 - Defined business objectives and rationale for managing risk.
 - Links to other management processes, such as business planning.
 - Categories of risks that have been identified as specific to the business.
 - Levels or types of risk to be accepted.
 - Responsibilities and accountabilities for identifying and managing risk (especially important for businesses with multiple staff).
 - Guidance on risk management documentation.
 - Requirements for monitoring and reviewing performance against the policy.
- **Implementation:** This should include:
 - Ensuring appropriate commitment to risk management.
 - Setting clear objectives and guidelines for risk management.
 - Allocating adequate resources.
 - Training staff appropriately.
 - Implementing systems for monitoring and reviewing risks.

3.5 CONCLUSION

This chapter briefly discussed the SMME sector and outlined small business owners and entrepreneurs' perception of risk management. Furthermore, the chapter aimed at elaborating upon how risk management should be approached within small businesses. The chapter furthermore deals with what should be done after the process

of risk management has been established. The next chapter explains the research methodology applied for this study, and the techniques used to collect the necessary data for this project.

CHAPTER FOUR

RESEARCH DESIGN AND METHODOLOGY

No method is perfect, but thoughtful choice can support judgements that a contribution is interesting, significant, and trustworthy.

Anne Sigismund Huff

4.1 INTRODUCTION

Social research is by no means an invention of the modern social scientist. Greek philosopher such as Socrates investigated the structure of society and the causes of social problems more than 2000 years ago and produced very impressive accounts of social life and society. They carried out research at different levels, collected information on various social phenomena and interpreted their findings in a political and philosophical context (Sarantakos, 1997:1).

Research is best conceived as the process of arriving at dependable solutions to problems through the planned and systematic collection, analysis, and interpretation of data. It is a most important tool for advancing knowledge, for promoting progress, and for enabling man to relate more effectively to his environment, to accomplish his purposes, and to resolve his conflicts (Wilkinson, 2000:1).

This chapter aims to discuss the research design and methodology selected to solve the research problem of this research study. The research problem introduced in Chapter 1, Paragraph 1.3, expresses that key decision-makers such as owner managers, managers and entrepreneurs within the SMME sector are perceived to neglect the use of risk management methods and techniques within their organisations. Research has shown that the absence of a structured risk management approach within a company, regardless of its size will ultimately lead to the demise of the business organisation.

4.2 RESEARCH DESIGN

Mitchell and Jolley (2007:208), are of the opinion that if you want to know why people do what they do or think what they think, you should use an experimental design. If, on the other hand you want to know what people are thinking, feeling, or doing, you should use a non-experimental design.

A research design is a strategic framework for action that serves as a bridge between research questions and the execution or implementation of the research. Research designs are plans that guide “the arrangement of conditions for collections and analysis of data in a manner that aims to combine relevance to the research purpose with economy in procedure” (Blanche and Durrheim, 2002:29).

A quantitative research design has been chosen, as stated in Chapter 1, for this research. Welman, Kruger and Mitchell (2005:78), list four types of research design, namely: experimental, quasi-experimental, non-experimental and qualitative research. Furthermore, the first three categories constitute quantitative research.

Quantitative research refers to the type of research that is based on the methodological principles of positivism and neopositivism, and adheres to the standard of strict research design developed before the research begins. It employs quantitative measurement and the use of statistical analysis (Sarantakos, 1997:6). According to Wilkinson (2000:7), surveys, tests, structured interviews, laboratory experiments and non-participants observation are usually categorised as quantitative data collection. Moreover, one of the important features of quantitative research is that it is highly structured and produces data which are amenable to statistical analysis. Babbie and Mouton (2002:74), define research methodology as, “the systematic, methodical, and accurate execution of the design”. A survey was used to collect the data of this study.

4.3 SURVEY DESIGN

Surveys are the most commonly used method of data collection in the social sciences; so common that they are quite often assumed to be one of the social sciences research methods (Sarantakos, 1997:153). A survey design provides a quantitative or numeric description of trends, attitudes, or opinions of a population by studying a sample of that population. From the sample results, the researcher generalises or makes claims

about the population (Creswell, 2003:153). In general, surveys are methods of data collection in which information is gathered through oral or written questioning. Oral questioning is known as interviewing and written questioning is accomplished through questionnaires (Sarantakos, 1997:223).

Collis and Hussey (2003:60-66), expresses the opinion that research should be organised in order to make the best of opportunities and resources available. Furthermore, to provide a coherent and logical route to a reliable outcome, research must be conducted systematically, using appropriate methods to collect and analyse the data. The survey should be designed according to the following stages:

- **Stage one:** Identify the topic and set some objectives.
- **Stage two:** Pilot a questionnaire to find out what people know and what they see as the important issues.
- **Stage three:** List the areas of information needed and refine the objectives.
- **Stage four:** Review the responses to the pilot.
- **Stage five:** Finalise the objectives.
- **Stage six:** Write the questionnaire.
- **Stage seven:** Re-pilot the questionnaire.
- **Stage eight:** Finalise the questionnaire.
- **Stage nine:** Code the questionnaire.

The survey design to be used in this instance is that of the descriptive survey as opposed to the analytical survey. The descriptive survey is according to Collis and Hussey (2003:60-66), frequently used in business research in the form of attitude surveys. The descriptive survey as defined by Ghauri, Grønhaug and Kristianslund (1995:60), has furthermore the characteristics to indicate how many members of a particular population have a certain characteristic.

4.4 DATA COLLECTION

Emory and Cooper (1995:278), distinguish between three primary types of data collection (survey) methods namely:

- Personal interviewing.
- Telephone interviewing.
- Self-administered questionnaires/surveys.

Remenyi, Williams, Money and Swartz (2002:290), define the concept of ‘survey’ as: “...the collection of a large quantity of evidence usually numeric, or evidence that will be converted to numbers, normally by means of a questionnaire”, while according to Gay and Diebl (1992:238), ‘survey’, is an attempt to collect data from members of a population in order to determine the current status of that population with respect to one or more variables.

Leedy and Ormrod (2001:185), points to the fact that a questionnaire allows the participants to respond to questions with assurance that their responses will be anonymous. This means the respondents can be more truthful than they would be in a personal interview.

4.5 SAMPLING AND TARGETED POPULATION SELECTION

At the outset of an empirical survey the investigator has to decide whether to study the entire population of elements (people and/or things); or only a sample of elements taken from the population. A sample is a portion of elements chosen from the larger population (or universe). The process of drawing those elements from the larger population or universe is called sampling (Mullins, 1994:39).

According to Blanche and Durrheim (2002:44), sampling involves decisions about which people, settings, events, behaviours and/or social processes to observe. Exactly what will be sampled in a particular study is influenced by the unit of analysis. Welman *et al.* (2005:53), stated that members or elements of the population are referred to the units of analysis, and that they could be comprised of:

- Humans, groups (for instance couples married in a particular year; households in a particular geographic region; gangs; etc);
- Organisations or institutions (for example schools; classes; congregations; hospitals; companies; political parties; and so on);
- Human products or outputs (for instance houses; paintings; articles published in a particular journal in a particular period; dramas; and so on);
- Events (for example elections; riots; court cases; and so on).

The main concern in sampling is the concept of ‘representativeness’. The aim is to select a sample that will be representative of the population about which the

researcher aims to draw conclusions. A second concern is the size of the sample; a very small sample may be quite unrepresentative, and the same is true for a large sample. The researcher must ensure that the sample is large enough to allow one to make inferences about the under studied population (Blanche & Durrheim, 2002:44).

The unit of analysis of this research study are owners, managers, entrepreneurs and key employees of the SMME sector. From the SMME sector, 88 businesses were selected, to represent the population. This number was selected as it is impractical and uneconomical to involve all the members of the population in a research project, for instance the populations that usually interests human behavioural scientists are so large that, from a practical point of view, it is simply impossible to conduct research on all of them (Welman *et al*, 2005:55).

Using purposive sampling, this sampling technique (also known as judgemental sampling) the researcher can purposively choose subjects, which in his/her opinion, are thought to be relevant to the research topic (Sarantakos, 1997:152). Owners, managers, entrepreneurs and key designated employees' participation were judged to be important for the successful collection of this research data.

4.6 VALIDITY AND RELIABILITY ISSUES

There are many types of validity. Measurement validity is the degree to which a measure does what it is intended to do. This means that the measure should provide a good degree of fit between the conceptual and operational definitions of the construct, and that the instrument should be usable for the particular purposes for which it was designed (Blanche & Durrheim, 2002:83).

Reliability refers to the dependability of a measurement instrument, that is, the extent to which the instrument yields the same results on repeated trials (Blanche & Durrheim, 2002:88). In other words, reliability relates to matters such as the consistency of the measure (Wilkinson, 2000:42).

According to Babbie (2005:285), survey research is generally weak on validity and strong on reliability. In support of this, Berenson, Levine and Krehbiel (2004:21-22),

stated that surveys are subject to potential errors. Good survey design attempts to reduce or minimise these errors:

- **Coverage error or selection bias:** Occurs if certain groups or subjects are excluded from the sampling frame.
- **Non-response error or non-response bias:** Non-response error arises from the failure to collect data on all subjects in the sample and results in a non-response bias.
- **Sampling error:** Reflects the heterogeneity between samples based on the probability of selection of individuals or items for particular samples.
- **Measurement error:** Refers to inaccuracies in the recorded responses that occur because of a weakness in question wording, an interviewer's effect on the respondent, or the effort made by the respondent. There are three types of measurement error: ambiguous wording of questions, the halo effect, and respondent error.

The researcher has endeavoured to minimise the effect of survey errors in the following ways:

- **Coverage error:** Although this error can never be completely eliminated, the author has selected the companies of this research from the Cape Town Business News Online, where enterprises are listed by category or industry to enable companies of different industries and SMME categories to participate in the survey. However, the unwillingness of most of the companies' owners or managers has culminated in the author to contact participants in person. Moreover, increasing the sampling frame would have in fact increase sampling error and/or measurement error, as participants have limited knowledge of the subject of risk management.
- **Non-response error or non-response bias:** The objective is to have a 100 percent return on questionnaires issued. All participants were contacted via telephone, after agreement the survey was emailed to them at the provided electronic address. All non-responses were followed up on a regular basis. Reminders were sent via email and appointments were made with those who could not email back the questionnaire due to whatever reason.
- **Sampling error:** Refer to coverage error.
- **Measurement error:**

- **Ambiguous wording of questions:** All questions asked of respondents were clear, concise and straight forward. Furthermore, the researcher has given participants an overview of the research topic, and explained within the email sent what was required and offered further help.
- **The halo effect:** The use of the self-administered questionnaires should minimise this effect. Respondents were given more than enough time to provide their input to this study.
- **Respondent error:** This error may be reduced to some extent by inspecting of the responses for obvious errors but will never be completely eliminated.

4.7 MEASUREMENT SCALE

Social research, irrespective of type and nature, entails a degree of measurement. In some cases measurement is exact, quantitative and complicated (Sarantakos, 1997:72). The survey is based on the Likert scale. The scale was introduced by Likert employing a set of response categories ranging from very positive to very negative, one of which the respondent has to choose (Sarantakos, 1997:465).

The Likert scale (Likert, 1932:1-55), is chosen as the scale can be used in both respondent-centred (how responses differ between people) and stimulus-centred (how responses differ between various stimuli) studies, and it is most appropriate to glean data in support of the research problem in question (Emory & Cooper 1995:180-181). According to Emory and Cooper (1995:180-181), the following are the advantages of the Likert scale:

- Easy and quick to construct.
- Each item meets an empirical test for discriminating ability.
- The Likert scale is probably more reliable than the Thurston scale, and it provides a greater volume of data than the Thurston differential scale.
- The Likert scale is also treated as an interval scale.

Remenyi *et al.* (2002:153-154), is of the opinion that interval scales facilitate meaningful statistics when calculating means, standard deviation and Pearson correlation coefficients.

4.8 SURVEY INSTRUMENTS

Research is usually constructed through rigorous, systematic inquiry, and research instruments are the tools researchers use to collect and structure data, thus transforming it into useful information. As stated above the survey design is concerned with gathering data from, usually a large number of people (or respondents), and the data gathered usually focuses on the views, ideas and attitudes of those respondents in relation to the research topic (Wilkinson, 2000:41). Survey instruments can be broadly classified into two categories, namely: questionnaires and interviews (Singh, 2007:69).

4.9 QUESTIONNAIRES

Data collection forms, as stated above, are a central component of most research studies (Mullins, 1994:28). A questionnaire is almost always self-administered, allowing respondents to fill them out themselves (Singh, 2007:69). However, designing a good questionnaire can be a skilled and challenging technical activity (Wilkinson, 2000:42). In the opinion of Sammy (2008:85), a questionnaire is a quantitative data collection method, which has several advantages, namely:

- It is relatively economical.
- It can ensure anonymity.
- It contains questions for specific purposes.

According to Patel, Patel, Tang and Elliot (2005:s.a.), questionnaire construction is a very demanding task, which requires not only methodological competence, but also extensive experience with research in general and questioning techniques in particular. When designing this study questionnaire the following points outlined by Wilkinson (2000:46) were considered:

- A maximum question sentence length of 20 words.
- No hidden assumptions in the questions.
- Avoidance of double-barrelled questions.
- Questions with negative connotations were avoided.
- The researcher was sensitive to potentially irritating questions.

The questionnaire is composed of dichotomous questions, but mostly of multiple-choice questions. The following guidelines pointed by Mullins (1994:35-36) were also followed when designing this study questionnaire:

- Simple words were used.
- Simple questions were asked.
- Clear words were used.
- Leading questions were avoided.
- Biased questions were avoided.

The questionnaire was compiled and divided into the following sections:

- **Section A:** Survey aim and instructions, and researcher information.
- **Section B:** Respondent identification.
- **Section C:** Business identification.
- **Section D:** Respondent general knowledge on Risk Management.
- **Section E:** Risk Management within SMMEs.
- **Section F:** The enterprise details.

Section A: Provides participants with the aim of the study and provides them with instructions on how to fill out the questionnaire. Furthermore, the researcher personal details are given.

Section B: Seeks to determine the respondent degree of authority within the enterprise, his/her academic achievement and how long he/she has been employed or leading the company. Those three elements are important as they could enable the investigator to have an early judgement towards the respondent degree of knowledge regarding the research topic.

Section C: Helps the investigator to approach SMMEs of different industries, size and to determine how long the organisation has been in existence as it is argued by many researchers that most SMMEs do not go beyond 5 years of existence.

Section D: Test the respondents' general knowledge regarding the research topic and its importance for the well-being of any organisation.

Section E: The researcher, in this section, is interested in the tools and techniques used within participants enterprises in connection with the research topic.

Section F: Requires the postal or physical address of the company for reliability purposes, and whether the participant would be interested in receiving a feedback from the study after completion.

A copy of the research questionnaire is included in Annexure C, while a list of all selected companies is provided in Annexure D. Furthermore, an important statement, which aimed at establishing assurance towards confidentiality to respondents, was removed from Annexure C as footer due to formatting reasons. This statement reads as follows: “ALL information provided by participants will be kept strictly confidential, and will be exclusively used for research purposes only”.

4.10 INTERVIEWS

An interview is typically defined as a face-to-face discussion or communication via some technology like the telephone or computer between an interviewer and a respondent. There are three subtypes of interviews, namely: unstructured, which allows a free flow of communication in the course of the interview or questionnaire administration, structured, where the information that needs to be culled out from the respondent is already decided and, semi-structured, which restricts certain kinds of communications but allows manoeuvring freedom on the discussion of certain topics (Singh, 2007:69). For the purpose of this study, unstructured interviews were conducted in the instance where respondents were unwilling to fill out the questionnaires.

4.11 CONCLUSION

This chapter has discussed the research design and methodology selected by the researcher in the following headings:

- Research design
- Data collection
- Survey design
- Sampling and targeted population selection

- Validity and reliability issues
- Measurement scale
- Survey instruments
- Research questionnaire
- Interviews

In Chapter 5, a data analysis and subsequent interpretation of results using descriptive and inferential statistics will be conducted on the data gleaned from the research survey.

CHAPTER FIVE

ANALYSIS AND INTERPRETATION OF THE RESULTS

“The results you achieve will be in direct proportion to the effort you apply”.

Denis Waitley

5.1 INTRODUCTION

Data analysis represents “the process of bringing order, structure and meaning to the mass of collected data” (de Vos 2002, 339). This chapter discusses the results of the data analysis of the survey conducted at SMME’s in the Cape Metropolitan area. The main goal of this study is to determine the risk management methods and techniques currently used by SMME’s and to determine, examine and monitor risks within SMME’s of the Cape Metropolitan area. The data obtained from the completed questionnaires will be presented and analysed by means of various analyses (uni-variate, bi-variate and multivariate) as it becomes applicable.

The data has been analysed by using SAS software. As descriptive statistics, frequency tables are displayed in Paragraph 5.3.2, which shows the distributions of the statement responses. Descriptive statistics is used to summarize the data. As a measure of central tendency and dispersion, Table 5.3 shows the means and standard deviation of statements that tested the general knowledge regarding risk management of the respondents and questions that have a continuous nature (ex. Number of years working or managing enterprise).

5.2 ANALYSIS METHOD

5.2.1 Validation survey results

A descriptive analysis of the survey results returned by the research questionnaire respondents are reflected below. The responses to the questions obtained through the questionnaires are indicated in table format for ease of reference. Data validation is the process of ensuring that a program operates on clean, correct and useful data. The construct validation however can only be taken to the point where the questionnaire

measure what it is suppose to measure. Construct validation should be addressed in the planning phases of the survey and when the questionnaire is developed. This questionnaire is supposed to measure what risk management methods and techniques are currently used by SMME's in the Cape Metropolitan area.

5.2.2 Data Format

The data was received in their original questionnaire format, which were coded and captured on a database that was developed on Microsoft Access. These questionnaires are captured twice and then the two datasets are compared to make sure that the information captured in the two datasets compare. On Microsoft Access some rules with respect to the questionnaire are build in so that there are set boundaries for the questions. For instance if the Likert scale is used, the following would apply:

- Strongly agree is coded as 1
- Agree is coded as 2
- Disagree is coded as 3
- Strongly disagree is coded as 4
- Unsure is coded as 5.

A boundary is set on Microsoft Access software as less than 6. This means if the number 6 or more than 6 is captured an error will show until a number less than 6 is captured.

This dataset is then imported into SAS-format through the SAS ACCESS module. This information which was double checked for correctness is then analysed by the custodian of this document.

5.2.3 Preliminary Analysis

The reliability of the statements in the questionnaire posted to the sample respondents are tested by using the Cronbach Alpha tests. (See Paragraph 5.3.1). Descriptive statistics was performed on all variables; displaying frequencies, percentages, cumulative frequencies and cumulative percentages. Descriptive statistics was performed on continuous variables; displaying means, standard deviations and range. These descriptive statistics are discussed in paragraphs 5.3.2 and 5.3.3. (See also computer printouts in Annexure E and F).

5.2.4 Inferential Statistics

The following inferential statistics are performed on the data:

- Cronbach Alpha test. Cronbach's Alpha is an index of reliability associated with the variation accounted for by the true score of the "underlying construct". Construct is the hypothetical variables that are being measured (Cooper & Schindler, 2001:216-217). More specifically, Cronbach's alpha measures how well a set of items (or variables) measures a single uni-dimensional latent construct.
- *Pearson's chi-square* is used to assess two types of comparison: tests of goodness of fit and tests of independence. A test of goodness of fit establishes whether or not an observed frequency distribution differs from a theoretical distribution. A test of independence assesses whether paired observations on two variables, expressed in a contingency table, are independent of each other – for example, whether two genders differ in the frequency with which they answer the questions put to them.
- *Fisher's exact test* is a statistical significance test used in the analysis of contingency tables where sample sizes are small. It is named after its inventor, R. A. Fisher, and is one of a class of exact tests, so called because the significance of the deviation from a null hypothesis can be calculated exactly, rather than relying on an approximation that becomes exact in the limit as the sample size grows to infinity, as with many statistical tests.

5.2.5 Technical report with graphic displays

A written report with explanations of all variables and their outcome was then compiled. A cross analysis of variables where necessary was performed, attaching statistical probabilities to indicate the magnitude of differences or associations.

All inferential statistics are discussed in Paragraph 5.3.4.

5.2.6 Assistance to Researcher

The conclusions made by the researcher, were validated by the statistical report. Help was provided to interpret the outcome of the data. The final report written by the researcher was validated and checked by a qualified statistician, to exclude any misleading interpretations.

5.2.7 Sample

The target population was SMME's in the Cape Metropolitan area. The sample is drawn from a population of 150 SMME's within the Cape Metropolitan area. A non-probability purposive sample of 88 SMME's in the Cape Metropolitan was drawn.

5.3 ANALYSIS

In total, 88 respondents from the population of 150 SMME's within the Cape Metropolitan area answered the questionnaire posted to them. The items (statements) in the questionnaire will be tested for reliability in the following paragraph.

5.3.1 Reliability Testing

The reliability test (Cronbach's Alpha Coefficient) was done on all the items (statements) which represent the measuring instrument of this survey, with respect to the responses rendered in this questionnaire. Reflected in Table 5.1 are the results of the statements used as measuring instrument. It shows the correlation between the respective item and the total sum score (without the respective item) and the internal consistency of the scale (coefficient alpha) if the respective item would be deleted. As indicated in Table 5.1, it was not necessary to delete one of these items due to the fact that the overall coefficient alpha is more than when any of the items are deleted.

Table 5. 1: Cronbach's Alpha Coefficients for survey measuring instrument.

| Statements | Variable nr. | Correlation with total | Cronbach's Alpha Coefficient |
|---|--------------|------------------------|------------------------------|
| SECTION D: General Knowledge wrt Risk Management | | | |
| 7. How would your rate your understanding of risk management? | Q07 | 00.4669 | 0.7576 |
| 8. How would your rate the importance of risk management within a small business? | Q08 | 0.6042 | 0.7441 |
| 9. To what extent can Risk Management participate towards a business growth and sustainability? | Q09 | 0.4597 | 0.7584 |
| 10. According to your knowledge ERM is a framework for RM? | Q10 | 0.6407 | 0.7658 |
| 11. According to your knowledge RM when well implemented and monitored always keep enterprises from failure? | Q11 | 0.2520 | 0.7799 |
| 12. According to your knowledge do you think that RM could improve any business performances? | Q12 | 0.4829 | 0.7561 |
| SECTION D: Risk Management in your Business | | | |
| 27.1 Do you have: Risk policies and/or mission statements are established? | Q27_1 | 0.5114 | 0.7651 |
| 27.2 Do you have: A risk strategy for the organisation is established? | Q27_2 | 0.4520 | 0.7665 |
| 27.3 Do you have: An adopted or developed common risk language? | Q27_3 | 0.3924 | 0.7707 |
| 27.4 Do you have: An adopted or developed risk framework? | Q27_4 | 0.4922 | 0.7662 |
| 27.5 Do you have: A risk appetite is set? | Q27_5 | 0.3554 | 0.7715 |
| 27.6 Do you have: Individual risks are proactively identified, categorised and prioritised before being assessed? | Q27_6 | 0.2958 | 0.7731 |
| 27.7 Do you have: The process is reported, monitored and kept up to date? | Q27_7 | 0.4513 | 0.7666 |
| 27.8 Do you have: RM is included in key employees' job descriptions? | Q27_8 | 0.3995 | 0.7686 |
| 27.9 Do you have: RM is included in the budgeting | Q27_9 | 0.3919 | 0.7689 |

| Statements | Variable nr. | Correlation with total | Cronbach's Alpha Coefficient |
|---|--------------|------------------------|------------------------------|
| function? | | | |
| Cronbach's Coefficient Alpha for standardized variable | | | 0.8394 |
| Cronbach's Coefficient Alpha for raw variables | | | 0.7778 |

According to the Cronbach's Alpha Coefficients (Table 5.1) for the measuring items in the questionnaire:

- 0.7778 for raw variables; and
- 0.8394 for standardized variables;

which were more than the acceptable level of 0.70. This measuring instrument proved to be reliable and consistent.

5.3.2 Descriptive Statistics

Table 5.2 shows the descriptive statistics for all the variables in the questionnaire measuring the risk management of SMME's with the frequencies in each category and the percentage out of total number of questionnaires. It is of importance to note that the descriptive statistics are based on the total sample. In some cases, no answers were given and will be shown in the descriptive statistics as unknown. The statistics in support of the above are shown in Annexure E, F and G. Due to the voluminous nature of Table 5.2, the contents thereof are contained within Annexure H.

It is of importance to note that when calculating the means, median and standard deviation the unknown category was excluded. This means that for the different items (statements) the number of respondents will differ.

Table 5.3: Descriptive statistics for the continuous variables

| Variable | N | Mean | Median | Standard Deviation | Range |
|---|----------|-------------|---------------|-------------------------------|--------------|
| 3. Time working for / managing the enterprise in years. | 80 | 6.8 | 3.0 | 8.8595 | 43 |
| 5. Number of employees in the business. | 83 | 29.4 | 7.0 | 71.7402 | 449 |
| 6. Number of years the business is in existence. | 82 | 17.9 | 11.0 | 22.7279 | 131 |

5.3.3 Uni-variate Graphs

Uni-variate Graphs interpretations, due to the voluminous nature thereof are contained within the ambit of Annexure I.

5.3.4 Comparative Statistic

Comparisons are made between the number of years in existence of the SMME's, between the number of employees in the SMME's and between the numbers of years of which the respondent have been working for or managing the enterprise. The number of years in existence of the SMME's, the number of employees in the SMME and the numbers of years of the respondent have been working for or managing the enterprise are each grouped in 2 groups namely, those that are less and equal to the median and those that are greater than the median. This was done to indicate whether there were differences between the larger and smaller companies, or whether there were differences between companies that are longer or shorter in existence, whether there were differences between companies that are managed longer or shorter by the same person. The following table shows these groupings.

Table 5.4: Descriptive statistics for comparison variables.

| Variables | Categories | Frequency | Percentage out of total |
|---|----------------|-----------|-------------------------|
| 3. Number of years worked for / managed enterprise. | LE 3 years | 42 | 52.5% |
| | GT 3 years | 38 | 47.5% |
| 5. Number of employees employed. | LE 7 employees | 48 | 57.8% |
| | GT 7 employees | 35 | 42.2% |
| 6. Business existence in years. | LE 11 years | 42 | 51.2% |
| | GT 11 years | 40 | 48.8% |

These comparisons were executed to determine whether the number of years in existence of the SMME's, the number of employees in the SMME and the numbers of years of the respondent have been working for or managing the enterprise have an influence on the risk management variables. The following tables and graphs will illustrate the statistically significant outcomes (where there are statistically significantly differences between the defined groups).

Table 5.5: Pearson Chi-Square test for statistically significant comparisons between the number of employees groups.

| Question / Statement | Sample Size | Chi-Square | DF | P-Value |
|---|-------------|------------|----|---------|
| Comparisons between the LE 7 employees and the GT 7 employees enterprises | | | | |
| 9 To what extent could risk management participate towards a business growth and sustainability | 82 | 47.1505 | 5 | 0.0147* |

Statistically significantly more from the larger employees group (more than 7 employees) was unsure regarding whether risk management participates towards a business growth and sustainability and the other choices were mostly the companies, which had less than or equal to 7 employees.

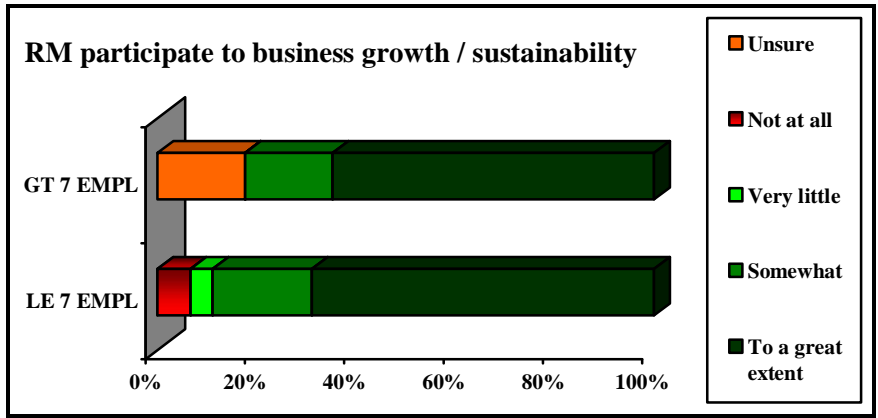


Figure 5.1: RM participation.

Table 5.6: Pearson Chi-Square test for statistically significant comparisons between the number of years in existence groups.

| Question / Statement | Sample Size | Chi-Square | DF | P-Value |
|---|-------------|------------|----|----------|
| Comparisons between the LE 11 and the GT 11 number of years in existence | | | | |
| 17. Kind of software used for risk management | 74 | 12.0841 | 4 | 0.0167* |
| 21. Tools / activities used to determine risk appetite. | 38 | 10.5000 | 2 | 0.0052** |

Statistically significantly more companies that are less and equal than 11 years in existence use standard business management software and in-house software, than the companies that are longer in existence, whilst more of the older companies use standard software and other software.

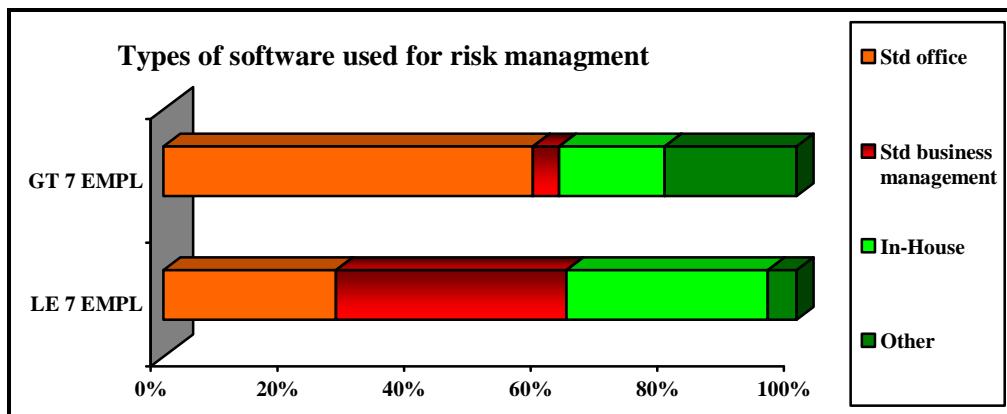


Figure 5. 2: Types of software used in risk management.

Statistically significant more of the older companies use a risk management matrix than the younger companies, whilst more of the younger companies use a Bar chart than the older companies.

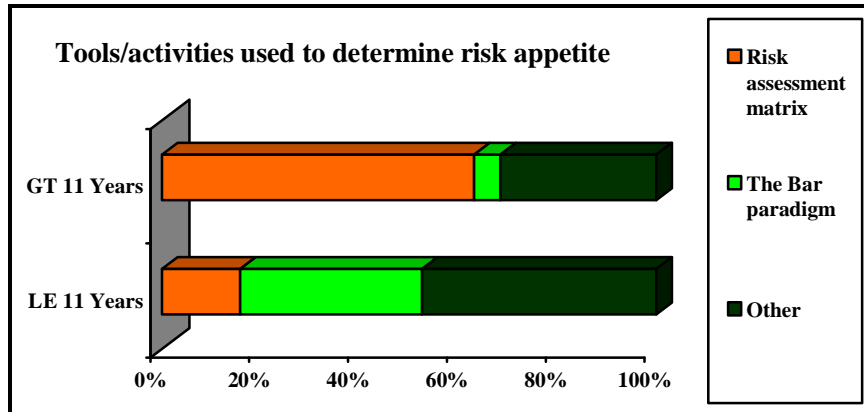


Figure 5. 3: Tools used to determine risk appetite

SAS computes a P-value (Probability value) that measure statistical significance which is derived from the test values like the chi-square, F-value and z-value. Results will be regarded as significant if the p-values are smaller than 0.05, because this value presents an acceptable level on a 95% confidence interval ($p \leq 0.05$). The p-value is the probability of observing a sample value as extreme as, or more extreme than, the value actually observed, given that the null hypothesis is true. This area represents the probability of a Type 1 error that must be assumed if the null hypothesis is rejected (Cooper & Schindler, 2001:509).

The p-value is compared to the significance level (α) and on this basis the null hypothesis is either rejected or not rejected. If the p value is less than the significance level, the null hypothesis is rejected (if p value $< \alpha$, reject null). If the p value is greater than or equal to the significance level, the null hypothesis is not rejected (if p value $\geq \alpha$, don't reject null). Thus with $\alpha=0.05$, if the p value is less than 0.05, the null hypothesis will be rejected. The p value is determined by using the standard normal distribution. The small p value represents the risk of rejecting the null hypothesis.

A difference has statistical significance if there is good reason to believe the difference does not represent random sampling fluctuations only. Results will be regarded as significant if the p-values are smaller than 0.05, because this value is used as cut-off point in most behavioural science research.

5.4 CONCLUSION

This chapter has presented and discussed the outcomes of the survey questionnaire. The results were interpreted using different techniques. Furthermore, test-controls were conducted on participant's responses to verify the trustworthiness of the overall answers collected. Key findings of this study will be elaborated in the next chapter.

CHAPTER SIX

CONCLUSION AND RECOMMENDATIONS

“Be yourself and think for yourself; and while your conclusions may not be infallible, they will be nearer right than the conclusions forced upon you.”

Elbert Hubbard

6.1 INTRODUCTION

This chapter aims to revisit the following elements of the research:

- The research problem.
- The main research question.
- The investigative questions.
- The key research objectives.
- The discussion of the survey findings.

Conclusions drawn are based on the findings of the study. As in all research studies, some limitations to the study occurred. The author offers some recommendations and a final conclusion to summarise the study.

6.2 RESEARCH PROBLEM REVISITED

Defining the research problem involves narrowing down our general interest in a research topic in order to focus on a particular research problem which is small enough to be investigated (Welman *et al*, 2005:13). This study research problem was first mooted following a study conducted in 2006 by A³ Consulting on behalf of the Institute of Risk Management South Africa (IRMSA), where it was concluded that enterprise risk management would benefit the SMME sector in South Africa.

The research problem in this research study reads as follows: “SMME owner managers, managers and entrepreneurs are perceived to not make use of risk management methods, to control the risk within their organisation. Research has shown that the absence of a structured risk management approach within SMME’s will ultimately lead to the demise of many SMME”.

The analysed and interpreted data drawn from the previous chapter has shown that most SMME do not make use of risk management methods to control the risk within their organisations. These results confirm that most SMME executives do not take serious, the importance of risk management as concluded by A³ Consulting in 2006.

6.3 RESEARCH QUESTION REVISITED

This research question was formulated in support of the research problem. The question relates to the methods and techniques used within the SMME sector. Moreover, answers from questions 17, 19, 21, 23 and 26 of the survey questionnaire were aimed to determine the major techniques used within SMMEs for RM. However, answers to these questions were omitted by most participants as they did not know what to indicate. Most of them verbally stated that risk management is not applicable to small businesses as they do not comprehend how it could be implemented within their businesses, although they were aware of its importance for the business.

6.4 INVESTIGATIVE QUESTIONS REVISITED

Five investigative questions were posed in support of the primary research question in order to mitigate the research problem. Those questions are restated for ease of reference, and some results derived from the survey are outlined as follows:

I.Q. 1: How do SMME owner managers perceive risk management?

- 50% of the respondents rated 'good' their understanding of risk management.
- 42% of the respondents rated 'highly important' the presence of risk management in small businesses.
- 64.8% stated that risk management can participate 'to a great extent' towards a company development.
- 38.6% agreed that ERM is a framework for risk management.
- 58% agreed that risk management when well monitored and implemented will keep entities from failure.
- 28.4% stated that RM could 'very probably' improve any business performances.

I.Q. 2: How do SMME owner managers/entrepreneurs manage risks?

- Question 17 has revealed that 35.2% and 11.4% of the participants rated the use of software as 'not applicable' and 'unknown' respectively.
- However, most respondents in question 19 implicitly stated that they get alerted to risks mostly thru customers' complaints, incident registers, audit reports and brainstorming.
- Question 20 outcomes show that SMME managers concentrate more on the evaluation of financial, strategic and reputation risks. 53.3% of the participants do not know how to determine their companies risk appetite, and 35.2% of them use risk avoidance.

I.Q. 3: How often do SMME owner managers/entrepreneurs manage risks?

- In Question 22, 21.6% of the respondents stated that they evaluate and identify their entities risks every month.
- Question 24 indicates that 31% of SMME has one year as the time horizon considered when risks are reviewed. While 26.1% and 21.6% indicated this question has 'not applicable' and 'unknown' respectively.

I.Q. 4: Where do they get the information from to risk manage?

- In Question 25, 45.4% of the participants stated that they get informed about risk through general reporting.
- In Question 26 answers indicated that 44.3% do not know in what document they record their risks.

I.Q 5: Which of this information is sourced from the accounting system?

- 22.7% of participants stated that they get their information from the cash flow statement.
- 11.4% from the Balance Sheet.
- 3.4% from the Income Statement.

6.5 KEY RESEARCH OBJECTIVES

The key objectives of this research study are restated, and expanded upon below:

- **Determining whether SMMEs executives make use of risk management techniques to control risk within their organisation.** Most SMME use 'Customer Complaints' as a technique to identify risks. While others claim to employ 'Incidents Registers', Audit Reports' the 'Brainstorming' technique, and the 'SWOT Analysis' according to Question 19 of Annexure H. However, a percentage of 53.4% was indicated from Question 21 as the incapability of SMME owners to mention the tools and activities used to determine their businesses 'Risk Appetite', which is a crucial point of any business to decide when to retort to risks.
- **Verifying whether the data used to manage their businesses risk are valid and reliable, and to determine if they retrieve them from their Accounting systems.** In Annexure H, from Questions 13 to 17, 23, 25 and 26, one could conclude that the validity, but particularly the reliability of those companies' data can be questioned. The findings have shown that SMME's entrepreneurs are unsure or do not know of the tools and/ or activities they use to record their entities' data. Moreover, many of those SMME do not make use of new accounting technologies to document their business daily transactions.
- **Helping SMME executives being aware of the necessity to constantly implement and monitor their companies' risks.** In Chapter 2, Paragraph 2.4.4, elaborates on the importance of risk management, and Paragraph 2.6 outlines instances of risk exposure faced by well known companies, due to their lack of constant monitoring of risk management techniques within their businesses.
- **Providing some guidelines on how risk management should be approached within small businesses to allow those enterprises experience growth and sustainability.** Chapter 3 of this study meets this objective by giving small businesses entrepreneurs a way to approach risk management within their entities.

6.6 DISCUSSION OF THE SURVEY FINDINGS

As for the results obtained through the survey, the following analogies can be drawn from the research:

- SMME's seem to understand the concept of risk management good to very good and they rate its importance high to very high.
- Risk management can significantly contribute towards business growth and sustainability.
- SMME's tend to regard ERM as a framework for risk management and if risk management is well implemented and monitored, it always safeguards enterprises from failure and improves any business performance.

The profile regarding risk management for SMME's in the Cape Metropolitan area shows that:

- Mostly the "Board of directors" and "Management / Owner" are responsible for the companies' risk management.
- "Staff of business unit", "Board of directors" and "Accountant" normally supervises and reviews the companies risk management process.
- Rules pertaining to risk management are circulated via various media such as 'Controlling Manual', 'General Manual' and 'Other' which includes 'meetings', 'manual' and 'verbal' media.
- Information to manage risk is received in the form of a 'Cash flow statement', 'Departmental internal reports', and 'other' such as 'Management', 'Various reports', 'Customer complaints' and 'Verbal'.
- SMME's tend to use 'Standard office or business or in-house software' rather than "Special risk management software" to manage risk.
- A small portion of SMME's plan to invest large amounts of money for their risk management.
- The major risk identifiers used in SMME's are 'Customer complaints', 'Incident registers' and 'Audit reports'.
- The categories where risk is evaluated are mostly 'Strategic risks', 'Financial risks' and 'Reputation risks'.
- Although a 'Risk assessment matrix' or the 'Bar Chart' or 'Other' is used in less than half of the companies to determine risk appetite, it seem that the companies do not have a tool or use an activity to determine risk appetite.

- The frequency with which risk are identified within companies varies equally from ‘every month’ to ‘every year’, and the way it is treated is usually through the concept of ‘avoidance’.
- Reviewing risks horizon is either ‘annually’ or an ‘open horizon’.
- Risks reporting are usually part of general reporting, but there are a few companies that use separate risk reporting. The recording of these risks are usually made in a risk register, a risk management plan or other such as meeting minutes or daily reports. There is however a large proportion of the companies that did not respond to this statement, and it can mean that they do not keep records of risks, or they do not use risk management.

6.7 RECOMMENTATIONS

The results drawn from this research survey have shown that risk management as a concept is known to SMMEs owners, managers and entrepreneurs. However, they do not seem to make use of structured tools or activities to manage risks within their businesses. The researcher believes that the following should be done to encourage the use of risk management in small businesses:

- Risk management techniques should be made available to South African SMMEs through the help of Governmental or Non-Governmental Financing Institutions.
- The above entities should offer sponsored trainings to SMMEs owners, entrepreneurs or managers, as most SMMEs are created by people with limited skills and finances. Risk management courses are offered at high cost by tertiary institutions. Therefore, enrolment to risk management training sessions or courses is not possible to all entrepreneurs or owner-managers due to a lack of access to finances.
- The South African Government should follow the example of countries like Australia, Germany, and the UK which made the application of RM mandatory to all type of companies through the development of laws and regulations.
- A risk management guide for SMMEs should be developed in partnership by institutions such as IRMSA, SAICA, etc., in order to explain to entrepreneurs, managers, and owners how risk management should be approached in their sector, as this will help them attain growth and sustainability like in developed countries.

- SMME's owners and entrepreneurs should also be open-minded towards changes caused by new technologies, and try to keep themselves up-to-date through means like the internet, public libraries and/or business related professional journals, if they cannot get any support in this regard from the Government or other supporting institutions.

6.8 RESEARCH LIMITATIONS

Due to a lack of finances the researcher was not able to collect data from all SMMEs in South Africa, only those of the Cape Metropolitan area were approached. During the collection of the data the researcher found it very difficult to collect all the questionnaires. Respondents were always making excuses not to fill out the questionnaire straight away, and some disagreed at a later stage due to various reasons. This has consequently reduced the number of participants to 88 companies, while 150 were contacted and agreed to take part in the survey.

6.9 CONCLUSION

This research study aimed at determining the techniques used by SMME owners, managers and entrepreneurs to manage risk within their businesses. The researcher from the survey conducted in SMMEs of the Cape Metropole drew conclusions based on the analysis of the data collected. Furthermore, the literature review of this research study have permitted to conclude that the identification, categorisation, prioritisation of individual risks, as well as the documentation and monitoring of the risk management process are the way many companies reach growth and sustainability in an ever changing business world.

The research clearly returned that risk management techniques are not part of most SMMEs business functions, although it is being acknowledged that it forms on aspect of the success of any business.

The researcher is of the opinion that risk management techniques, based on this research, and the one conducted by IRMSA in 2006, if well implemented of which the monitoring could help the SMME sector to reach growth and sustainability, thus benefitting South Africa as whole in the creation of more jobs, and enable the

expansion of its economy, as this was the primary goal of the Government through the SMME sector. This study does not imply that the success of SMMEs will lie only on the application and monitoring of risk management. It simply recognizes the preponderance of risk management techniques within any business for its continued success.

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ANNEXURE A

CLASSIFICATION OF THE SMME SECTOR IN SOUTH AFRICA

| Sector or sub-sector in accordance with the standard Industrial Classification | Size or class | Total full-time equivalent of paid employees | Total annual turnover | Total gross asset value (fixed property excluded) |
|--|---------------|--|-----------------------|---|
| | | Less than | Less than | Less than |
| Agriculture | Medium | 100 | R 4.00 m | R 4.00 m |
| | Small | 50 | R 2.00 m | R 2.00 m |
| | Very small | 10 | R 0.40 m | R 0.40 m |
| | Micro | 5 | R 0.15 m | R 0.10 m |
| Mining and quarrying | Medium | 200 | R 30.00 m | R 18.00 m |
| | Small | 50 | R 7.50 m | R 4.50 m |
| | Very small | 20 | R 3.00 m | R 1.80 m |
| | Micro | 5 | R 0.15 m | R 0.10 m |
| Manufacturing | Medium | 200 | R 40.00 m | R 15.00 m |
| | Small | 50 | R 10.00 m | R 3.75 m |
| | Very small | 20 | R 4.00 m | R 1.50 m |
| | Micro | 5 | R 0.15 m | R 0.10 m |
| Electricity, Gas and Water | Medium | 200 | R 40.00 m | R 15.00 m |
| | Small | 50 | R 10.00 m | R 3.75 m |
| | Very small | 20 | R 4.00 m | R 1.50 m |
| | Micro | 5 | R 0.15 m | R 0.10 m |
| Construction | Medium | 200 | R 20.00 m | R 4.00 m |
| | Small | 50 | R 5.00 m | R 1.00 m |
| | Very small | 20 | R 2.00 m | R 0.40 m |
| | Micro | 5 | R 0.15 m | R 0.10 m |
| Retail and Motor Trade and Repair Services | Medium | 100 | R 30.00 m | R 5.00 m |
| | Small | 50 | R 15.00 m | R 2.50 m |
| | Very small | 10 | R 3.00 m | R 0.50 m |
| | Micro | 5 | R 0.15 m | R 0.10 m |

Continued...

| Sector or sub-sector in accordance with the standard Industrial Classification | Size or class | Total full-time equivalent of paid employees | Total annual turnover | Total gross asset value (fixed property excluded) |
|--|---------------|--|-----------------------|---|
| | | Less than | Less than | Less than |
| Wholesale Trade, Commercial Agents and Allied Services | Medium | 100 | R 50.00 m | R 8.00 m |
| | Small | 50 | R 25.00 m | R 4.00 m |
| | Very small | 10 | R 5.00 m | R 0.50 m |
| | Micro | 5 | R 0.15 m | R 0.10 m |
| Catering, Accommodation and other Trade | Medium | 100 | R 10.00 m | R 2.00 m |
| | Small | 50 | R 5.00 m | R 1.00 m |
| | Very small | 10 | R 1.00 m | R 0.20 m |
| | Micro | 5 | R 0.15 m | R 0.10 m |
| Transport, Storage and communications | Medium | 100 | R 20.00 m | R 5.00 m |
| | Small | 50 | R 10.00 m | R 2.50 m |
| | Very small | 10 | R 2.00 m | R 0.50 m |
| | Micro | 5 | R 0.15 m | R 0.10 m |
| Finance and Business Services | Medium | 100 | R 20.00 m | R 4.00 m |
| | Small | 50 | R 10.00 m | R 2.00 m |
| | Very small | 10 | R 2.00 m | R 0.40 m |
| | Micro | 5 | R 0.15 m | R 0.10 m |
| Community, Social and Personal Services | Medium | 100 | R 10.00 m | R 5.00 m |
| | Small | 50 | R 5.00 m | R 2.50 m |
| | Very small | 10 | R 1.00 m | R 0.50 m |
| | Micro | 5 | R 0.15 m | R 0.10 m |

Source: National Small Business Act, 1996.

ANNEXURE B

EXAMPLES OF RISK CRITERIA FOR PROJECT IN SMALL BUSINESS

| Risk criterion | Objective |
|------------------|--|
| Safety | Safety must be upheld at all times. No injuries or fatalities will be accepted |
| Financial impact | Project costs should remain within allocated budget |
| Media exposure | The project must ensure that the reputation of the business is protected from negative media exposure |
| Timing | The project must be completed within the contractual timeframe |
| Staff management | The project must utilise existing staff skills. Where a particular skill set is not available, sub-contracting may be considered |
| Environment | The project must operate within requirements of environmental legislation and be consistent with the business's environmental commitment |

ANNEXURE C

SECTION A (SURVEY AIMS & RESEARCHER INFORMATION)

Dear Respondents,

This survey aims at determining the perception of risk management and the methods used to manage risks within the Small, Medium and Micro Enterprises (SMME) sector. As researchers believe that risk management will help the SMME sector, in South Africa, attain a sustainable growth, as a result lead to the economic development of the country.

More than one answer is allowed where there is the following symbol indicated: **

THANK YOU FOR YOUR PARTICIPATION.

HELENE GESIKA, OUMBAHOUI BOUBALA
Magister Technologiae in Internal Auditing
Faculty of Business

Student number: 205049621
Email: LNG6K@LIVE.FR or
205049621@CPUT.AC.ZA
Contact: 0726631746

Supervisor: Prof. Dr. J. André Watkins

SECTION B (PERSONAL IDENTIFICATION)

1. What position do you hold in this firm?

- Entrepreneur
 Manager
 Owner-Manager
 Other, Please specify _____

2. What is your highest academic qualification? (Optional)

- Lower than grade 12 i.e. Grade 8
 Grade 12
 Grade 12 with diploma/certificate
 Undergraduate degree i.e. B Degrees
 Postgraduate degree
 Doctorate

3. How long have you been working for/managing this enterprise?

_____ Years

SECTION C (BUSINESS IDENTIFICATION)

4. In what industry does your business fall?**

- Food and Beverage
 Clothing
 Textile
 Computer
 Other, Please specify _____

5. How many people are employed by your business?

6. How long has this business been in existence?

_____ Years

SECTION D (GENERAL KNOWLEDGE)

7. How would you rate your understanding of risk management?

- | | |
|--|--------------------------------------|
| <input type="checkbox"/> Very good | <input type="checkbox"/> Poor |
| <input type="checkbox"/> Good | <input type="checkbox"/> Very poor |
| <input type="checkbox"/> Barely acceptable | <input type="checkbox"/> Do not know |

8. How would you rate the importance of risk management within a small business?

- | | |
|---|---|
| <input type="checkbox"/> Highly important | <input type="checkbox"/> Of no importance |
| <input type="checkbox"/> Important | <input type="checkbox"/> Unsure |
| <input type="checkbox"/> Not very important | <input type="checkbox"/> Do not know |

9. To what extent could risk management participate towards a business growth and sustainability?

- | | |
|--|--------------------------------------|
| <input type="checkbox"/> To a great extent | <input type="checkbox"/> Not at all |
| <input type="checkbox"/> Somewhat | <input type="checkbox"/> Unsure |
| <input type="checkbox"/> Very little | <input type="checkbox"/> Do not know |

10. According to your knowledge, Enterprise Risk Management (ERM) is a framework for Risk Management (RM).

- | | |
|---|--|
| <input type="checkbox"/> Strongly agree | <input type="checkbox"/> Disagree |
| <input type="checkbox"/> Agree | <input type="checkbox"/> Disagree strongly |
| <input type="checkbox"/> Tend to agree | <input type="checkbox"/> Unsure |
| <input type="checkbox"/> Tend to disagree | <input type="checkbox"/> Do not know |

11. According to your knowledge, risk management, when well implemented and monitored, always keeps enterprises from failure.

- | | |
|---|--|
| <input type="checkbox"/> Strongly Agree | <input type="checkbox"/> Strongly disagree |
| <input type="checkbox"/> Agree | <input type="checkbox"/> Unsure |
| <input type="checkbox"/> Disagree | <input type="checkbox"/> Do not know |

12. According to your knowledge, do you think that risk management could improve any business performances?

- | | |
|--|--|
| <input type="checkbox"/> Definitely | <input type="checkbox"/> Probably not |
| <input type="checkbox"/> Very probably | <input type="checkbox"/> Very definitely not |
| <input type="checkbox"/> Probably | <input type="checkbox"/> Unsure |
| <input type="checkbox"/> Possibly | <input type="checkbox"/> Do not know |

SECTION E (RM IN YOUR BUSINESS)

13. Who is responsible for your risk management?**

- | | |
|--|--|
| <input type="checkbox"/> Board of directors | <input type="checkbox"/> Controlling function |
| <input type="checkbox"/> Internal audit | <input type="checkbox"/> Staff of business units |
| <input type="checkbox"/> Designated risk manager | <input type="checkbox"/> Management alone |
| <input type="checkbox"/> Head of accounting function | <input type="checkbox"/> Designated employees |
| | <input type="checkbox"/> Yourself |
| | <input type="checkbox"/> Other (Please specify) |

| | |
|---|---|
| 14**. Who supervises and reviews your risk management process? | |
| <input type="checkbox"/> Board of directors <input type="checkbox"/> Internal audit <input type="checkbox"/> Accountant | <input type="checkbox"/> Controlling function <input type="checkbox"/> Self control of business unit <input type="checkbox"/> Other (Please, specify) |

| | |
|--|---|
| 15**. How are the practices of your risk management circulated? | |
| <input type="checkbox"/> Risk Management manual <input type="checkbox"/> General manual | <input type="checkbox"/> Controlling manual <input type="checkbox"/> Other (Please, specify) |

| | |
|---|---|
| 16**. Where do you get the information from to risk manage? | |
| <input type="checkbox"/> Cash Flow Statement <input type="checkbox"/> Balance Sheet <input type="checkbox"/> Income Statement | <input type="checkbox"/> Bank Statements <input type="checkbox"/> Departmental/ internal reports <input type="checkbox"/> Other (Please, specify) |

| | |
|---|--|
| 17**. Which kind of software do you use for your risk management? | |
| <input type="checkbox"/> Standard office software <input type="checkbox"/> Standard business management software <input type="checkbox"/> Special RM software | <input type="checkbox"/> In-house software <input type="checkbox"/> Other software <input type="checkbox"/> Not applicable |

| | |
|--|--|
| 18. Which amount of investment, in Rand, do you plan for your risk management? | |
| <input type="checkbox"/> No investment planned <input type="checkbox"/> less than R20'000 | <input type="checkbox"/> From R20'000 to R50'000 <input type="checkbox"/> More than R50'000 |

| |
|---|
| 19**. What do you use to identify risk? |
| <input type="checkbox"/> Incident registers <input type="checkbox"/> Customer complaints <input type="checkbox"/> Audit reports <input type="checkbox"/> SWOT analysis <input type="checkbox"/> Brainstorming <input type="checkbox"/> Risk questionnaires and risk surveys <input type="checkbox"/> Using technology <input type="checkbox"/> Other techniques, (Please specify) _____ |

| | |
|---|---|
| 20**. In which categories do you evaluate risk? | |
| <input type="checkbox"/> Strategic risks <input type="checkbox"/> Reputation risks <input type="checkbox"/> Legal risks <input type="checkbox"/> Environmental and ethical risks <input type="checkbox"/> Financial risks | <input type="checkbox"/> People risks <input type="checkbox"/> Operational risks <input type="checkbox"/> Safety risks <input type="checkbox"/> Technology risks <input type="checkbox"/> Other (Specify) |

| |
|--|
| 21**. What tools or activities do you use to determine your risk appetite? |
| <input type="checkbox"/> Risk assessment matrix <input type="checkbox"/> The Bar Chart Paradigm <input type="checkbox"/> Others, (Please, specify) |

| | |
|---|--|
| 22. How often are risks identified and evaluated? | |
| <input type="checkbox"/> Every year <input type="checkbox"/> Every 6 months <input type="checkbox"/> Every 3 months <input type="checkbox"/> Every month | <input type="checkbox"/> Other, please, specify _____ <input type="checkbox"/> Not applicable |

| |
|--|
| 23**. What tools or activities do you use to treat your enterprise risks? |
| <input type="checkbox"/> Risk avoidance <input type="checkbox"/> Risk sharing <input type="checkbox"/> Risk treatment plan <input type="checkbox"/> Crisis or emergency management planning <input type="checkbox"/> Other tools used, (Please, specify) |

| | |
|---|--|
| 24. What time horizon is considered when risks are reviewed? | |
| <input type="checkbox"/> 1 year <input type="checkbox"/> 2 years <input type="checkbox"/> 3 years | <input type="checkbox"/> 5 years <input type="checkbox"/> Open <input type="checkbox"/> Not applicable |

| |
|---|
| 25**. How do you get informed about risks? |
| <input type="checkbox"/> Separate risk reporting <input type="checkbox"/> Risk reporting is part of general reporting <input type="checkbox"/> Other reporting, please, specify _____ |

| | |
|---|--|
| 26**. In what document do you record risks? | |
| <input type="checkbox"/> Risk Register <input type="checkbox"/> Risk management plan | <input type="checkbox"/> Risk profile <input type="checkbox"/> Other(s) _____ |

| 27. Do you have or do the following within your business regarding risk management? | YES/NO |
|--|---------------|
| Risk policies and/or mission statement are established. | |
| A risk strategy for the organisation is established. | |
| An adopted or developed common risk language. | |
| An Adopted or developed risk framework. | |
| A risk appetite is set. | |
| Individual risks are proactively identified, categorised and prioritised, before being assessed. | |
| The process is reported, monitored and kept up to date. | |
| Risk management is included in key employees' job descriptions. | |
| Risk management is included in the budgeting function. | |

SECTION F (Enterprise Details)

| |
|--|
| Company name & address: <input type="checkbox"/> I wish to receive feedback from this study. |
|--|

ANNEXURE D

LIST OF SELECTED COMPANIES

| Row number | Company name | Company address | Company TEL NO |
|-------------------|---|---|-----------------------|
| 1 | Execusrecs | Bayside Mall; Tableview | 021 5575011 |
| 2 | Linex Yamaha | P.O. BOX 1549; Cape Town; 8000 | |
| 3 | Betafence Manufacturing SA (Pty) Ltd | P.O. Box 3356; Paarl; 7820 | 021 8687300 |
| 4 | Imbuko Wines (Pty) Ltd | P.O. Box 810; Wellington; 7654 | |
| 5 | Tie Stop CC | | |
| 6 | John Bean Technologies (Pty) Ltd | | |
| 7 | Aartscape Theatre Centre | DF Malan Street; Cape Town; 8001 | 021 4109800 |
| 8 | Real-time Solutions | P.O. Box 910; Howard Place; 7450 | |
| 9 | African Home, Creative Homeware CC | 41 Caledon Street; Cape Town; 8001 | 021 5511052 |
| 10 | Lavo Bathroom Concepts | | |
| 11 | Magalesly C | | 021 9453270 |
| 12 | Fast Forward | | 021 9493057 |
| 13 | Prima Style | | 021 9464148 |
| 14 | AGE Arica Promotions & Events (Pty) Ltd | | |
| 15 | Mullers Optometrists | | 021 9483627 |
| 16 | Suntrax | P.O. Box 11400; Bloubergstrand; 7443 | 021 5560044 |
| 17 | Modrags | Shop 28; Charl Malan Street; Middestad Mall, Belville | 021 9484584 |
| 18 | Cock & Bull | Bayside Mall | |
| 19 | Kazi Logistics | | 021 9454299 |

| Row number | Company name | Company address | Company TEL NO |
|-------------------|--------------------------------|---|-----------------------|
| 20 | Linear Furnishings | 62 Sir Lowry Road; Woodstock | |
| 21 | Wanted to be anonymous | | |
| 22 | Pour Maisons | P.O. Box 11483; Bloubergstrand; 7443 | |
| 23 | Ceragran | The Square; 50 Buitenkant Street; Cape Town | |
| 24 | Alex's Corner | Addison Street/house | |
| 25 | PC Microscope | 495 Albert Road; Salt River; Cape Town | 079 1846253 |
| 26 | Lunar | 10 Cavendish Road; Claremont | 021 6746871 |
| 27 | Airton Timbers (Pty) Ltd | | |
| 28 | Wanted to be anonymous | | |
| 29 | Wanted to be anonymous | | |
| 30 | Zollenvari SA (Pty) Ltd | 31 Vineyard Road; Claremont | |
| 31 | Canterbury Framers | | |
| 32 | Limnos Bakers | 21 Dreyer Street; Sundare Building; Claremont | |
| 33 | Café Da Capo | 22 Dreyer Street; Claremont | |
| 34 | Hearsense (Pty) Ltd | Cnr. Vineyard & Dreyer street; Claremont; Cape Town; 7708 | 021 6833708 |
| 35 | The Little Black Dress Company | No. 5 The Lane; Cavendish Street; Claremont | |
| 36 | Wedding Time | | |
| 37 | Cape Finance | | |
| 38 | GSA Marketing (Pty) Ltd | | |
| 39 | Indy's Clothing | 4Longmarket Street; Cape Town | |
| 40 | Woodheads | | |
| 41 | Gina@Work | Unit B6, M5 Park; Berkley Road; | |

| Row number | Company name | Company address | Company TEL NO |
|-------------------|---------------------------|--|-----------------------|
| | | Maitland; 7405 | |
| 42 | Woodlam (Pty) Ltd | 24 Christian Avenue; Epping; 7460 | |
| 43 | Seekers Franchise Partner | The Lane; 2 Cavendish Close; Claremont; 7708 | 021 6719113 |
| 44 | Goat Clothing | No. 2 Longmarket Street | 021 4615257 |
| 45 | Pie in the sky | 142 Belvedere Road; Claremont | |
| 46 | Ilex Outfilter | Shop No. 6; 25 Addenly Street; Cape Town | |
| 47 | Treehouse | | |
| 48 | Malick | 16 Cavendish Road; Claremont | |
| 49 | Big Game Fishing Safari's | Newlands; Cape Town | |
| 50 | Get Graphic Gardens | | |
| 51 | Blue Ice | Gardens Centre, P.O. Box 211; Shop 39D; Millstreet; Sea Point 8060; Gardens 8001 | 021 4623123 |
| 52 | Nocturnal Affair | P.O. Box 346; Woodstock 7915 | |
| 53 | Xoxo Gardens | Cape Town | |
| 54 | Sport unlimited gardens | Mill Street Gardens; 8001 | 021 4617259 |
| 55 | Hammer & Tongs | Gardens Shopping Centre; Mill Street; Cape Town; 8001 | 021 4651837 |
| 56 | Bed World | 175 Buitenkant Street; Gardens; Cape Town | 021 4618802 |
| 57 | IT Café | 136 Buitenkant Street | |
| 58 | Book Lounge | 71 Roeland Street; Cape Town | |
| 59 | Laundry Nature of Denim | Bayside Center; Shop E09 | |
| 60 | Jagadi Cavendish Street | | |
| 61 | Souette CC | 14 Cavendish Road; Claremont | |
| 62 | Legai Liquids | P.O. Box 23009; Claremont; 7735 | |
| 63 | Wanted to be anonymous | | |

| Row number | Company name | Company address | Company TEL NO |
|-------------------|---|--|-----------------------|
| 64 | Jeans & Less | No. 10 Cavendish Street; Claremont | 021 6710845 |
| 65 | Peacock Tea & Coffee | Crete Road Wetton | |
| 66 | Cardies | Cardies Bayside; Shop 76 | |
| 67 | Wanted to be anonymous | | |
| 68 | O'Brien Mnf Jewellers | Shop 48; Bayside Mall; Table View | 021 5568884 |
| 69 | Barksole | Shop 44; Bayside Center | 021 5576350 |
| 70 | Bentley for Carpets | 75 Roeland Street; Cape Town | |
| 71 | Le Cleuzet | Shop 20B; Gardens Center; Buitenkant Street; Cape Town; 8001 | |
| 72 | Wordsworth Books | Shop No. 5; Mill Street; Gardens | |
| 73 | The Pause Room | Shop No. 2; Gardens Centre | |
| 74 | Gardens Online | Shop 14A; Gardens Centre; Mill Street | |
| 75 | Oxford Stationery & Books | SHOP 16 UPPER LEVEL; GARDENS CENTRE | 021 4657654 |
| 76 | Marlboro Originals | Shop 63A; Upper level; Gardens Shopping Centre; Mill Street; Gardens | 021 4617896 |
| 77 | Queue Sales | Garden Centre | |
| 78 | Renty Pets | Garden Centre | 021 4616937 |
| 79 | La Novita | Gardens Centre | |
| 80 | Lams CC | P.O. Box 156 | |
| 81 | Michael R | Shop No.4; Gardens Centre; Cape Town 8001 | |
| 82 | Springbok Atlas | P.O. Box 819; Cape Town; 8000 | |
| 83 | Cape Gate Fence & Wire Works (Pty) Ltd | P.O. Box 17; Parow; 7499 | |
| 84 | M. West Green Cross Manufacturers (Pty) Ltd | | |
| 85 | Wanted to be anonymous | Bayside | |

| Row number | Company name | Company address | Company TEL NO |
|-------------------|----------------------------------|---|-----------------------|
| 86 | Sunglass Hut Retail SA (Pty) Ltd | Kiosk No. 4; Bayside shopping Centre; Blaauwberg Road; Table View | 021 5570062 |
| 87 | Wanted to be anonymous | Bayside | 021 5561466 |
| 88 | Pexatech | P.O. Box 1193; Milnerton; 7435 | |

ANNEXURE E

DESCRIPTIVE STATISTICS FOR EACH VARIABLE

| Q01 | Frequency | Percent | Cumul ative Frequency | Cumul ative Percent |
|---------------|-----------|---------|--------------------------|------------------------|
| Entrepreneur | 5 | 5.68 | 5 | 5.68 |
| Manager | 54 | 61.36 | 59 | 67.05 |
| Owner-Manager | 16 | 18.18 | 75 | 85.23 |
| Other | 13 | 14.77 | 88 | 100.00 |

Chi-Square Test
for Equal Proportions
Chi-Square 65.0000
DF 3
Pr > Chi Sq <.0001
Sample Size = 88

| Cumul ative Percent | Q01_1 | Frequency | Percent | Cumul ative Frequency |
|------------------------|------------------------|-----------|---------|--------------------------|
| 7.69 | Area Manager | 1 | 7.69 | 1 |
| 23.08 | Bookkeeper | 2 | 15.38 | 3 |
| 38.46 | Employee | 2 | 15.38 | 5 |
| 46.15 | Fi nanci al Controller | 1 | 7.69 | 6 |
| 53.85 | HR Administrator | 1 | 7.69 | 7 |
| 61.54 | Operations | 1 | 7.69 | 8 |
| 69.23 | PR & Market ing | 1 | 7.69 | 9 |
| 76.92 | Shop assistant | 1 | 7.69 | 10 |
| 84.62 | Staff Member | 1 | 7.69 | 11 |
| 100.00 | Supervi sor | 2 | 15.38 | 13 |

Frequency Missing = 75

| Q02 | Frequency | Percent | Cumul ative Frequency | Cumul ative Percent |
|-----------------------|-----------|---------|--------------------------|------------------------|
| <Grade 12 | 3 | 3.41 | 4 | 4.55 |
| Grade 12 | 28 | 31.82 | 32 | 36.36 |
| Grade 12 & Dipl /Cert | 23 | 26.14 | 55 | 62.50 |
| Undergraduate degree | 17 | 19.32 | 72 | 81.82 |
| Postgraduate degree | 16 | 18.18 | 88 | 100.00 |

Chi-Square Test
for Equal Proportions
Chi-Square 39.3636
DF 5
Pr > Chi Sq <.0001
Sample Size = 88

| Q03 | Frequency | Percent | Cumul ative Frequency | Cumul ative Percent |
|-----|-----------|---------|--------------------------|------------------------|
| 0 | 8 | 9.09 | 8 | 9.09 |
| 1 | 22 | 25.00 | 30 | 34.09 |
| 2 | 14 | 15.91 | 44 | 50.00 |
| 3 | 6 | 6.82 | 50 | 56.82 |
| 4 | 6 | 6.82 | 56 | 63.64 |
| 5 | 5 | 5.68 | 61 | 69.32 |
| 6 | 1 | 1.14 | 62 | 70.45 |
| 7 | 2 | 2.27 | 64 | 72.73 |
| 8 | 4 | 4.55 | 68 | 77.27 |
| 9 | 2 | 2.27 | 70 | 79.55 |
| 10 | 3 | 3.41 | 73 | 82.95 |
| 11 | 1 | 1.14 | 74 | 84.09 |
| 12 | 1 | 1.14 | 75 | 85.23 |
| 13 | 1 | 1.14 | 76 | 86.36 |
| 15 | 2 | 2.27 | 78 | 88.64 |
| 16 | 2 | 2.27 | 80 | 90.91 |
| 17 | 1 | 1.14 | 81 | 92.05 |
| 18 | 1 | 1.14 | 82 | 93.18 |
| 20 | 1 | 1.14 | 83 | 94.32 |
| 25 | 1 | 1.14 | 84 | 95.45 |
| 30 | 1 | 1.14 | 85 | 96.59 |
| 35 | 1 | 1.14 | 86 | 97.73 |
| 40 | 1 | 1.14 | 87 | 98.86 |
| 44 | 1 | 1.14 | 88 | 100.00 |

| Q04 | Frequency | Percent | Cumul ative Frequency | Cumul ative Percent |
|-----------------|-----------|---------|--------------------------|------------------------|
| Food & Beverage | 8 | 9.09 | 9 | 10.23 |
| Clothing | 20 | 22.73 | 29 | 32.95 |
| Textile | 3 | 3.41 | 32 | 36.36 |

| | | | | |
|----------|----|-------|----|--------|
| Computer | 4 | 4.55 | 36 | 40.91 |
| Other | 52 | 59.09 | 88 | 100.00 |

Chi-Square Test
for Equal Proportions
Chi-Square 129.7727
DF 5
Pr > Chi Sq <.0001
Sample Size = 88

| Cumulati ve Percent | Q04_1 | Frequency | Percent | Cumulati ve Frequency |
|------------------------|---------------------------|-----------|---------|--------------------------|
| 1.92 | Administrati on | 1 | 1.92 | 1 |
| 3.85 | Advertisi ng | 1 | 1.92 | 2 |
| 5.77 | Art&Frami ng | 1 | 1.92 | 3 |
| 7.69 | Arts&Crafts | 1 | 1.92 | 4 |
| 11.54 | Books | 2 | 3.85 | 6 |
| 13.46 | Brushware | 1 | 1.92 | 7 |
| 15.38 | Bui l di ng | 1 | 1.92 | 8 |
| 17.31 | Cookware | 1 | 1.92 | 9 |
| 19.23 | Fashi on i tems | 1 | 1.92 | 10 |
| 21.15 | Fi nance | 1 | 1.92 | 11 |
| 23.08 | Footwear | 1 | 1.92 | 12 |
| 28.85 | Furni ture | 3 | 5.77 | 15 |
| 30.77 | Gi fti ng | 1 | 1.92 | 16 |
| 32.69 | Government - Non profi t | 1 | 1.92 | 17 |
| 34.62 | Graphi c | 1 | 1.92 | 18 |
| 36.54 | Hardware | 1 | 1.92 | 19 |
| 38.46 | Heal th | 1 | 1.92 | 20 |
| 40.38 | Home Décor | 1 | 1.92 | 21 |
| 42.31 | Imported toys | 1 | 1.92 | 22 |
| 44.23 | Iron & Steel | 1 | 1.92 | 23 |
| 48.08 | Jewel lery | 2 | 3.85 | 25 |
| 50.00 | Leather/Shoe | 1 | 1.92 | 26 |
| 51.92 | Luxury Sunglasses | 1 | 1.92 | 27 |
| 53.85 | Metal /Fenci ng | 1 | 1.92 | 28 |
| 55.77 | Motor | 1 | 1.92 | 29 |
| 57.69 | Opti cal | 1 | 1.92 | 30 |
| 59.62 | Pet Trade | 1 | 1.92 | 31 |
| 61.54 | Pri nti ng & Publi shi ng | 1 | 1.92 | 32 |
| 63.46 | Repai rs | 1 | 1.92 | 33 |
| 78.85 | Retai l | 8 | 15.38 | 41 |
| 80.77 | Sani tary ware/retai l | 1 | 1.92 | 42 |
| 82.69 | Servi ce | 1 | 1.92 | 43 |
| 84.62 | Shoes | 1 | 1.92 | 44 |
| 86.54 | Spectacl es | 1 | 1.92 | 45 |
| 88.46 | Stati onery | 1 | 1.92 | 46 |
| 90.38 | Trai ni ng & Devel opment | 1 | 1.92 | 47 |
| 94.23 | Travel | 2 | 3.85 | 49 |
| 96.15 | Travel & Touri sm | 1 | 1.92 | 50 |
| 98.08 | Tuna Fi shi ng | 1 | 1.92 | 51 |
| 100.00 | Whol esal e & Retai l | 1 | 1.92 | 52 |

Frequency Missing = 36

| 005 | Frequency | Percent | Cumulati ve Frequency | Cumulati ve Percent |
|-----|-----------|---------|--------------------------|------------------------|
| 0 | 5 | 5.68 | 5 | 5.68 |
| 1 | 3 | 3.41 | 8 | 9.09 |
| 2 | 7 | 7.95 | 15 | 17.05 |
| 3 | 15 | 17.05 | 30 | 34.09 |
| 4 | 7 | 7.95 | 37 | 42.05 |
| 5 | 5 | 5.68 | 42 | 47.73 |
| 6 | 4 | 4.55 | 46 | 52.27 |
| 7 | 7 | 7.95 | 53 | 60.23 |
| 8 | 4 | 4.55 | 57 | 64.77 |
| 10 | 2 | 2.27 | 59 | 67.05 |
| 11 | 2 | 2.27 | 61 | 69.32 |
| 12 | 7 | 7.95 | 68 | 77.27 |
| 14 | 2 | 2.27 | 70 | 79.55 |

| | | | | |
|-----|---|------|----|--------|
| 18 | 1 | 1.14 | 71 | 80.68 |
| 25 | 3 | 3.41 | 74 | 84.09 |
| 40 | 1 | 1.14 | 75 | 85.23 |
| 50 | 1 | 1.14 | 76 | 86.36 |
| 56 | 1 | 1.14 | 77 | 87.50 |
| 58 | 1 | 1.14 | 78 | 88.64 |
| 60 | 2 | 2.27 | 80 | 90.91 |
| 67 | 1 | 1.14 | 81 | 92.05 |
| 80 | 1 | 1.14 | 82 | 93.18 |
| 110 | 1 | 1.14 | 83 | 94.32 |
| 150 | 1 | 1.14 | 84 | 95.45 |
| 179 | 1 | 1.14 | 85 | 96.59 |
| 261 | 1 | 1.14 | 86 | 97.73 |
| 350 | 1 | 1.14 | 87 | 98.86 |
| 450 | 1 | 1.14 | 88 | 100.00 |

| 006 | Frequency | Percent | Cumulative Frequency | Cumulative Percent |
|-----|-----------|---------|----------------------|--------------------|
| 0 | 6 | 6.82 | 6 | 6.82 |
| 1 | 9 | 10.23 | 15 | 17.05 |
| 2 | 3 | 3.41 | 18 | 20.45 |
| 3 | 4 | 4.55 | 22 | 25.00 |
| 4 | 4 | 4.55 | 26 | 29.55 |
| 5 | 3 | 3.41 | 29 | 32.95 |
| 6 | 4 | 4.55 | 33 | 37.50 |
| 7 | 2 | 2.27 | 35 | 39.77 |
| 8 | 3 | 3.41 | 38 | 43.18 |
| 10 | 7 | 7.95 | 45 | 51.14 |
| 11 | 3 | 3.41 | 48 | 54.55 |
| 12 | 5 | 5.68 | 53 | 60.23 |
| 13 | 1 | 1.14 | 54 | 61.36 |
| 14 | 1 | 1.14 | 55 | 62.50 |
| 15 | 3 | 3.41 | 58 | 65.91 |
| 16 | 3 | 3.41 | 61 | 69.32 |
| 17 | 1 | 1.14 | 62 | 70.45 |
| 18 | 2 | 2.27 | 64 | 72.73 |
| 19 | 1 | 1.14 | 65 | 73.86 |
| 20 | 7 | 7.95 | 72 | 81.82 |
| 25 | 2 | 2.27 | 74 | 84.09 |
| 30 | 1 | 1.14 | 75 | 85.23 |
| 33 | 1 | 1.14 | 76 | 86.36 |
| 34 | 1 | 1.14 | 77 | 87.50 |
| 36 | 1 | 1.14 | 78 | 88.64 |
| 37 | 2 | 2.27 | 80 | 90.91 |
| 38 | 1 | 1.14 | 81 | 92.05 |
| 40 | 1 | 1.14 | 82 | 93.18 |
| 59 | 1 | 1.14 | 83 | 94.32 |
| 63 | 1 | 1.14 | 84 | 95.45 |
| 80 | 1 | 1.14 | 85 | 96.59 |
| 84 | 1 | 1.14 | 86 | 97.73 |
| 100 | 1 | 1.14 | 87 | 98.86 |
| 132 | 1 | 1.14 | 88 | 100.00 |

| 007 | Frequency | Percent | Cumulative Frequency | Cumulative Percent |
|-------------------|-----------|---------|----------------------|--------------------|
| Very good | 26 | 29.55 | 26 | 29.55 |
| Good | 44 | 50.00 | 70 | 79.55 |
| Barely acceptable | 5 | 5.68 | 75 | 85.23 |
| Poor | 6 | 6.82 | 81 | 92.05 |
| Very poor | 3 | 3.41 | 84 | 95.45 |
| Do not know | 4 | 4.55 | 88 | 100.00 |

Chi-Square Test
for Equal Proportions
Chi-Square 95.9545
DF 5
Pr > Chi Sq <.0001
Sample Size = 88

| 008 | Frequency | Percent | Cumulative Frequency | Cumulative Percent |
|--------------------|-----------|---------|----------------------|--------------------|
| 0 | 2 | 2.27 | 2 | 2.27 |
| Highly important | 37 | 42.05 | 39 | 44.32 |
| Important | 33 | 37.50 | 72 | 81.82 |
| Not very important | 4 | 4.55 | 76 | 86.36 |
| Of no importance | 2 | 2.27 | 78 | 88.64 |
| Unsure | 7 | 7.95 | 85 | 96.59 |
| Do not know | 3 | 3.41 | 88 | 100.00 |

Chi-Square Test
for Equal Proportions
Chi-Square 114.0455
DF 6
Pr > Chi Sq <.0001
Sample Size = 88

| 009 | Frequency | Percent | Cumulative Frequency | Cumulative Percent |
|-------------------|-----------|---------|----------------------|--------------------|
| 0 | 1 | 1.14 | 1 | 1.14 |
| To a great extent | 57 | 64.77 | 58 | 65.91 |
| Somewhat | 15 | 17.05 | 73 | 82.95 |
| Very little | 2 | 2.27 | 75 | 85.23 |
| Not at all | 3 | 3.41 | 78 | 88.64 |
| Unsure | 6 | 6.82 | 84 | 95.45 |
| Do not know | 4 | 4.55 | 88 | 100.00 |

Chi-Square Test
for Equal Proportions
Chi-Square 193.5909
DF 6
Pr > Chi Sq <.0001
Sample Size = 88

| 010 | Frequency | Percent | Cumulative Frequency | Cumulative Percent |
|-----|-----------|---------|----------------------|--------------------|
|-----|-----------|---------|----------------------|--------------------|

| | | | | |
|------------------|----|-------|----|--------|
| Strongly agree | 5 | 5.68 | 5 | 5.68 |
| Agree | 14 | 15.91 | 19 | 21.59 |
| Tend to agree | 34 | 38.64 | 53 | 60.23 |
| Tend to disagree | 13 | 14.77 | 66 | 75.00 |
| Unsure | 2 | 2.27 | 68 | 77.27 |
| Do not know | 9 | 10.23 | 77 | 87.50 |
| | 11 | 12.50 | 88 | 100.00 |

Chi-Square Test
for Equal Proportions
Chi-Square 51.3636
DF 6
Pr > Chi Sq <.0001
Sample Size = 88

| Q11 | Frequency | Percent | Cumulative Frequency | Cumulative Percent |
|----------------|-----------|---------|----------------------|--------------------|
| Strongly agree | 10 | 11.36 | 11 | 12.50 |
| Agree | 51 | 57.95 | 62 | 70.45 |
| Disagree | 11 | 12.50 | 73 | 82.95 |
| Unsure | 9 | 10.23 | 82 | 93.18 |
| Do not know | 6 | 6.82 | 88 | 100.00 |

Chi-Square Test
for Equal Proportions
Chi-Square 112.4545
DF 5
Pr > Chi Sq <.0001
Sample Size = 88

| Q12 | Frequency | Percent | Cumulative Frequency | Cumulative Percent |
|---------------|-----------|---------|----------------------|--------------------|
| Definitely | 22 | 25.00 | 23 | 26.14 |
| Very probably | 25 | 28.41 | 48 | 54.55 |
| Probably | 22 | 25.00 | 70 | 79.55 |
| Possibly | 14 | 15.91 | 84 | 95.45 |
| Do not know | 4 | 4.55 | 88 | 100.00 |

Chi-Square Test
for Equal Proportions
Chi-Square 35.1364
DF 5
Pr > Chi Sq <.0001
Sample Size = 88

| Q13 | Frequency | Percent | Cumulative Frequency | Cumulative Percent |
|-----------------------------|-----------|---------|----------------------|--------------------|
| Board of directors | 21 | 23.86 | 27 | 30.68 |
| Internal audit | 3 | 3.41 | 30 | 34.09 |
| Designated risk manager | 4 | 4.55 | 34 | 38.64 |
| Head of accounting function | 6 | 6.82 | 40 | 45.45 |
| Staff of business units | 5 | 5.68 | 45 | 51.14 |
| Management alone | 13 | 14.77 | 58 | 65.91 |
| Designated employees | 1 | 1.14 | 59 | 67.05 |
| Yourself | 16 | 18.18 | 75 | 85.23 |
| Other | 13 | 14.77 | 88 | 100.00 |

Chi-Square Test
for Equal Proportions
Chi-Square 43.5909
DF 9
Pr > Chi Sq <.0001
Sample Size = 88

| Q13_1 | Frequency | Percent | Cumulative Frequency | Cumulative Percent |
|-------------------------|-----------|---------|----------------------|--------------------|
| All staff and ourselves | 1 | 8.33 | 1 | 8.33 |
| Business Owner | 1 | 8.33 | 2 | 16.67 |
| CEO | 2 | 16.67 | 4 | 33.33 |
| Combination of choices | 1 | 8.33 | 5 | 41.67 |
| Management/Staff | 1 | 8.33 | 6 | 50.00 |
| Owner | 6 | 50.00 | 12 | 100.00 |

Frequency Missing = 76

| Q14 | Frequency | Percent | Cumulative Frequency | Cumulative Percent |
|-------------------------------|-----------|---------|----------------------|--------------------|
| Board of directors | 19 | 21.59 | 30 | 34.09 |
| Internal audit | 7 | 7.95 | 37 | 42.05 |
| Accountant | 10 | 11.36 | 47 | 53.41 |
| Controlling function | 5 | 5.68 | 52 | 59.09 |
| Self control of business unit | 22 | 25.00 | 74 | 84.09 |
| Other | 14 | 15.91 | 88 | 100.00 |

Chi-Square Test
for Equal Proportions
Chi-Square 18.2727
DF 6
Pr > Chi Sq 0.0056
Sample Size = 88

Cumulative

| Cumulative Percent | Q14_1 | Frequency | Percent | Frequency |
|--------------------|--|-----------|---------|-----------|
| 7.14 | All | 1 | 7.14 | 1 |
| 14.29 | CEO | 1 | 7.14 | 2 |
| 21.43 | Compliance department & combination of choices | 1 | 7.14 | 3 |
| 28.57 | Financial Manager | 1 | 7.14 | 4 |
| 35.71 | Myself | 1 | 7.14 | 5 |
| 100.00 | Owner | 9 | 64.29 | 14 |

Frequency Missing = 74

| Q15 | Frequency | Percent | Cumulative Frequency | Cumulative Percent |
|------------------------|-----------|---------|----------------------|--------------------|
| 0 | 28 | 31.82 | 28 | 31.82 |
| Risk Management manual | 6 | 6.82 | 34 | 38.64 |
| General manual | 16 | 18.18 | 50 | 56.82 |
| Controlling manual | 18 | 20.45 | 68 | 77.27 |
| Other | 20 | 22.73 | 88 | 100.00 |

Chi-Square Test for Equal Proportions
 Chi-Square 14.2727
 DF 4
 Pr > Chi Sq 0.0065
 Sample Size = 88

| Cumulative Percent | Q15_1 | Frequency | Percent | Cumulative Frequency |
|--------------------|---------------------|-----------|---------|----------------------|
| 10.00 | Area Manager | 1 | 10.00 | 1 |
| 20.00 | Financial Manager | 1 | 10.00 | 2 |
| 30.00 | In House | 1 | 10.00 | 3 |
| 40.00 | Manual & Verbal | 1 | 10.00 | 4 |
| 50.00 | Meetings | 1 | 10.00 | 5 |
| 60.00 | Minutes of meetings | 1 | 10.00 | 6 |
| 70.00 | Self | 1 | 10.00 | 7 |
| 100.00 | Verbally | 3 | 30.00 | 10 |

Frequency Missing = 78

| Q16 | Frequency | Percent | Cumulative Frequency | Cumulative Percent |
|---------------------------------|-----------|---------|----------------------|--------------------|
| 0 | 19 | 21.59 | 19 | 21.59 |
| Cash flow statement | 20 | 22.73 | 39 | 44.32 |
| Balance sheet | 10 | 11.36 | 49 | 55.68 |
| Income statement | 3 | 3.41 | 52 | 59.09 |
| Bank statements | 3 | 3.41 | 55 | 62.50 |
| Departmental / internal reports | 18 | 20.45 | 73 | 82.95 |
| Other | 15 | 17.05 | 88 | 100.00 |

Chi-Square Test for Equal Proportions
 Chi-Square 25.5909
 DF 6
 Pr > Chi Sq 0.0003
 Sample Size = 88

| Cumulative Percent | Q16_1 | Frequency | Percent | Cumulative Frequency |
|--------------------|--|-----------|---------|----------------------|
| 9.09 | Centre Management | 1 | 9.09 | 1 |
| 18.18 | Customer Complaints Management | 1 | 9.09 | 2 |
| 27.27 | Management meetings | 1 | 9.09 | 3 |
| 36.36 | PC Program | 1 | 9.09 | 4 |
| 45.45 | Self | 1 | 9.09 | 5 |
| 54.55 | Strategic Plan & Departmental / internal reports | 1 | 9.09 | 6 |
| 63.64 | Trading | 1 | 9.09 | 7 |
| 72.73 | Various Reports | 1 | 9.09 | 8 |
| 81.82 | Verbally | 2 | 18.18 | 11 |

Frequency Missing = 77

| Q17 | Frequency | Percent | Cumulative Frequency | Percent |
|---------------------------------------|-----------|---------|----------------------|---------|
| 0 | 10 | 11.36 | 10 | 11.36 |
| Standard office software | 21 | 23.86 | 31 | 35.23 |
| Standard business management software | 9 | 10.23 | 40 | 45.45 |
| In-house software | 11 | 12.50 | 51 | 57.95 |

| | | | | |
|----------------|----|-------|----|--------|
| Other software | 6 | 6.82 | 57 | 64.77 |
| Not applicable | 31 | 35.23 | 88 | 100.00 |

Chi-Square Test
for Equal Proportions
 Chi-Square 30.6364
 DF 5
 Pr > Chi Sq <.0001
 Sample Size = 88

| Q18 | Frequency | Percent | Cumulative Frequency | Cumulative Percent |
|-----------------------|-----------|---------|----------------------|--------------------|
| 0 | 29 | 32.95 | 29 | 32.95 |
| No investment planned | 31 | 35.23 | 60 | 68.18 |
| Less than R200000 | 11 | 12.50 | 71 | 80.68 |
| R20000-R50000 | 7 | 7.95 | 78 | 88.64 |
| >R50000 | 10 | 11.36 | 88 | 100.00 |

Chi-Square Test
for Equal Proportions
 Chi-Square 29.7273
 DF 4
 Pr > Chi Sq <.0001
 Sample Size = 88

| Q19 | Frequency | Percent | Cumulative Frequency | Cumulative Percent |
|---------------------|-----------|---------|----------------------|--------------------|
| 0 | 20 | 22.73 | 20 | 22.73 |
| Incident registers | 12 | 13.64 | 32 | 36.36 |
| Customer complaints | 25 | 28.41 | 57 | 64.77 |
| Audit reports | 11 | 12.50 | 68 | 77.27 |
| SWOT analysis | 5 | 5.68 | 73 | 82.95 |
| Brainstorming | 9 | 10.23 | 82 | 93.18 |
| Using technology | 3 | 3.41 | 85 | 96.59 |
| Other techniques | 3 | 3.41 | 88 | 100.00 |

Chi-Square Test
for Equal Proportions
 Chi-Square 40.5455
 DF 7
 Pr > Chi Sq <.0001
 Sample Size = 88

| Cumulative Percent | Q19_1 | Frequency | Percent | Cumulative Frequency |
|--------------------|------------------------------------|-----------|---------|----------------------|
| 50.00 | Self | 1 | 50.00 | 1 |
| 100.00 | Workshops & combination of choices | 1 | 50.00 | 2 |

Frequency Missing = 86

| Q20 | Frequency | Percent | Cumulative Frequency | Cumulative Percent |
|---------------------------------|-----------|---------|----------------------|--------------------|
| 0 | 17 | 19.32 | 17 | 19.32 |
| Strategic risks | 21 | 23.86 | 38 | 43.18 |
| Reputation risks | 14 | 15.91 | 52 | 59.09 |
| Legal risks | 1 | 1.14 | 53 | 60.23 |
| Environmental and ethical risks | 2 | 2.27 | 55 | 62.50 |
| Financial risks | 18 | 20.45 | 73 | 82.95 |
| People risks | 4 | 4.55 | 77 | 87.50 |
| Operational risks | 7 | 7.95 | 84 | 95.45 |
| Technology risks | 1 | 1.14 | 85 | 96.59 |
| Other | 3 | 3.41 | 88 | 100.00 |

Chi-Square Test
for Equal Proportions
 Chi-Square 63.1364
 DF 9
 Pr > Chi Sq <.0001
 Sample Size = 88

| Cumulative Percent | Q20_1 | Frequency | Percent | Cumulative Frequency |
|--------------------|-------------------------------------|-----------|---------|----------------------|
| 100.00 | Governance, Marketing & all choices | 1 | 100.00 | 1 |

Frequency Missing = 87

| Q21 | Frequency | Percent | Cumulative Frequency | Cumulative Percent |
|------------------------|-----------|---------|----------------------|--------------------|
| 0 | 47 | 53.41 | 47 | 53.41 |
| Risk assessment matrix | 16 | 18.18 | 63 | 71.59 |
| The Bar Chart paradigm | 8 | 9.09 | 71 | 80.68 |
| Other | 17 | 19.32 | 88 | 100.00 |

Chi-Square Test
for Equal Proportions
 Chi-Square 40.0909
 DF 3
 Pr > Chi Sq <.0001
 Sample Size = 88

| Cumulative Percent | Q21_1 | Frequency | Percent | Cumulative Frequency |
|--------------------|-------|-----------|---------|----------------------|
| | | | | |

| | | | | |
|--------|--------------------|---|-------|---|
| 16.67 | Accountants advice | 1 | 16.67 | 1 |
| 33.33 | Daily | 1 | 16.67 | 2 |
| 50.00 | Less orders | 1 | 16.67 | 3 |
| 66.67 | Own | 1 | 16.67 | 4 |
| 83.33 | Results | 1 | 16.67 | 5 |
| 100.00 | Self | 1 | 16.67 | 6 |

Frequency Missing = 82

| Q22 | Frequency | Percent | Cumulative Frequency | Cumulative Percent |
|----------------|-----------|---------|----------------------|--------------------|
| 0 | 14 | 15.91 | 14 | 15.91 |
| Every year | 15 | 17.05 | 29 | 32.95 |
| Every 6 months | 13 | 14.77 | 42 | 47.73 |
| Every 3 months | 10 | 11.36 | 52 | 59.09 |
| Every month | 19 | 21.59 | 71 | 80.68 |
| Other | 5 | 5.68 | 76 | 86.36 |
| Not applicable | 12 | 13.64 | 88 | 100.00 |

Chi-Square Test
for Equal Proportions
Chi-Square 9.0455
DF 6
Pr > Chi Sq 0.1710
Sample Size = 88

| Cumulative Percent | Q22_1 | Frequency | Percent | Cumulative Frequency |
|--------------------|--------------------|-----------|---------|----------------------|
| 33.33 | Constantly | 1 | 33.33 | 1 |
| 66.67 | Daily | 1 | 33.33 | 2 |
| 100.00 | On an ad hoc basis | 1 | 33.33 | 3 |

Frequency Missing = 85

| Cumulative Percent | Q23 | Frequency | Percent | Cumulative Frequency | Percent |
|--------------------|---------------------------------------|-----------|---------|----------------------|---------|
| 36.36 | Risk avoidance | 32 | 36.36 | 32 | 36.36 |
| 71.59 | Risk sharing | 31 | 35.23 | 63 | 71.59 |
| 80.68 | Risk treatment plan | 8 | 9.09 | 71 | 80.68 |
| 90.91 | Risk or emergency management planning | 9 | 10.23 | 80 | 90.91 |
| 95.45 | Other tools used | 4 | 4.55 | 84 | 95.45 |
| 100.00 | | 4 | 4.55 | 88 | 100.00 |

Chi-Square Test
for Equal Proportions
Chi-Square 59.4091
DF 5
Pr > Chi Sq <.0001
Sample Size = 88

| Cumulative Percent | Q23_1 | Frequency | Percent | Cumulative Frequency |
|--------------------|------------------------|-----------|---------|----------------------|
| 50.00 | Combination of choices | 1 | 50.00 | 1 |
| 100.00 | Communication | 1 | 50.00 | 2 |

Frequency Missing = 86

| Q24 | Frequency | Percent | Cumulative Frequency | Cumulative Percent |
|----------------|-----------|---------|----------------------|--------------------|
| 0 | 19 | 21.59 | 19 | 21.59 |
| 1 year | 28 | 31.82 | 47 | 53.41 |
| 2 years | 1 | 1.14 | 48 | 54.55 |
| 5 years | 3 | 3.41 | 51 | 57.95 |
| Open | 14 | 15.91 | 65 | 73.86 |
| Not applicable | 23 | 26.14 | 88 | 100.00 |

Chi-Square Test
for Equal Proportions
Chi-Square 40.1818
DF 5
Pr > Chi Sq <.0001
Sample Size = 88

| Cumulative Percent | Q25 | Frequency | Percent | Cumulative Frequency |
|--------------------|---|-----------|---------|----------------------|
| 30.68 | Separate risk reporting | 15 | 17.05 | 42 |
| 47.73 | Risk reporting is part of general reporting | 40 | 45.45 | 82 |
| 93.18 | Other reporting | 6 | 6.82 | 88 |
| 100.00 | | | | |

Chi-Square Test
for Equal Proportions
Chi-Square 29.7273

DF 3
Pr > Chi Sq <.0001
Sample Size = 88

| Cumulative Percent | Q25_1 | Frequency | Percent | Cumulative Frequency |
|--------------------|-------|-----------|---------|----------------------|
| 100.00 | Daily | 1 | 100.00 | 1 |

Frequency Missing = 87

| | Q26 | Frequency | Percent | Cumulative Frequency | Cumulative Percent |
|--|----------------------|-----------|---------|----------------------|--------------------|
| | 0 | 39 | 44.32 | 39 | 44.32 |
| | Risk Register | 12 | 13.64 | 51 | 57.95 |
| | Risk management plan | 15 | 17.05 | 66 | 75.00 |
| | Risk profile | 7 | 7.95 | 73 | 82.95 |
| | Other | 15 | 17.05 | 88 | 100.00 |

Chi-Square Test for Equal Proportions
Chi-Square 34.9545
DF 4
Pr > Chi Sq <.0001
Sample Size = 88

| Cumulative Percent | Q26_1 | Frequency | Percent | Cumulative Frequency |
|--------------------|-----------------------------|-----------|---------|----------------------|
| 14.29 | Daily Report | 1 | 14.29 | 1 |
| 28.57 | Diari se everything | 1 | 14.29 | 2 |
| 42.86 | Mi nutes of meeting | 1 | 14.29 | 3 |
| 57.14 | Monthly Meeting | 1 | 14.29 | 4 |
| 71.43 | Not recorded | 1 | 14.29 | 5 |
| 85.71 | Not speci ficall y recorded | 1 | 14.29 | 6 |
| 100.00 | Yearly risk report | 1 | 14.29 | 7 |

Frequency Missing = 81

| Q27_1 | Frequency | Percent | Cumulative Frequency | Cumulative Percent |
|-------|-----------|---------|----------------------|--------------------|
| 0 | 32 | 36.36 | 32 | 36.36 |
| Yes | 17 | 19.32 | 49 | 55.68 |
| No | 39 | 44.32 | 88 | 100.00 |

Chi-Square Test for Equal Proportions
Chi-Square 8.6136
DF 2
Pr > Chi Sq 0.0135
Sample Size = 88

| Q27_2 | Frequency | Percent | Cumulative Frequency | Cumulative Percent |
|-------|-----------|---------|----------------------|--------------------|
| 0 | 34 | 38.64 | 34 | 38.64 |
| Yes | 24 | 27.27 | 58 | 65.91 |
| No | 30 | 34.09 | 88 | 100.00 |

Chi-Square Test for Equal Proportions
Chi-Square 1.7273
DF 2
Pr > Chi Sq 0.4216
Sample Size = 88

| Q27_3 | Frequency | Percent | Cumulative Frequency | Cumulative Percent |
|-------|-----------|---------|----------------------|--------------------|
| 0 | 34 | 38.64 | 34 | 38.64 |
| Yes | 13 | 14.77 | 47 | 53.41 |
| No | 41 | 46.59 | 88 | 100.00 |

Chi-Square Test for Equal Proportions
Chi-Square 14.4773
DF 2
Pr > Chi Sq 0.0007
Sample Size = 88

| Q27_4 | Frequency | Percent | Cumulative Frequency | Cumulative Percent |
|-------|-----------|---------|----------------------|--------------------|
| 0 | 35 | 39.77 | 35 | 39.77 |
| Yes | 18 | 20.45 | 53 | 60.23 |
| No | 35 | 39.77 | 88 | 100.00 |

Chi-Square Test for Equal Proportions
Chi-Square 6.5682
DF 2
Pr > Chi Sq 0.0375

Sample Size = 88

| Q27_5 | Frequency | Percent | Cumulative Frequency | Cumulative Percent |
|-------|-----------|---------|----------------------|--------------------|
| 0 | 34 | 38.64 | 34 | 38.64 |
| Yes | 17 | 19.32 | 51 | 57.95 |
| No | 37 | 42.05 | 88 | 100.00 |

Chi-Square Test
for Equal Proportions
Chi-Square 7.9318
DF 2
Pr > Chi Sq 0.0190
Sample Size = 88

| Q27_6 | Frequency | Percent | Cumulative Frequency | Cumulative Percent |
|-------|-----------|---------|----------------------|--------------------|
| 0 | 34 | 38.64 | 34 | 38.64 |
| Yes | 34 | 38.64 | 68 | 77.27 |
| No | 20 | 22.73 | 88 | 100.00 |

Chi-Square Test
for Equal Proportions
Chi-Square 4.4545
DF 2
Pr > Chi Sq 0.1078
Sample Size = 88

| Q27_7 | Frequency | Percent | Cumulative Frequency | Cumulative Percent |
|-------|-----------|---------|----------------------|--------------------|
| 0 | 30 | 34.09 | 30 | 34.09 |
| Yes | 39 | 44.32 | 69 | 78.41 |
| No | 19 | 21.59 | 88 | 100.00 |

Chi-Square Test
for Equal Proportions
Chi-Square 6.8409
DF 2
Pr > Chi Sq 0.0327
Sample Size = 88

| Q27_8 | Frequency | Percent | Cumulative Frequency | Cumulative Percent |
|-------|-----------|---------|----------------------|--------------------|
| 0 | 28 | 31.82 | 28 | 31.82 |
| Yes | 36 | 40.91 | 64 | 72.73 |
| No | 24 | 27.27 | 88 | 100.00 |

Chi-Square Test
for Equal Proportions
Chi-Square 2.5455
DF 2
Pr > Chi Sq 0.2801
Sample Size = 88

| Q27_9 | Frequency | Percent | Cumulative Frequency | Cumulative Percent |
|-------|-----------|---------|----------------------|--------------------|
| 0 | 33 | 37.50 | 33 | 37.50 |
| Yes | 34 | 38.64 | 67 | 76.14 |
| No | 21 | 23.86 | 88 | 100.00 |

Chi-Square Test
for Equal Proportions
Chi-Square 3.5682
DF 2
Pr > Chi Sq 0.1679
Sample Size = 88

ANNEXURE F

| | | | |
|-----------------|------------|------------------|------------|
| | Variable: | Q03 (Q03) | |
| N | 80 | Sum Weights | 80 |
| Mean | 6.8 | Sum Observations | 544 |
| Std Deviation | 8.85952252 | Variance | 78.4911392 |
| Skewness | 2.43992669 | Kurtosis | 6.36809139 |
| Uncorrected SS | 9900 | Corrected SS | 6200.8 |
| Coeff Variation | 130.287096 | Std Error Mean | 0.99052473 |

| | | | |
|----------------------------|----------|---------------------|----------|
| Basic Statistical Measures | | | |
| Location | | Variability | |
| Mean | 6.800000 | Std Deviation | 8.85952 |
| Median | 3.000000 | Variance | 78.49114 |
| Mode | 1.000000 | Range | 43.00000 |
| | | Interquartile Range | 7.50000 |

| | | | |
|---------------------------|-------------|----------|------------|
| Tests for Location: Mu0=0 | | | |
| Test | -Statistic- | -----p | Value----- |
| Student's t | t 6.865048 | Pr > t | <.0001 |
| Sign | M 40 | Pr >= M | <.0001 |
| Signed Rank | S 1620 | Pr >= S | <.0001 |

| | |
|--------------------------|----------|
| Quantiles (Definition 5) | |
| Quantile | Estimate |
| 100% Max | 44.0 |
| 99% | 44.0 |
| 95% | 27.5 |
| 90% | 16.5 |
| 75% Q3 | 8.5 |
| 50% Median | 3.0 |
| 25% Q1 | 1.0 |
| 10% | 1.0 |
| 5% | 1.0 |
| 1% | 1.0 |
| 0% Min | 1.0 |

| | | | |
|-----------------|------------|------------------|------------|
| | Variable: | Q05 (Q05) | |
| N | 83 | Sum Weights | 83 |
| Mean | 29.373494 | Sum Observations | 2438 |
| Std Deviation | 71.7401665 | Variance | 5146.65148 |
| Skewness | 4.22432706 | Kurtosis | 19.4453046 |
| Uncorrected SS | 493638 | Corrected SS | 422025.422 |
| Coeff Variation | 244.234365 | Std Error Mean | 7.87450628 |

| | | | |
|----------------------------|----------|---------------------|-----------|
| Basic Statistical Measures | | | |
| Location | | Variability | |
| Mean | 29.37349 | Std Deviation | 71.74017 |
| Median | 7.00000 | Variance | 5147 |
| Mode | 3.00000 | Range | 449.00000 |
| | | Interquartile Range | 9.00000 |

| | | | |
|---------------------------|-------------|----------|------------|
| Tests for Location: Mu0=0 | | | |
| Test | -Statistic- | -----p | Value----- |
| Student's t | t 3.730201 | Pr > t | 0.0004 |
| Sign | M 41.5 | Pr >= M | <.0001 |
| Signed Rank | S 1743 | Pr >= S | <.0001 |

| | |
|--------------------------|----------|
| Quantiles (Definition 5) | |
| Quantile | Estimate |
| 100% Max | 450 |
| 99% | 450 |
| 95% | 150 |
| 90% | 60 |
| 75% Q3 | 12 |
| 50% Median | 7 |
| 25% Q1 | 3 |
| 10% | 2 |
| 5% | 2 |
| 1% | 1 |
| 0% Min | 1 |

| | | | |
|-----------------|------------|------------------|------------|
| | Variable: | Q06 (Q06) | |
| N | 82 | Sum Weights | 82 |
| Mean | 17.902439 | Sum Observations | 1468 |
| Std Deviation | 22.7279182 | Variance | 516.558266 |
| Skewness | 2.88114027 | Kurtosis | 9.75571293 |
| Uncorrected SS | 68122 | Corrected SS | 41841.2195 |
| Coeff Variation | 126.954311 | Std Error Mean | 2.50987869 |

| | | | |
|----------------------------|----------|---------------------|-----------|
| Basic Statistical Measures | | | |
| Location | | Variability | |
| Mean | 17.90244 | Std Deviation | 22.72792 |
| Median | 11.00000 | Variance | 516.55827 |
| Mode | 1.00000 | Range | 131.00000 |
| | | Interquartile Range | 15.00000 |

| | | | |
|---------------------------|-------------|----------|------------|
| Tests for Location: Mu0=0 | | | |
| Test | -Statistic- | -----p | Value----- |
| Student's t | t 7.132791 | Pr > t | <.0001 |
| Sign | M 41 | Pr >= M | <.0001 |
| Signed Rank | S 1701.5 | Pr >= S | <.0001 |

| | |
|--------------------------|----------|
| Quantiles (Definition 5) | |
| Quantile | Estimate |
| 100% Max | 132 |
| 99% | 132 |
| 95% | 63 |
| 90% | 37 |
| 75% Q3 | 20 |
| 50% Median | 11 |
| 25% Q1 | 5 |
| 10% | 1 |
| 5% | 1 |
| 1% | 1 |
| 0% Min | 1 |

ANNEXURE G

SIMPLE STATISTICS

| Simple Statistics | | | | | | | |
|-------------------|----------|----|---------|---------|-----------|---------|---------|
| Label | Variable | N | Mean | Std Dev | Sum | Minimum | Maximum |
| Q07 | Q07 | 59 | 2.01695 | 1.04207 | 119.00000 | 1.00000 | 6.00000 |
| Q08 | Q08 | 59 | 1.81356 | 1.04179 | 107.00000 | 1.00000 | 5.00000 |
| Q09 | Q09 | 59 | 1.57627 | 1.20635 | 93.00000 | 1.00000 | 6.00000 |
| Q10 | Q10 | 59 | 3.08475 | 2.30657 | 182.00000 | 1.00000 | 8.00000 |
| Q11 | Q11 | 59 | 2.32203 | 1.16620 | 137.00000 | 1.00000 | 6.00000 |
| Q12 | Q12 | 59 | 2.28814 | 1.03476 | 135.00000 | 1.00000 | 4.00000 |
| Q27_1 | Q27_1 | 59 | 1.72881 | 0.44839 | 102.00000 | 1.00000 | 2.00000 |
| Q27_2 | Q27_2 | 59 | 1.62712 | 0.48772 | 96.00000 | 1.00000 | 2.00000 |
| Q27_3 | Q27_3 | 59 | 1.79661 | 0.40598 | 106.00000 | 1.00000 | 2.00000 |
| Q27_4 | Q27_4 | 59 | 1.74576 | 0.43917 | 103.00000 | 1.00000 | 2.00000 |
| Q27_5 | Q27_5 | 59 | 1.74576 | 0.43917 | 103.00000 | 1.00000 | 2.00000 |
| Q27_6 | Q27_6 | 59 | 1.44068 | 0.50073 | 85.00000 | 1.00000 | 2.00000 |
| Q27_7 | Q27_7 | 59 | 1.37288 | 0.48772 | 81.00000 | 1.00000 | 2.00000 |
| Q27_8 | Q27_8 | 59 | 1.42373 | 0.49839 | 84.00000 | 1.00000 | 2.00000 |
| Q27_9 | Q27_9 | 59 | 1.47458 | 0.50364 | 87.00000 | 1.00000 | 2.00000 |

Cronbach Coefficient Alpha
 Variables Alpha
 Raw 0.777764
 Standardized 0.839353

| Cronbach Coefficient Alpha with Deleted Variables | | | | | |
|---|------------------------|----------|------------------------|----------|-------|
| Deleted Variable | Correlation with Total | Alpha | Correlation with Total | Alpha | Label |
| Q07 | 0.466930 | 0.757615 | 0.393270 | 0.833962 | Q07 |
| Q08 | 0.604222 | 0.744150 | 0.506852 | 0.827199 | Q08 |
| Q09 | 0.459671 | 0.758419 | 0.385244 | 0.834433 | Q09 |
| Q10 | 0.640712 | 0.765838 | 0.591807 | 0.822021 | Q10 |
| Q11 | 0.252011 | 0.779889 | 0.155309 | 0.847555 | Q11 |
| Q12 | 0.482870 | 0.756118 | 0.532273 | 0.825660 | Q12 |
| Q27_1 | 0.511435 | 0.765129 | 0.545850 | 0.824835 | Q27_1 |
| Q27_2 | 0.452015 | 0.766548 | 0.565108 | 0.823659 | Q27_2 |
| Q27_3 | 0.392360 | 0.770725 | 0.478420 | 0.828908 | Q27_3 |
| Q27_4 | 0.492177 | 0.766166 | 0.589607 | 0.822156 | Q27_4 |
| Q27_5 | 0.355417 | 0.771476 | 0.444186 | 0.830952 | Q27_5 |
| Q27_6 | 0.295802 | 0.773144 | 0.393292 | 0.833960 | Q27_6 |
| Q27_7 | 0.451281 | 0.766580 | 0.505048 | 0.827307 | Q27_7 |
| Q27_8 | 0.399532 | 0.768622 | 0.390214 | 0.834141 | Q27_8 |
| Q27_9 | 0.391860 | 0.768868 | 0.490636 | 0.828175 | Q27_9 |

Chi-Square tests

Number of years worked for company grouped in "Less and equal median of the number of years (3)" and "Greater than median of the number of years (3)"

Table of Q03 by Q01

| Frequency | Percent | Row Pct | Col Pct | Entrepen, Manager | Owner-Ma, Other | Total |
|------------|---------|---------|---------|-------------------|-----------------|-------|
| LE 3 years | 1 | 26 | 7 | 8 | 42 | |
| | 1.25 | 32.50 | 8.75 | 10.00 | 52.50 | |
| | 2.38 | 61.90 | 16.67 | 19.05 | | |
| | 20.00 | 53.06 | 50.00 | 66.67 | | |
| GT 3 years | 4 | 23 | 7 | 4 | 38 | |
| | 5.00 | 28.75 | 8.75 | 5.00 | 47.50 | |
| | 10.53 | 60.53 | 18.42 | 10.53 | | |
| | 80.00 | 46.94 | 50.00 | 33.33 | | |
| Total | 5 | 49 | 14 | 12 | 80 | |
| | 6.25 | 61.25 | 17.50 | 15.00 | 100.00 | |

Statistics for Table of Q03 by Q01

| Statistic | DF | Value | Prob |
|-----------------------------|----|--------|--------|
| Chi-Square | 3 | 3.1248 | 0.3728 |
| Likelihood Ratio Chi-Square | 3 | 3.2703 | 0.3518 |
| Mantel-Haenszel Chi-Square | 1 | 1.6211 | 0.2029 |
| Phi Coefficient | | 0.1976 | |
| Contingency Coefficient | | 0.1939 | |
| Cramer's V | | 0.1976 | |

WARNING: 25% of the cells have expected counts less than 5. Chi-Square may not be a valid test.
Sample Size = 80

Table of Q03 by Q02

| Frequency | Percent | Row Pct | Col Pct | <Grade 1, Grade 12, Grade 12, Undergra, Postgrad, & Dipl / duate de, uate deg, Cert, gree, ree | Total |
|------------|---------|---------|---------|--|-------|
| LE 3 years | 2 | 13 | 9 | 10 | 42 |
| | 2.53 | 16.46 | 11.39 | 12.66 | 53.16 |
| | 4.76 | 30.95 | 21.43 | 23.81 | 19.05 |
| | 66.67 | 54.17 | 42.86 | 58.82 | 57.14 |
| GT 3 years | 1 | 11 | 12 | 7 | 37 |
| | 1.27 | 13.92 | 15.19 | 8.86 | 7.59 |
| | 2.70 | 29.73 | 32.43 | 18.92 | 16.22 |
| | 33.33 | 45.83 | 57.14 | 41.18 | 42.86 |
| Total | 3 | 24 | 21 | 17 | 79 |
| | 3.80 | 30.38 | 26.58 | 21.52 | 17.72 |

Statistics for Table of Q03 by Q02

| Statistic | DF | Value | Prob |
|-----------------------------|----|--------|--------|
| Chi-Square | 4 | 1.4330 | 0.8384 |
| Likelihood Ratio Chi-Square | 4 | 1.4389 | 0.8374 |
| Mantel-Haenszel Chi-Square | 1 | 0.0393 | 0.8429 |
| Phi Coefficient | | 0.1347 | |
| Contingency Coefficient | | 0.1335 | |
| Cramer's V | | 0.1347 | |

Sample Size = 79

Table of Q03 by Q04

| Frequency | Percent | Row Pct | Col Pct | Food & B, Clothing, Textile | Computer, Other | Total |
|------------|---------|---------|---------|-----------------------------|-----------------|--------|
| LE 3 years | 3 | 11 | 1 | 2 | 25 | 42 |
| | 3.80 | 13.92 | 1.27 | 2.53 | 31.65 | 53.16 |
| | 7.14 | 26.19 | 2.38 | 4.76 | 59.52 | |
| | 42.86 | 64.71 | 33.33 | 50.00 | 52.08 | |
| GT 3 years | 4 | 6 | 2 | 2 | 23 | 37 |
| | 5.06 | 7.59 | 2.53 | 2.53 | 29.11 | 46.84 |
| | 10.81 | 16.22 | 5.41 | 5.41 | 62.16 | |
| | 57.14 | 35.29 | 66.67 | 50.00 | 47.92 | |
| Total | 7 | 17 | 3 | 4 | 48 | 79 |
| | 8.86 | 21.52 | 3.80 | 5.06 | 60.76 | 100.00 |

Statistics for Table of Q03 by Q04

| Statistic | DF | Value | Prob |
|-----------------------------|----|--------|--------|
| Chi-Square | 4 | 1.7205 | 0.7870 |
| Likelihood Ratio Chi-Square | 4 | 1.7424 | 0.7830 |
| Mantel-Haenszel Chi-Square | 1 | 0.0622 | 0.8031 |
| Phi Coefficient | | 0.1476 | |
| Contingency Coefficient | | 0.1460 | |
| Cramer's V | | 0.1476 | |

WARNING: 60% of the cells have expected counts less than 5. Chi-Square may not be a valid test.
Sample Size = 79

Table of Q03 by Q07

| Frequency | Percent | Row Pct | Col Pct | Very good | Good | Barely acceptable | Poor | Very poor | Do not know | Total |
|------------|---------|---------|---------|-----------|-------|-------------------|------|-----------|-------------|--------|
| LE 3 years | 9 | 23 | 3 | 4 | 2 | 1 | | | | 42 |
| | 11.25 | 28.75 | 3.75 | 5.00 | 2.50 | 1.25 | | | | 52.50 |
| | 21.43 | 54.76 | 7.14 | 9.52 | 4.76 | 2.38 | | | | |
| | 39.13 | 56.10 | 60.00 | 80.00 | 66.67 | 33.33 | | | | |
| GT 3 years | 14 | 18 | 2 | 1 | 1 | 2 | | | | 38 |
| | 17.50 | 22.50 | 2.50 | 1.25 | 1.25 | 2.50 | | | | 47.50 |
| | 36.84 | 47.37 | 5.26 | 2.63 | 2.63 | 5.26 | | | | |
| | 60.87 | 43.90 | 40.00 | 20.00 | 33.33 | 66.67 | | | | |
| Total | 23 | 41 | 5 | 5 | 3 | 3 | | | | 80 |
| | 28.75 | 51.25 | 6.25 | 6.25 | 3.75 | 3.75 | | | | 100.00 |

Statistics for Table of Q03 by Q07

| Statistic | DF | Value | Prob |
|-----------------------------|----|--------|--------|
| Chi-Square | 5 | 4.1738 | 0.5247 |
| Likelihood Ratio Chi-Square | 5 | 4.3153 | 0.5050 |
| Mantel-Haenszel Chi-Square | 1 | 0.8773 | 0.3490 |
| Phi Coefficient | | 0.2284 | |
| Contingency Coefficient | | 0.2227 | |
| Cramer's V | | 0.2284 | |

WARNING: 67% of the cells have expected counts less than 5. Chi-Square may not be a valid test.
Sample Size = 80

Table of Q03 by Q08

| Frequency Percent Row Pct Col Pct | Highly important | Important | Not very important | Of no importance | Unsure | Do not know | Total |
|--|------------------|-----------|--------------------|------------------|--------|-------------|--------|
| LE 3 years | 15 | 18 | 2 | 2 | 2 | 2 | 41 |
| | 19.23 | 23.08 | 2.56 | 2.56 | 2.56 | 2.56 | 52.56 |
| | 36.59 | 43.90 | 4.88 | 4.88 | 4.88 | 4.88 | |
| | 44.12 | 60.00 | 50.00 | 100.00 | 40.00 | 66.67 | |
| GT 3 years | 19 | 12 | 2 | 0 | 3 | 1 | 37 |
| | 24.36 | 15.38 | 2.56 | 0.00 | 3.85 | 1.28 | 47.44 |
| | 51.35 | 32.43 | 5.41 | 0.00 | 8.11 | 2.70 | |
| | 55.88 | 40.00 | 50.00 | 0.00 | 60.00 | 33.33 | |
| Total | 34 | 30 | 4 | 2 | 5 | 3 | 78 |
| | 43.59 | 38.46 | 5.13 | 2.56 | 6.41 | 3.85 | 100.00 |

Statistics for Table of Q03 by Q08

| Statistic | DF | Value | Prob |
|-----------------------------|----|--------|--------|
| Chi-Square | 5 | 4.0093 | 0.5481 |
| Likelihood Ratio Chi-Square | 5 | 4.7883 | 0.4423 |
| Mantel-Haenszel Chi-Square | 1 | 0.5703 | 0.4501 |
| Phi Coefficient | | 0.2267 | |
| Contingency Coefficient | | 0.2211 | |
| Cramer's V | | 0.2267 | |

WARNING: 67% of the cells have expected counts less than 5. Chi-Square may not be a valid test.
Sample Size = 78

Table of Q03 by Q09

| Frequency Percent Row Pct Col Pct | to a great extent | Somewhat | Very little | Not at all | Unsure | Do not know | Total |
|--|-------------------|----------|-------------|------------|--------|-------------|--------|
| LE 3 years | 30 | 6 | 0 | 2 | 2 | 2 | 42 |
| | 37.97 | 7.59 | 0.00 | 2.53 | 2.53 | 2.53 | 53.16 |
| | 71.43 | 14.29 | 0.00 | 4.76 | 4.76 | 4.76 | |
| | 57.69 | 46.15 | 0.00 | 66.67 | 40.00 | 50.00 | |
| GT 3 years | 22 | 7 | 2 | 1 | 3 | 2 | 37 |
| | 27.85 | 8.86 | 2.53 | 1.27 | 3.80 | 2.53 | 46.84 |
| | 59.46 | 18.92 | 5.41 | 2.70 | 8.11 | 5.41 | |
| | 42.31 | 53.85 | 100.00 | 33.33 | 60.00 | 50.00 | |
| Total | 52 | 13 | 2 | 3 | 5 | 4 | 79 |
| | 65.82 | 16.46 | 2.53 | 3.80 | 6.33 | 5.06 | 100.00 |

Statistics for Table of Q03 by Q09

| Statistic | DF | Value | Prob |
|-----------------------------|----|--------|--------|
| Chi-Square | 5 | 3.5387 | 0.6175 |
| Likelihood Ratio Chi-Square | 5 | 4.3097 | 0.5057 |
| Mantel-Haenszel Chi-Square | 1 | 0.5940 | 0.4409 |
| Phi Coefficient | | 0.2116 | |
| Contingency Coefficient | | 0.2071 | |
| Cramer's V | | 0.2116 | |

WARNING: 67% of the cells have expected counts less than 5. Chi-Square may not be a valid test.
Sample Size = 79

Table of Q03 by Q10

| Frequency Percent Row Pct Col Pct | Straongl, y agree | Agree | Tend to agree | Tend to di disagree | Unsure | Do not k, now | Total |
|--|----------------------|-------|------------------|------------------------|--------|------------------|--------|
| LE 3 years | 6 | 16 | 6 | 1 | 3 | 8 | 40 |
| | 7.89 | 21.05 | 7.89 | 1.32 | 3.95 | 10.53 | 52.63 |
| | 15.00 | 40.00 | 15.00 | 2.50 | 7.50 | 20.00 | |
| | 50.00 | 48.48 | 50.00 | 50.00 | 50.00 | 72.73 | |
| GT 3 years | 6 | 17 | 6 | 1 | 3 | 3 | 36 |
| | 7.89 | 22.37 | 7.89 | 1.32 | 3.95 | 3.95 | 47.37 |
| | 16.67 | 47.22 | 16.67 | 2.78 | 8.33 | 8.33 | |
| | 50.00 | 51.52 | 50.00 | 50.00 | 50.00 | 27.27 | |
| Total | 12 | 33 | 12 | 2 | 6 | 11 | 76 |
| | 15.79 | 43.42 | 15.79 | 2.63 | 7.89 | 14.47 | 100.00 |

Statistics for Table of Q03 by Q10

| Statistic | DF | Value | Prob |
|-----------------------------|----|--------|--------|
| Chi-Square | 5 | 2.0983 | 0.8354 |
| Likelihood Ratio Chi-Square | 5 | 2.1780 | 0.8240 |
| Mantel-Haenszel Chi-Square | 1 | 1.3564 | 0.2442 |
| Phi Coefficient | | 0.1662 | |
| Contingency Coefficient | | 0.1639 | |
| Cramer's V | | 0.1662 | |

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.
Sample Size = 76

Table of Q03 by Q11

| Frequency Percent Row Pct Col Pct | Straongl, y agree | Agree | Di disagree | Unsure | Do not k, now | Total |
|--|----------------------|-------|-------------|--------|------------------|--------|
| LE 3 years | 4 | 24 | 6 | 5 | 3 | 42 |
| | 5.00 | 30.00 | 7.50 | 6.25 | 3.75 | 52.50 |
| | 9.52 | 57.14 | 14.29 | 11.90 | 7.14 | |
| | 50.00 | 48.98 | 75.00 | 55.56 | 50.00 | |
| GT 3 years | 4 | 25 | 2 | 4 | 3 | 38 |
| | 5.00 | 31.25 | 2.50 | 5.00 | 3.75 | 47.50 |
| | 10.53 | 65.79 | 5.26 | 10.53 | 7.89 | |
| | 50.00 | 51.02 | 25.00 | 44.44 | 50.00 | |
| Total | 8 | 49 | 8 | 9 | 6 | 80 |
| | 10.00 | 61.25 | 10.00 | 11.25 | 7.50 | 100.00 |

Statistics for Table of Q03 by Q11

| Statistic | DF | Value | Prob |
|-----------------------------|----|--------|--------|
| Chi-Square | 4 | 1.9364 | 0.7475 |
| Likelihood Ratio Chi-Square | 4 | 2.0247 | 0.7312 |
| Mantel-Haenszel Chi-Square | 1 | 0.1222 | 0.7267 |
| Phi Coefficient | | 0.1556 | |
| Contingency Coefficient | | 0.1537 | |
| Cramer's V | | 0.1556 | |

WARNING: 80% of the cells have expected counts less than 5. Chi-Square may not be a valid test.
Sample Size = 80

Table of Q03 by Q12

| Frequency | Percent | Row Pct | Col Pct | Definite, ly | Very probab ly | Probably | Possibly | Do not know | Total |
|------------|---------|---------|---------|--------------|----------------|----------|----------|-------------|--------|
| LE 3 years | 9 | 12 | 11 | 7 | 3 | | | | 42 |
| | 11.25 | 15.00 | 13.75 | 8.75 | 3.75 | | | | 52.50 |
| | 21.43 | 28.57 | 26.19 | 16.67 | 7.14 | | | | |
| | 45.00 | 52.17 | 52.38 | 58.33 | 75.00 | | | | |
| GT 3 years | 11 | 11 | 10 | 5 | 1 | | | | 38 |
| | 13.75 | 13.75 | 12.50 | 6.25 | 1.25 | | | | 47.50 |
| | 28.95 | 28.95 | 26.32 | 13.16 | 2.63 | | | | |
| | 55.00 | 47.83 | 47.62 | 41.67 | 25.00 | | | | |
| Total | 20 | 23 | 21 | 12 | 4 | | | | 80 |
| | 25.00 | 28.75 | 26.25 | 15.00 | 5.00 | | | | 100.00 |

Statistics for Table of Q03 by Q12

| Statistic | DF | Value | Prob |
|-----------------------------|----|--------|--------|
| Chi-Square | 4 | 1.4280 | 0.8393 |
| Likelihood Ratio Chi-Square | 4 | 1.4728 | 0.8315 |
| Mantel-Haenszel Chi-Square | 1 | 1.3358 | 0.2478 |
| Phi Coefficient | | 0.1336 | |
| Contingency Coefficient | | 0.1324 | |
| Cramer's V | | 0.1336 | |

Sample Size = 80

Table of Q03 by Q13

| Frequency | Percent | Row Pct | Col Pct | Board of directors | Internal audit | Designated risk manager | Head of accounting function | Staff of business units | Total |
|------------|---------|---------|---------|--------------------|----------------|-------------------------|-----------------------------|-------------------------|--------|
| LE 3 years | 10 | 1 | 1 | 1 | 4 | | | | 40 |
| | 13.16 | 1.32 | 1.32 | 1.32 | 5.26 | | | | 52.63 |
| | 25.00 | 2.50 | 2.50 | 2.50 | 10.00 | | | | |
| | 50.00 | 33.33 | 33.33 | 20.00 | 80.00 | | | | |
| GT 3 years | 10 | 2 | 2 | 4 | 1 | | | | 36 |
| | 13.16 | 2.63 | 2.63 | 5.26 | 1.32 | | | | 47.37 |
| | 27.78 | 5.56 | 5.56 | 11.11 | 2.78 | | | | |
| | 50.00 | 66.67 | 66.67 | 80.00 | 20.00 | | | | |
| Total | 20 | 3 | 3 | 5 | 5 | | | | 76 |
| | 26.32 | 3.95 | 3.95 | 6.58 | 6.58 | | | | 100.00 |

(Continued)

| Frequency | Percent | Row Pct | Col Pct | Management employees | Designated employees | Yourselves | Other | Total |
|------------|---------|---------|---------|----------------------|----------------------|------------|-------|--------|
| LE 3 years | 8 | 0 | 8 | 7 | | | | 40 |
| | 10.53 | 0.00 | 10.53 | 9.21 | | | | 52.63 |
| | 20.00 | 0.00 | 20.00 | 17.50 | | | | |
| | 61.54 | 0.00 | 57.14 | 58.33 | | | | |
| GT 3 years | 5 | 1 | 6 | 5 | | | | 36 |
| | 6.58 | 1.32 | 7.89 | 6.58 | | | | 47.37 |
| | 13.89 | 2.78 | 16.67 | 13.89 | | | | |
| | 38.46 | 100.00 | 42.86 | 41.67 | | | | |
| Total | 13 | 1 | 14 | 12 | | | | 76 |
| | 17.11 | 1.32 | 18.42 | 15.79 | | | | 100.00 |

Statistics for Table of Q03 by Q13

| Statistic | DF | Value | Prob |
|-----------------------------|----|--------|--------|
| Chi-Square | 8 | 6.3852 | 0.6042 |
| Likelihood Ratio Chi-Square | 8 | 7.0303 | 0.5334 |
| Mantel-Haenszel Chi-Square | 1 | 0.9266 | 0.3357 |
| Phi Coefficient | | 0.2899 | |
| Contingency Coefficient | | 0.2784 | |
| Cramer's V | | 0.2899 | |

WARNING: 56% of the cells have expected counts less than 5. Chi-Square may not be a valid test.
Sample Size = 76

Table of Q03 by Q14

| Frequency | Percent | Row Pct | Col Pct | Board of directors | Internal audit | Accounting function | Control function | Self control of business unit | Other | Total |
|------------|---------|---------|---------|--------------------|----------------|---------------------|------------------|-------------------------------|-------|--------|
| LE 3 years | 11 | 1 | 2 | 2 | 10 | | | | | 36 |
| | 15.94 | 1.45 | 2.90 | 2.90 | 14.49 | | | | | 52.17 |
| | 30.56 | 2.78 | 5.56 | 5.56 | 27.78 | | | | | |
| | 57.89 | 25.00 | 22.22 | 50.00 | 50.00 | | | | | |
| GT 3 years | 8 | 3 | 7 | 2 | 10 | | | | | 33 |
| | 11.59 | 4.35 | 10.14 | 2.90 | 14.49 | | | | | 47.83 |
| | 24.24 | 9.09 | 21.21 | 6.06 | 30.30 | | | | | |
| | 42.11 | 75.00 | 77.78 | 50.00 | 50.00 | | | | | |
| Total | 19 | 4 | 9 | 4 | 20 | | | | | 69 |
| | 27.54 | 5.80 | 13.04 | 5.80 | 28.99 | | | | | 100.00 |

Statistics for Table of Q03 by Q14

| Statistic | DF | Value | Prob |
|------------|----|--------|--------|
| Chi-Square | 5 | 7.9052 | 0.1615 |

Likelihood Ratio Chi-Square 5 8.3101 0.1400
 Mantel-Haenszel Chi-Square 1 0.8909 0.3452
 Phi Coefficient 0.3385
 Contingency Coefficient 0.3206
 Cramer's V 0.3385
 WARNING: 50% of the cells have expected counts less than 5. Chi-Square may not be a valid test.
 Sample Size = 69

Table of Q03 by Q15

| Frequency | Percent | Row Pct | Col Pct | Risk Management | General manual | Control manual | Other manual | Total |
|------------|---------|---------|---------|-----------------|----------------|----------------|--------------|--------|
| LE 3 years | 5 | 9.09 | 17.24 | 12.73 | 12.73 | 18.18 | 10 | 29 |
| | 17.24 | 83.33 | 46.67 | 43.75 | 55.56 | | | |
| GT 3 years | 1 | 1.82 | 3.85 | 14.55 | 16.36 | 14.55 | 8 | 26 |
| | 16.67 | 83.33 | 53.33 | 56.25 | 44.44 | | | |
| Total | 6 | 10.91 | 27.27 | 29.09 | 32.73 | 18 | 55 | 100.00 |

Statistics for Table of Q03 by Q15

Statistic DF Value Prob
 Chi-Square 3 3.0510 0.3838
 Likelihood Ratio Chi-Square 3 3.2874 0.3494
 Mantel-Haenszel Chi-Square 1 0.3606 0.5482
 Phi Coefficient 0.2355
 Contingency Coefficient 0.2293
 Cramer's V 0.2355
 WARNING: 25% of the cells have expected counts less than 5. Chi-Square may not be a valid test.
 Sample Size = 55

Table of Q03 by Q16

| Frequency | Percent | Row Pct | Col Pct | Cash flow statement | Balance sheet | Income statement | Bank statements | Departmental / internal reports | Other | Total |
|------------|---------|---------|---------|---------------------|---------------|------------------|-----------------|---------------------------------|-------|--------|
| LE 3 years | 10 | 15.63 | 29.41 | 6.25 | 3.13 | 3.13 | 10.94 | 14.06 | 9 | 34 |
| | 52.63 | 44.44 | 66.67 | 66.67 | 41.18 | 69.23 | | | | |
| GT 3 years | 9 | 14.06 | 30.00 | 7.81 | 1.56 | 1.56 | 15.63 | 6.25 | 4 | 30 |
| | 47.37 | 55.56 | 33.33 | 33.33 | 58.82 | 30.77 | | | | |
| Total | 19 | 29.69 | 14.06 | 4.69 | 4.69 | 26.56 | 20.31 | 13 | 64 | 100.00 |

Statistics for Table of Q03 by Q16

Statistic DF Value Prob
 Chi-Square 5 3.0448 0.6931
 Likelihood Ratio Chi-Square 5 3.0992 0.6847
 Mantel-Haenszel Chi-Square 1 0.1965 0.6576
 Phi Coefficient 0.2181
 Contingency Coefficient 0.2131
 Cramer's V 0.2181
 WARNING: 50% of the cells have expected counts less than 5. Chi-Square may not be a valid test.
 Sample Size = 64

Table of Q03 by Q17

| Frequency | Percent | Row Pct | Col Pct | Standard office software | Standard business software | In-house software | Other software | Not applicable | Total |
|------------|---------|---------|---------|--------------------------|----------------------------|-------------------|----------------|----------------|-------|
| LE 3 years | 10 | 13.89 | 27.03 | 6.94 | 5.56 | 1.39 | 23.61 | 17 | 37 |
| | 50.00 | 62.50 | 36.36 | 16.67 | 62.96 | | | | |
| GT 3 years | 10 | 13.89 | 28.57 | 4.17 | 9.72 | 6.94 | 13.89 | 10 | 35 |
| | 50.00 | 37.50 | 63.64 | 83.33 | 37.04 | | | | |
| Total | 20 | 27.78 | 11.11 | 15.28 | 8.33 | 37.50 | 72 | 100.00 | |

Statistics for Table of Q03 by Q17

Statistic DF Value Prob
 Chi-Square 4 5.7485 0.2187
 Likelihood Ratio Chi-Square 4 6.0252 0.1973
 Mantel-Haenszel Chi-Square 1 0.1271 0.7214
 Phi Coefficient 0.2826
 Contingency Coefficient 0.2719
 Cramer's V 0.2826
 WARNING: 40% of the cells have expected counts less than 5. Chi-Square may not be a valid test.
 Sample Size = 72
 Table of Q03 by Q18

| Frequency | Percent | Row Pct | Col Pct | No inves, Less tha, R20000-R, >R50000 | Total |
|------------|---------|---------|---------|---------------------------------------|--------|
| LE 3 years | 19 | 6 | 2 | 4 | 31 |
| | 34.55 | 10.91 | 3.64 | 7.27 | 56.36 |
| | 61.29 | 19.35 | 6.45 | 12.90 | |
| | 65.52 | 60.00 | 28.57 | 44.44 | |
| GT 3 years | 10 | 4 | 5 | 5 | 24 |
| | 18.18 | 7.27 | 9.09 | 9.09 | 43.64 |
| | 41.67 | 16.67 | 20.83 | 20.83 | |
| | 34.48 | 40.00 | 71.43 | 55.56 | |
| Total | 29 | 10 | 7 | 9 | 55 |
| | 52.73 | 18.18 | 12.73 | 16.36 | 100.00 |

Statistics for Table of Q03 by Q18

| Statistic | DF | Value | Prob |
|-----------------------------|----|--------|--------|
| Chi-Square | 3 | 3.7599 | 0.2886 |
| Likelihood Ratio Chi-Square | 3 | 3.7888 | 0.2852 |
| Mantel-Haenszel Chi-Square | 1 | 2.5330 | 0.1115 |
| Phi Coefficient | | 0.2615 | |
| Contingency Coefficient | | 0.2530 | |
| Cramer's V | | 0.2615 | |

WARNING: 50% of the cells have expected counts less than 5. Chi-Square may not be a valid test.
Sample Size = 55

Table of Q03 by Q19

| Frequency | Percent | Row Pct | Col Pct | Incident, Customer, Audit re, SWOT ana, Brainsto, Using te, Other te, | Total |
|------------|---------|---------|---------|---|--------|
| LE 3 years | 7 | 13 | 3 | 4 | 33 |
| | 11.11 | 20.63 | 4.76 | 6.35 | 52.38 |
| | 21.21 | 39.39 | 9.09 | 12.12 | |
| | 63.64 | 56.52 | 27.27 | 100.00 | |
| GT 3 years | 4 | 10 | 8 | 0 | 30 |
| | 6.35 | 15.87 | 12.70 | 0.00 | 47.62 |
| | 13.33 | 33.33 | 26.67 | 0.00 | |
| | 36.36 | 43.48 | 72.73 | 0.00 | |
| Total | 11 | 23 | 11 | 4 | 63 |
| | 17.46 | 36.51 | 17.46 | 6.35 | 100.00 |

Statistics for Table of Q03 by Q19

| Statistic | DF | Value | Prob |
|-----------------------------|----|--------|--------|
| Chi-Square | 6 | 7.8015 | 0.2530 |
| Likelihood Ratio Chi-Square | 6 | 9.4327 | 0.1507 |
| Mantel-Haenszel Chi-Square | 1 | 0.5772 | 0.4474 |
| Phi Coefficient | | 0.3519 | |
| Contingency Coefficient | | 0.3319 | |
| Cramer's V | | 0.3519 | |

WARNING: 57% of the cells have expected counts less than 5. Chi-Square may not be a valid test.
Sample Size = 63

Table of Q03 by Q20

| Frequency | Percent | Row Pct | Col Pct | Strategic risks | Reputational risks | Legal risks | Environmental risks | Financial risks | Total | | | |
|------------|---------|---------|---------|-----------------|--------------------|-------------|---------------------|-----------------|-------|------|-------|--------|
| LE 3 years | 13 | 5 | 1 | 2 | 9 | 34 | 19.70 | 7.58 | 1.52 | 3.03 | 13.64 | 51.52 |
| GT 3 years | 6 | 8 | 0 | 0 | 9 | 32 | 18.75 | 25.00 | 0.00 | 0.00 | 13.64 | 48.48 |
| Total | 19 | 13 | 1 | 2 | 18 | 66 | 28.79 | 19.70 | 1.52 | 3.03 | 27.27 | 100.00 |

(Continued)

| Frequency | Percent | Row Pct | Col Pct | People risks | Operational risks | Technology risks | Other risks | Total | | |
|------------|---------|---------|---------|--------------|-------------------|------------------|-------------|-------|------|--------|
| LE 3 years | 0 | 3 | 0 | 1 | 34 | 0.00 | 4.55 | 0.00 | 1.52 | 51.52 |
| GT 3 years | 4 | 4 | 1 | 0 | 32 | 6.06 | 6.06 | 1.52 | 0.00 | 48.48 |
| Total | 4 | 7 | 1 | 1 | 66 | 6.06 | 10.61 | 1.52 | 1.52 | 100.00 |

Statistics for Table of Q03 by Q20

| Statistic | DF | Value | Prob |
|-----------------------------|----|---------|--------|
| Chi-Square | 8 | 12.3649 | 0.1357 |
| Likelihood Ratio Chi-Square | 8 | 15.8987 | 0.0439 |
| Mantel-Haenszel Chi-Square | 1 | 1.6855 | 0.1942 |
| Phi Coefficient | | 0.4328 | |
| Contingency Coefficient | | 0.3972 | |
| Cramer's V | | 0.4328 | |

WARNING: 67% of the cells have expected counts less than 5. Chi-Square may not be a valid test.
Sample Size = 66

Table of Q03 by Q21

| Frequency | Percent | Row Pct | Col Pct | Risk assessment matrix | The Bar Chart paradigm | Other | Total | | |
|------------|---------|---------|---------|------------------------|------------------------|-------|-------|--------|-------|
| LE 3 years | 8 | 6 | 6 | 6 | 20 | 21.05 | 15.79 | 15.79 | 52.63 |
| GT 3 years | 7 | 2 | 9 | 18 | 18.42 | 5.26 | 23.68 | 47.37 | |
| Total | 15 | 8 | 15 | 38 | 39.47 | 21.05 | 39.47 | 100.00 | |

Statistics for Table of Q03 by Q21

| Statistic | DF | Value | Prob |
|-----------------------------|----|--------|--------|
| Chi-Square | 2 | 2.5685 | 0.2769 |
| Likelihood Ratio Chi-Square | 2 | 2.6585 | 0.2647 |
| Mantel-Haenszel Chi-Square | 1 | 0.5207 | 0.4705 |
| Phi Coefficient | | 0.2600 | |
| Contingency Coefficient | | 0.2516 | |
| Cramer's V | | 0.2600 | |

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.
Sample Size = 38

Table of Q03 by Q22

| Frequency | Percent | Row Pct | Col Pct | Every year | Every 6 months | Every 3 months | Every month | Other | Not applicable | Total | | | | |
|------------|---------|---------|---------|------------|----------------|----------------|-------------|-------|----------------|-------|-------|------|-------|--------|
| LE 3 years | 6 | 6 | 5 | 13 | 1 | 5 | 36 | 8.70 | 8.70 | 7.25 | 18.84 | 1.45 | 7.25 | 52.17 |
| GT 3 years | 9 | 7 | 5 | 5 | 4 | 3 | 33 | 13.04 | 10.14 | 7.25 | 7.25 | 5.80 | 4.35 | 47.83 |
| Total | 15 | 13 | 10 | 18 | 5 | 8 | 69 | 21.74 | 18.84 | 14.49 | 26.09 | 7.25 | 11.59 | 100.00 |

Statistics for Table of Q03 by Q22

| Statistic | DF | Value | Prob |
|-----------------------------|----|--------|--------|
| Chi-Square | 5 | 6.4142 | 0.2680 |
| Likelihood Ratio Chi-Square | 5 | 6.6664 | 0.2467 |

Mantel-Haenszel Chi-Square 1 1.1589 0.2817
 Phi Coefficient 0.3049
 Contingency Coefficient 0.2916
 Cramer's V 0.3049
 WARNING: 42% of the cells have expected counts less than 5. Chi-Square may not be a valid test.
 Sample Size = 69

Table of Q03 by Q23

| Frequency | Percent | Row Pct | Col Pct | Risk avoidance | Risk sharing | Risk treatment plan | Crisis management planning | Other tools used | Total |
|------------|---------|---------|---------|----------------|--------------|---------------------|----------------------------|------------------|-------|
| LE 3 years | 16 | 30.19 | 53.33 | 5 | 11.32 | 6 | 1.89 | 2 | 30 |
| | 30.19 | 9.43 | 16.67 | 20.00 | 3.33 | 6.67 | 53.33 | 62.50 | 56.60 |
| GT 3 years | 14 | 26.42 | 60.87 | 3 | 13.04 | 3 | 5.66 | 0 | 23 |
| | 26.42 | 5.66 | 13.04 | 13.04 | 13.04 | 0.00 | 46.67 | 37.50 | 43.40 |
| Total | 30 | 56.60 | 8 | 15.09 | 16.98 | 9 | 7.55 | 2 | 53 |
| | 56.60 | 15.09 | 16.98 | 7.55 | 3.77 | 100.00 | | | |

Statistics for Table of Q03 by Q23

| Statistic | DF | Value | Prob |
|-----------------------------|----|--------|--------|
| Chi-Square | 4 | 3.7746 | 0.4374 |
| Likelihood Ratio Chi-Square | 4 | 4.5500 | 0.3367 |
| Mantel-Haenszel Chi-Square | 1 | 0.2134 | 0.6441 |
| Phi Coefficient | | 0.2669 | |
| Contingency Coefficient | | 0.2578 | |
| Cramer's V | | 0.2669 | |

WARNING: 70% of the cells have expected counts less than 5. Chi-Square may not be a valid test.
Sample Size = 53

Table of Q03 by Q24

| Frequency | Percent | Row Pct | Col Pct | 1 year | 2 years | 5 years | Open | Not applicable | Total |
|------------|---------|---------|---------|--------|---------|---------|------|----------------|-------|
| LE 3 years | 18 | 0 | 1 | 5 | 11 | 35 | | | |
| | 28.13 | 0.00 | 1.56 | 7.81 | 17.19 | 54.69 | | | |
| | 51.43 | 0.00 | 2.86 | 14.29 | 31.43 | | | | |
| | 64.29 | 0.00 | 33.33 | 38.46 | 57.89 | | | | |
| GT 3 years | 10 | 1 | 2 | 8 | 8 | 29 | | | |
| | 15.63 | 1.56 | 3.13 | 12.50 | 12.50 | 45.31 | | | |
| | 34.48 | 3.45 | 6.90 | 27.59 | 27.59 | | | | |
| | 35.71 | 100.00 | 66.67 | 61.54 | 42.11 | | | | |
| Total | 28 | 1 | 3 | 13 | 19 | 64 | | | |
| | 43.75 | 1.56 | 4.69 | 20.31 | 29.69 | 100.00 | | | |

Statistics for Table of Q03 by Q24

| Statistic | DF | Value | Prob |
|-----------------------------|----|--------|--------|
| Chi-Square | 4 | 4.2600 | 0.3720 |
| Likelihood Ratio Chi-Square | 4 | 4.6549 | 0.3246 |
| Mantel-Haenszel Chi-Square | 1 | 0.7530 | 0.3855 |
| Phi Coefficient | | 0.2580 | |
| Contingency Coefficient | | 0.2498 | |
| Cramer's V | | 0.2580 | |

WARNING: 40% of the cells have expected counts less than 5. Chi-Square may not be a valid test.
Sample Size = 64

Table of Q03 by Q25

| Frequency | Percent | Row Pct | Col Pct | Separate, risk reporting, separate, risk reporting, of general report, ing | Total |
|------------|---------|---------|---------|--|-------|
| LE 3 years | 6 | 23 | 1 | 30 | |
| | 10.53 | 40.35 | 1.75 | 52.63 | |
| | 20.00 | 76.67 | 3.33 | | |
| | 40.00 | 58.97 | 33.33 | | |
| GT 3 years | 9 | 16 | 2 | 27 | |
| | 15.79 | 28.07 | 3.51 | 47.37 | |
| | 33.33 | 59.26 | 7.41 | | |
| | 60.00 | 41.03 | 66.67 | | |
| Total | 15 | 39 | 3 | 57 | |
| | 26.32 | 68.42 | 5.26 | 100.00 | |

Statistics for Table of Q03 by Q25

| Statistic | DF | Value | Prob |
|-----------------------------|----|--------|--------|
| Chi-Square | 2 | 2.0375 | 0.3610 |
| Likelihood Ratio Chi-Square | 2 | 2.0491 | 0.3590 |
| Mantel-Haenszel Chi-Square | 1 | 0.4409 | 0.5067 |
| Phi Coefficient | | 0.1891 | |
| Contingency Coefficient | | 0.1858 | |
| Cramer's V | | 0.1891 | |

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.
Sample Size = 57

Table of Q03 by Q26

| Frequency | Percent | Row Pct | Col Pct | Risk Register | Risk Management | Risk Profile | Other | Total | |
|------------|---------|---------|---------|---------------|-----------------|--------------|-------|-------|----|
| LE 3 years | 6 | 13.04 | 17.39 | 8 | 17.39 | 4 | 8.70 | 17.39 | 26 |
| | | 23.08 | 30.77 | | 15.38 | | 30.77 | | |
| | | 50.00 | 53.33 | | 66.67 | | 61.54 | | |
| GT 3 years | 6 | 13.04 | 15.22 | 7 | 15.22 | 2 | 4.35 | 10.87 | 20 |
| | | 30.00 | 35.00 | | 10.00 | | 25.00 | | |
| | | 50.00 | 46.67 | | 33.33 | | 38.46 | | |
| Total | 12 | 26.09 | 32.61 | 15 | 32.61 | 6 | 13.04 | 28.26 | 46 |

Statistics for Table of Q03 by Q26

| Statistic | DF | Value | Prob |
|-----------------------------|----|--------|--------|
| Chi-Square | 3 | 0.6542 | 0.8839 |
| Likelihood Ratio Chi-Square | 3 | 0.6601 | 0.8826 |
| Mantel-Haenszel Chi-Square | 1 | 0.4718 | 0.4921 |
| Phi Coefficient | | 0.1193 | |
| Contingency Coefficient | | 0.1184 | |
| Cramer's V | | 0.1193 | |

WARNING: 25% of the cells have expected counts less than 5. Chi-Square may not be a valid test.
Sample Size = 46

Table of Q03 by Q27_1

| Frequency | Percent | Row Pct | Col Pct | Yes | No | Total |
|------------|---------|---------|---------|-----|--------|-------|
| LE 3 years | 9 | 14.75 | 26.47 | 25 | 40.98 | 34 |
| | | 26.47 | 60.00 | | 73.53 | |
| | | 60.00 | 54.35 | | 54.35 | |
| GT 3 years | 6 | 9.84 | 22.22 | 21 | 34.43 | 27 |
| | | 22.22 | 40.00 | | 77.78 | |
| | | 40.00 | 45.65 | | 45.65 | |
| Total | 15 | 24.59 | 75.41 | 46 | 100.00 | 61 |

Statistics for Table of Q03 by Q27_1

| Statistic | DF | Value | Prob |
|-----------------------------|----|--------|--------|
| Chi-Square | 1 | 0.1465 | 0.7019 |
| Likelihood Ratio Chi-Square | 1 | 0.1473 | 0.7011 |
| Continuity Adj. Chi-Square | 1 | 0.0070 | 0.9335 |
| Mantel-Haenszel Chi-Square | 1 | 0.1441 | 0.7043 |
| Phi Coefficient | | 0.0490 | |
| Contingency Coefficient | | 0.0489 | |
| Cramer's V | | 0.0490 | |

Sample Size = 61

Table of Q03 by Q27_2

| Frequency | Percent | Row Pct | Col Pct | Yes | No | Total |
|------------|---------|---------|---------|-----|--------|-------|
| LE 3 years | 12 | 20.00 | 36.36 | 21 | 35.00 | 33 |
| | | 36.36 | 54.55 | | 63.64 | |
| | | 54.55 | 55.26 | | 55.26 | |
| GT 3 years | 10 | 16.67 | 37.04 | 17 | 28.33 | 27 |
| | | 37.04 | 45.45 | | 62.96 | |
| | | 45.45 | 44.74 | | 44.74 | |
| Total | 22 | 36.67 | 63.33 | 38 | 100.00 | 60 |

Statistics for Table of Q03 by Q27_2

| Statistic | DF | Value | Prob |
|-----------------------------|----|---------|--------|
| Chi-Square | 1 | 0.0029 | 0.9571 |
| Likelihood Ratio Chi-Square | 1 | 0.0029 | 0.9571 |
| Continuity Adj. Chi-Square | 1 | 0.0000 | 1.0000 |
| Mantel-Haenszel Chi-Square | 1 | 0.0029 | 0.9574 |
| Phi Coefficient | | -0.0070 | |
| Contingency Coefficient | | 0.0070 | |
| Cramer's V | | -0.0070 | |

Sample Size = 60

Table of Q03 by Q27_3

| Frequency | Percent | Row Pct | Col Pct | Yes | No | Total |
|------------|---------|---------|---------|-----|--------|-------|
| LE 3 years | 12 | 20.00 | 36.36 | 21 | 35.00 | 33 |
| | | 36.36 | 54.55 | | 63.64 | |
| | | 54.55 | 55.26 | | 55.26 | |
| GT 3 years | 10 | 16.67 | 37.04 | 17 | 28.33 | 27 |
| | | 37.04 | 45.45 | | 62.96 | |
| | | 45.45 | 44.74 | | 44.74 | |
| Total | 22 | 36.67 | 63.33 | 38 | 100.00 | 60 |

| | | | |
|------------|-------|-------|--------|
| LE 3 years | 7 | 26 | 33 |
| | 11.67 | 43.33 | 55.00 |
| | 21.21 | 78.79 | |
| | 63.64 | 53.06 | |
| GT 3 years | 4 | 23 | 27 |
| | 6.67 | 38.33 | 45.00 |
| | 14.81 | 85.19 | |
| | 36.36 | 46.94 | |
| Total | 11 | 49 | 60 |
| | 18.33 | 81.67 | 100.00 |

Statistics for Table of 003 by Q27_3

| Statistic | DF | Value | Prob |
|-----------------------------|----|--------|--------|
| Chi-Square | 1 | 0.4059 | 0.5241 |
| Likelihood Ratio Chi-Square | 1 | 0.4114 | 0.5212 |
| Continuity Adj. Chi-Square | 1 | 0.0911 | 0.7628 |
| Mantel-Haenszel Chi-Square | 1 | 0.3991 | 0.5275 |
| Phi Coefficient | | 0.0823 | |
| Contingency Coefficient | | 0.0820 | |
| Cramer's V | | 0.0823 | |

WARNING: 25% of the cells have expected counts less than 5. Chi-Square may not be a valid test.
Sample Size = 60

| Frequency | Yes | No | Total |
|------------|-------|-------|--------|
| LE 3 years | 12 | 21 | 33 |
| | 20.34 | 35.59 | 55.93 |
| | 36.36 | 63.64 | |
| | 75.00 | 48.84 | |
| GT 3 years | 4 | 22 | 26 |
| | 6.78 | 37.29 | 44.07 |
| | 15.38 | 84.62 | |
| | 25.00 | 51.16 | |
| Total | 16 | 43 | 59 |
| | 27.12 | 72.88 | 100.00 |

Statistics for Table of 003 by Q27_4

| Statistic | DF | Value | Prob |
|-----------------------------|----|--------|--------|
| Chi-Square | 1 | 3.2383 | 0.0719 |
| Likelihood Ratio Chi-Square | 1 | 3.3768 | 0.0661 |
| Continuity Adj. Chi-Square | 1 | 2.2639 | 0.1324 |
| Mantel-Haenszel Chi-Square | 1 | 3.1834 | 0.0744 |
| Phi Coefficient | | 0.2343 | |
| Contingency Coefficient | | 0.2281 | |
| Cramer's V | | 0.2343 | |

Sample Size = 59

| Frequency | Yes | No | Total |
|------------|-------|-------|--------|
| LE 3 years | 10 | 23 | 33 |
| | 16.67 | 38.33 | 55.00 |
| | 30.30 | 69.70 | |
| | 62.50 | 52.27 | |
| GT 3 years | 6 | 21 | 27 |
| | 10.00 | 35.00 | 45.00 |
| | 22.22 | 77.78 | |
| | 37.50 | 47.73 | |
| Total | 16 | 44 | 60 |
| | 26.67 | 73.33 | 100.00 |

Statistics for Table of 003 by Q27_5

| Statistic | DF | Value | Prob |
|-----------------------------|----|--------|--------|
| Chi-Square | 1 | 0.4959 | 0.4813 |
| Likelihood Ratio Chi-Square | 1 | 0.5006 | 0.4792 |
| Continuity Adj. Chi-Square | 1 | 0.1687 | 0.6812 |
| Mantel-Haenszel Chi-Square | 1 | 0.4876 | 0.4850 |
| Phi Coefficient | | 0.0909 | |
| Contingency Coefficient | | 0.0905 | |
| Cramer's V | | 0.0909 | |

Sample Size = 60

| Frequency | Yes | No | Total |
|------------|-------|-------|--------|
| LE 3 years | 19 | 13 | 32 |
| | 32.76 | 22.41 | 55.17 |
| | 59.38 | 40.63 | |
| | 57.58 | 52.00 | |
| GT 3 years | 14 | 12 | 26 |
| | 24.14 | 20.69 | 44.83 |
| | 53.85 | 46.15 | |
| | 42.42 | 48.00 | |
| Total | 33 | 25 | 58 |
| | 56.90 | 43.10 | 100.00 |

Statistics for Table of 003 by Q27_6

```

Statistic          DF      Value      Prob
-----
Chi-Square          1      0.1788    0.6724
Likelihood Ratio Chi-Square  1      0.1787    0.6725
Continuity Adj. Chi-Square  1      0.0244    0.8758
Mantel-Haenszel Chi-Square  1      0.1757    0.6751
Phi Coefficient          0.0555
Contingency Coefficient  0.0554
Cramer's V            0.0555
Sample Size = 58

```

Table of 003 by 027_7

| Frequency | Percent | Row Pct | Col Pct | Yes | No | Total |
|------------|---------|---------|---------|-----|-------|--------|
| LE 3 years | 21 | 35.59 | 63.64 | 12 | 20.34 | 33 |
| | | | 56.76 | | 54.55 | |
| GT 3 years | 16 | 27.12 | 61.54 | 10 | 16.95 | 26 |
| | | | 43.24 | | 45.45 | |
| Total | 37 | 62.71 | | 22 | 37.29 | 59 |
| | | | | | | 100.00 |

```

Statistics for Table of 003 by 027_7
Statistic          DF      Value      Prob
-----
Chi-Square          1      0.0274    0.8686
Likelihood Ratio Chi-Square  1      0.0273    0.8686
Continuity Adj. Chi-Square  1      0.0000    1.0000
Mantel-Haenszel Chi-Square  1      0.0269    0.8697
Phi Coefficient          0.0215
Contingency Coefficient  0.0215
Cramer's V            0.0215
Sample Size = 59

```

Table of 003 by 027_8

| Frequency | Percent | Row Pct | Col Pct | Yes | No | Total |
|------------|---------|---------|---------|-----|-------|--------|
| LE 3 years | 18 | 30.00 | 54.55 | 15 | 25.00 | 33 |
| | | | 52.94 | | 57.69 | |
| GT 3 years | 16 | 26.67 | 59.26 | 11 | 18.33 | 27 |
| | | | 47.06 | | 42.31 | |
| Total | 34 | 56.67 | | 26 | 43.33 | 60 |
| | | | | | | 100.00 |

```

Statistics for Table of 003 by 027_8
Statistic          DF      Value      Prob
-----
Chi-Square          1      0.1344    0.7139
Likelihood Ratio Chi-Square  1      0.1345    0.7138
Continuity Adj. Chi-Square  1      0.0110    0.9166
Mantel-Haenszel Chi-Square  1      0.1321    0.7162
Phi Coefficient          -0.0473
Contingency Coefficient  0.0473
Cramer's V            -0.0473
Sample Size = 60

```

Table of 003 by Q27_9

| Frequency | Percent | Row Pct | Col Pct | Yes | No | Total |
|------------|---------|---------|---------|-------|-------|--------|
| LE 3 years | 18 | 30.51 | 54.55 | 15 | 25.42 | 33 |
| | | 56.25 | | 55.56 | | 55.93 |
| GT 3 years | 14 | 23.73 | 53.85 | 12 | 20.34 | 26 |
| | | 43.75 | | 44.44 | | 44.07 |
| Total | 32 | | | 27 | | 59 |
| | | | | 54.24 | 45.76 | 100.00 |

Statistics for Table of 003 by Q27_9

| Statistic | DF | Value | Prob |
|-----------------------------|----|--------|--------|
| Chi-Square | 1 | 0.0029 | 0.9573 |
| Likelihood Ratio Chi-Square | 1 | 0.0029 | 0.9573 |
| Continuity Adj. Chi-Square | 1 | 0.0000 | 1.0000 |
| Mantel-Haenszel Chi-Square | 1 | 0.0028 | 0.9577 |
| Phi Coefficient | | 0.0070 | |
| Contingency Coefficient | | 0.0070 | |
| Cramer's V | | 0.0070 | |

Fisher's Exact Test

| | |
|--------------------------|--------|
| Cell (1,1) Frequency (F) | 18 |
| Left-sided Pr <= F | 0.6244 |
| Right-sided Pr >= F | 0.5826 |
| Table Probability (P) | 0.2069 |
| Two-sided Pr <= P | 1.0000 |

Sample Size = 59

Number of employees working for company grouped in "Less and equal median of the number of employees (7)" and "Greater than median of the number of employees (7)"

Table of 005 by 001

| Frequency | Percent | Row Pct | Col Pct | Entrepen, Manager | Owner-Ma, Other | Total |
|----------------|---------|---------|---------|-------------------|-----------------|--------|
| LE 7 employees | 4 | 8.82 | 80.00 | 26 | 13 | 39 |
| | | 31.33 | | 15.66 | 6.02 | 21.68 |
| GT 7 employees | 1 | 1.20 | 20.00 | 24 | 2 | 26 |
| | | 28.92 | | 2.41 | 9.64 | 12.05 |
| Total | 5 | 6.02 | | 50 | 15 | 65 |
| | | 60.24 | | 18.07 | 15.66 | 100.00 |

Statistics for Table of 005 by 001

| Statistic | DF | Value | Prob |
|-----------------------------|----|--------|--------|
| Chi-Square | 3 | 8.8192 | 0.0318 |
| Likelihood Ratio Chi-Square | 3 | 9.6757 | 0.0215 |
| Mantel-Haenszel Chi-Square | 1 | 0.2378 | 0.6258 |
| Phi Coefficient | | 0.3260 | |
| Contingency Coefficient | | 0.3099 | |
| Cramer's V | | 0.3260 | |

WARNING: 25% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Sample Size = 83

Table of 005 by 002

| Frequency | Percent | Row Pct | Col Pct | <Grade 1, Grade 12, Undergrad, Postgrad, & Dipl / duate de, uate deg, Cert, gree, ree | Total | |
|----------------|---------|---------|---------|---|-------|--------|
| LE 7 employees | 2 | 4.17 | 100.00 | 17 | 11 | 28 |
| | | 20.73 | | 13.41 | 13.41 | 40.54 |
| GT 7 employees | 0 | 0.00 | 0.00 | 12 | 6 | 18 |
| | | 9.76 | | 14.63 | 7.32 | 21.95 |
| Total | 2 | 2.44 | | 29 | 17 | 46 |
| | | 30.49 | | 28.05 | 20.73 | 100.00 |

Statistics for Table of 005 by 002

| Statistic | DF | Value | Prob |
|-----------------------------|----|--------|--------|
| Chi-Square | 4 | 4.5635 | 0.3351 |
| Likelihood Ratio Chi-Square | 4 | 5.2872 | 0.2591 |
| Mantel-Haenszel Chi-Square | 1 | 1.6397 | 0.2004 |
| Phi Coefficient | | 0.2359 | |
| Contingency Coefficient | | 0.2296 | |
| Cramer's V | | 0.2359 | |

Sample Size = 82

Table of Q05 by Q04

| Frequency | Food & B, Clothing, Textile , Computer, Other | | | | | Total |
|----------------|---|-------|-------|--------|-------|--------|
| Percent | Average | | | | | |
| Row Pct | | | | | | |
| Col Pct | | | | | | |
| LE 7 employees | 4 | 14 | 2 | 4 | 24 | 48 |
| | 4.88 | 17.07 | 2.44 | 4.88 | 29.27 | 58.54 |
| | 8.33 | 29.17 | 4.17 | 8.33 | 50.00 | |
| | 50.00 | 70.00 | 66.67 | 100.00 | 51.06 | |
| GT 7 employees | 4 | 6 | 1 | 0 | 23 | 34 |
| | 4.88 | 7.32 | 1.22 | 0.00 | 28.05 | 41.46 |
| | 11.76 | 17.65 | 2.94 | 0.00 | 67.65 | |
| | 50.00 | 30.00 | 33.33 | 0.00 | 48.94 | |
| Total | 8 | 20 | 3 | 4 | 47 | 82 |
| | 9.76 | 24.39 | 3.66 | 4.88 | 57.32 | 100.00 |

Statistics for Table of Q05 by Q04

| Statistic | DF | Value | Prob |
|-----------------------------|----|--------|--------|
| Chi-Square | 4 | 5.3194 | 0.2561 |
| Likelihood Ratio Chi-Square | 4 | 6.7956 | 0.1471 |
| Mantel-Haenszel Chi-Square | 1 | 0.8176 | 0.3659 |
| Phi Coefficient | | 0.2547 | |
| Contingency Coefficient | | 0.2468 | |
| Cramer's V | | 0.2547 | |

WARNING: 60% of the cells have expected counts less than 5. Chi-Square may not be a valid test.
Sample Size = 82

Table of Q05 by Q07

| Frequency | Very goo, Good , Barely a, Poor , Very poo, Do not k, | | | | | Total | |
|----------------|---|-------|-------|-------|-------|-------|--------|
| Percent | d , cceptabl , r , now , | | | | | | |
| Row Pct | | | | | | | |
| Col Pct | | | | | | | |
| LE 7 employees | 13 | 25 | 2 | 5 | 1 | 2 | 48 |
| | 15.66 | 30.12 | 2.41 | 6.02 | 1.20 | 2.41 | 57.83 |
| | 27.08 | 52.08 | 4.17 | 10.42 | 2.08 | 4.17 | |
| | 59.09 | 56.82 | 40.00 | 83.33 | 33.33 | 66.67 | |
| GT 7 employees | 9 | 19 | 3 | 1 | 2 | 1 | 35 |
| | 10.84 | 22.89 | 3.61 | 1.20 | 2.41 | 1.20 | 42.17 |
| | 25.71 | 54.29 | 8.57 | 2.86 | 5.71 | 2.86 | |
| | 40.91 | 43.18 | 60.00 | 16.67 | 66.67 | 33.33 | |
| Total | 22 | 44 | 5 | 6 | 3 | 3 | 83 |
| | 26.51 | 53.01 | 6.02 | 7.23 | 3.61 | 3.61 | 100.00 |

Statistics for Table of Q05 by Q07

| Statistic | DF | Value | Prob |
|-----------------------------|----|--------|--------|
| Chi-Square | 5 | 3.1192 | 0.6816 |
| Likelihood Ratio Chi-Square | 5 | 3.2995 | 0.6539 |
| Mantel-Haenszel Chi-Square | 1 | 0.0184 | 0.8921 |
| Phi Coefficient | | 0.1939 | |
| Contingency Coefficient | | 0.1903 | |
| Cramer's V | | 0.1939 | |

WARNING: 67% of the cells have expected counts less than 5. Chi-Square may not be a valid test.
Sample Size = 83

Table of Q05 by Q08

| Frequency | Percent | Row Pct | Col Pct | Highly important | Important | Not very important | Of no importance | Unsure | Do not know | Total |
|----------------|---------|---------|---------|------------------|-----------|--------------------|------------------|--------|-------------|--------|
| LE 7 employees | 17 | 19 | 3 | 2 | 4 | 1 | | | | 46 |
| | 20.99 | 23.46 | 3.70 | 2.47 | 4.94 | 1.23 | | | | 56.79 |
| | 36.96 | 41.30 | 6.52 | 4.35 | 8.70 | 2.17 | | | | |
| | 48.57 | 61.29 | 75.00 | 100.00 | 57.14 | 50.00 | | | | |
| GT 7 employees | 18 | 12 | 1 | 0 | 3 | 1 | | | | 35 |
| | 22.22 | 14.81 | 1.23 | 0.00 | 3.70 | 1.23 | | | | 43.21 |
| | 51.43 | 34.29 | 2.86 | 0.00 | 8.57 | 2.86 | | | | |
| | 51.43 | 38.71 | 25.00 | 0.00 | 42.86 | 50.00 | | | | |
| Total | 35 | 31 | 4 | 2 | 7 | 2 | | | | 81 |
| | 43.21 | 38.27 | 4.94 | 2.47 | 8.64 | 2.47 | | | | 100.00 |

Statistics for Table of Q05 by Q08

| Statistic | DF | Value | Prob |
|-----------------------------|----|--------|--------|
| Chi-Square | 5 | 3.3195 | 0.6509 |
| Likelihood Ratio Chi-Square | 5 | 4.0869 | 0.5370 |
| Mantel-Haenszel Chi-Square | 1 | 0.6709 | 0.4128 |
| Phi Coefficient | | 0.2024 | |
| Contingency Coefficient | | 0.1984 | |
| Cramer's V | | 0.2024 | |

WARNING: 67% of the cells have expected counts less than 5. Chi-Square may not be a valid test.
Sample Size = 81

Table of Q05 by Q09

| Frequency | Percent | Row Pct | Col Pct | to a great extent | Somewhat | Very little | Not at all | Unsure | Do not know | Total |
|----------------|---------|---------|---------|-------------------|----------|-------------|------------|--------|-------------|--------|
| LE 7 employees | 31 | 9 | 2 | 3 | 0 | 3 | | | | 48 |
| | 37.80 | 10.98 | 2.44 | 3.66 | 0.00 | 3.66 | | | | 58.54 |
| | 64.58 | 18.75 | 4.17 | 6.25 | 0.00 | 6.25 | | | | |
| | 58.49 | 60.00 | 100.00 | 100.00 | 0.00 | 100.00 | | | | |
| GT 7 employees | 22 | 6 | 0 | 0 | 6 | 0 | | | | 34 |
| | 26.83 | 7.32 | 0.00 | 0.00 | 7.32 | 0.00 | | | | 41.46 |
| | 64.71 | 17.65 | 0.00 | 0.00 | 17.65 | 0.00 | | | | |
| | 41.51 | 40.00 | 0.00 | 0.00 | 100.00 | 0.00 | | | | |
| Total | 53 | 15 | 2 | 3 | 6 | 3 | | | | 82 |
| | 64.63 | 18.29 | 2.44 | 3.66 | 7.32 | 3.66 | | | | 100.00 |

Statistics for Table of Q05 by Q09

| Statistic | DF | Value | Prob |
|-----------------------------|----|---------|--------|
| Chi-Square | 5 | 14.1505 | 0.0147 |
| Likelihood Ratio Chi-Square | 5 | 19.1459 | 0.0018 |
| Mantel-Haenszel Chi-Square | 1 | 0.1206 | 0.7284 |
| Phi Coefficient | | 0.4154 | |
| Contingency Coefficient | | 0.3836 | |
| Cramer's V | | 0.4154 | |

WARNING: 67% of the cells have expected counts less than 5. Chi-Square may not be a valid test.
Sample Size = 82

Table of Q05 by Q10

| Frequency | Percent | Row Pct | Col Pct | Straongl y agree | Agree | Tend to agree | Tend to disagree | Unsure | Do not know | Total |
|----------------|---------|---------|---------|------------------|-------|---------------|------------------|--------|-------------|--------|
| LE 7 employees | 8 | 14 | 9 | 2 | 3 | 8 | | | | 44 |
| | 10.26 | 17.95 | 11.54 | 2.56 | 3.85 | 10.26 | | | | 56.41 |
| | 18.18 | 31.82 | 20.45 | 4.55 | 6.82 | 18.18 | | | | |
| | 61.54 | 45.16 | 69.23 | 100.00 | 33.33 | 80.00 | | | | |
| GT 7 employees | 5 | 17 | 4 | 0 | 6 | 2 | | | | 34 |
| | 6.41 | 21.79 | 5.13 | 0.00 | 7.69 | 2.56 | | | | 43.59 |
| | 14.71 | 50.00 | 11.76 | 0.00 | 17.65 | 5.88 | | | | |
| | 38.46 | 54.84 | 30.77 | 0.00 | 66.67 | 20.00 | | | | |
| Total | 13 | 31 | 13 | 2 | 9 | 10 | | | | 78 |
| | 16.67 | 39.74 | 16.67 | 2.56 | 11.54 | 12.82 | | | | 100.00 |

Statistics for Table of Q05 by Q10

| Statistic | DF | Value | Prob |
|-----------------------------|----|--------|--------|
| Chi-Square | 5 | 8.3611 | 0.1374 |
| Likelihood Ratio Chi-Square | 5 | 9.3242 | 0.0968 |
| Mantel-Haenszel Chi-Square | 1 | 0.3649 | 0.5458 |
| Phi Coefficient | | 0.3274 | |
| Contingency Coefficient | | 0.3112 | |
| Cramer's V | | 0.3274 | |

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.
Sample Size = 78

Table of Q05 by Q11

| Frequency | Percent | Row Pct | Col Pct | Straongl y agree | Agree | Disagree | Unsure | Do not know | Total |
|----------------|---------|---------|---------|------------------|-------|----------|--------|-------------|--------|
| LE 7 employees | 7 | 25 | 7 | 4 | 4 | | | | 47 |
| | 8.54 | 30.49 | 8.54 | 4.88 | 4.88 | | | | 57.32 |
| | 14.89 | 53.19 | 14.89 | 8.51 | 8.51 | | | | |
| | 77.78 | 52.08 | 63.64 | 44.44 | 80.00 | | | | |
| GT 7 employees | 2 | 23 | 4 | 5 | 1 | | | | 35 |
| | 2.44 | 28.05 | 4.88 | 6.10 | 1.22 | | | | 42.68 |
| | 5.71 | 65.71 | 11.43 | 14.29 | 2.86 | | | | |
| | 22.22 | 47.92 | 36.36 | 55.56 | 20.00 | | | | |
| Total | 9 | 48 | 11 | 9 | 5 | | | | 82 |
| | 10.98 | 58.54 | 13.41 | 10.98 | 6.10 | | | | 100.00 |

Statistics for Table of Q05 by Q11

| Statistic | DF | Value | Prob |
|-----------------------------|----|--------|--------|
| Chi-Square | 4 | 3.9182 | 0.4172 |
| Likelihood Ratio Chi-Square | 4 | 4.1303 | 0.3887 |
| Mantel-Haenszel Chi-Square | 1 | 0.0002 | 0.9889 |
| Phi Coefficient | | 0.2186 | |
| Contingency Coefficient | | 0.2136 | |
| Cramer's V | | 0.2186 | |

WARNING: 50% of the cells have expected counts less than 5. Chi-Square may not be a valid test.
Sample Size = 82

Table of Q05 by Q12

| Frequency | Percent | Row Pct | Col Pct | Definite | Probably | Possibly | Do not know | Total |
|----------------|---------|---------|---------|----------|----------|----------|-------------|--------|
| LE 7 employees | 14 | 10 | 10 | 10 | 10 | 3 | | 47 |
| | 17.07 | 12.20 | 12.20 | 12.20 | 12.20 | 3.66 | | 57.32 |
| | 29.79 | 21.28 | 21.28 | 21.28 | 21.28 | 6.38 | | |
| | 66.67 | 43.48 | 47.62 | 71.43 | 100.00 | | | |
| GT 7 employees | 7 | 13 | 11 | 4 | 0 | | | 35 |
| | 8.54 | 15.85 | 13.41 | 4.88 | 0.00 | | | 42.68 |
| | 20.00 | 37.14 | 31.43 | 11.43 | 0.00 | | | |
| | 33.33 | 56.52 | 52.38 | 28.57 | 0.00 | | | |
| Total | 21 | 23 | 21 | 14 | 3 | | | 82 |
| | 25.61 | 28.05 | 25.61 | 17.07 | 3.66 | | | 100.00 |

Statistics for Table of Q05 by Q12

| Statistic | DF | Value | Prob |
|-----------------------------|----|--------|--------|
| Chi-Square | 4 | 6.7318 | 0.1508 |
| Likelihood Ratio Chi-Square | 4 | 7.8717 | 0.0964 |
| Mantel-Haenszel Chi-Square | 1 | 1.3059 | 0.2531 |
| Phi Coefficient | | 0.2865 | |
| Contingency Coefficient | | 0.2754 | |
| Cramer's V | | 0.2865 | |

Sample Size = 82

Table of Q05 by Q13

| Frequency | Percent | Row Pct | Col Pct | Board of directors | Internal audit | Designated risk manager | Head of accounting function | Staff of business units | Total |
|----------------|---------|---------|---------|--------------------|----------------|-------------------------|-----------------------------|-------------------------|--------|
| LE 7 employees | 9 | 1 | 1 | 3 | 4 | | | | 45 |
| | 11.54 | 1.28 | 1.28 | 3.85 | 5.13 | | | | 57.69 |
| | 20.00 | 2.22 | 2.22 | 6.67 | 8.89 | | | | |
| | 42.86 | 50.00 | 25.00 | 50.00 | 80.00 | | | | |
| GT 7 employees | 12 | 1 | 3 | 3 | 1 | | | | 33 |
| | 15.38 | 1.28 | 3.85 | 3.85 | 1.28 | | | | 42.31 |
| | 36.36 | 3.03 | 9.09 | 9.09 | 3.03 | | | | |
| | 57.14 | 50.00 | 75.00 | 50.00 | 20.00 | | | | |
| Total | 21 | 2 | 4 | 6 | 5 | | | | 78 |
| | 26.92 | 2.56 | 5.13 | 7.69 | 6.41 | | | | 100.00 |

(Continued)

| Frequency | Percent | Row Pct | Col Pct | Management alone | Designated employees | Yourself | Other | Total |
|----------------|---------|---------|---------|------------------|----------------------|----------|-------|--------|
| LE 7 employees | 7 | 1 | 12 | 7 | | | | 45 |
| | 8.97 | 1.28 | 15.38 | 8.97 | | | | 57.69 |
| | 15.56 | 2.22 | 26.67 | 15.56 | | | | |
| | 58.33 | 100.00 | 85.71 | 53.85 | | | | |
| GT 7 employees | 5 | 0 | 2 | 6 | | | | 33 |
| | 6.41 | 0.00 | 2.56 | 7.69 | | | | 42.31 |
| | 15.15 | 0.00 | 6.06 | 18.18 | | | | |
| | 41.67 | 0.00 | 14.29 | 46.15 | | | | |
| Total | 12 | 1 | 14 | 13 | | | | 78 |
| | 15.38 | 1.28 | 17.95 | 16.67 | | | | 100.00 |

Statistics for Table of Q05 by Q13

| Statistic | DF | Value | Prob |
|-----------------------------|----|---------|--------|
| Chi-Square | 8 | 10.1764 | 0.2529 |
| Likelihood Ratio Chi-Square | 8 | 11.2735 | 0.1867 |
| Mantel-Haenszel Chi-Square | 1 | 4.2586 | 0.0391 |
| Phi Coefficient | | 0.3612 | |
| Contingency Coefficient | | 0.3397 | |
| Cramer's V | | 0.3612 | |

WARNING: 56% of the cells have expected counts less than 5. Chi-Square may not be a valid test.
Sample Size = 78

Table of Q05 by Q14

| Frequency | Percent | Row Pct | Col Pct | Board of directors | Internal audit | Accounting function | Controlling function | Self control of business unit | Other | Total |
|----------------|---------|---------|---------|--------------------|----------------|---------------------|----------------------|-------------------------------|-------|--------|
| LE 7 employees | 8 | 4 | 4 | 2 | 15 | 11 | | | | 44 |
| | 10.67 | 5.33 | 5.33 | 2.67 | 20.00 | 14.67 | | | | 58.67 |
| | 18.18 | 9.09 | 9.09 | 4.55 | 34.09 | 25.00 | | | | |
| | 44.44 | 57.14 | 40.00 | 40.00 | 71.43 | 78.57 | | | | |
| GT 7 employees | 10 | 3 | 6 | 3 | 6 | 3 | | | | 31 |
| | 13.33 | 4.00 | 8.00 | 4.00 | 8.00 | 4.00 | | | | 41.33 |
| | 32.26 | 9.68 | 19.35 | 9.68 | 19.35 | 9.68 | | | | |
| | 55.56 | 42.86 | 60.00 | 60.00 | 28.57 | 21.43 | | | | |
| Total | 18 | 7 | 10 | 5 | 21 | 14 | | | | 75 |
| | 24.00 | 9.33 | 13.33 | 6.67 | 28.00 | 18.67 | | | | 100.00 |

Statistics for Table of Q05 by Q14

| Statistic | DF | Value | Prob |
|-----------------------------|----|-------|------|
| Chi-Square | | | |
| Likelihood Ratio Chi-Square | | | |
| Mantel-Haenszel Chi-Square | | | |
| Phi Coefficient | | | |
| Contingency Coefficient | | | |
| Cramer's V | | | |

Chi-Square 5 7.3615 0.1951
 Likelihood Ratio Chi-Square 5 7.5501 0.1828
 Mantel-Haenszel Chi-Square 1 4.9675 0.0258
 Phi Coefficient 0.3133
 Contingency Coefficient 0.2990
 Cramer's V 0.3133
 WARNING: 42% of the cells have expected counts less than 5. Chi-Square may not be a valid test.
 Sample Size = 75

Table of Q05 by Q15

| Frequency | Percent | Row Pct | Col Pct | Risk Management, manual | General, manual | Controlling, manual | Other | Total | | |
|----------------|---------|---------|---------|-------------------------|-----------------|---------------------|-------|-------|-------|--------|
| LE 7 employees | 3 | 11 | 8 | 13 | 35 | 5.17 | 18.97 | 13.79 | 22.41 | 60.34 |
| | 8.57 | 31.43 | 22.86 | 37.14 | 50.00 | 68.75 | 47.06 | 68.42 | | |
| GT 7 employees | 3 | 5 | 9 | 6 | 23 | 5.17 | 8.62 | 15.52 | 10.34 | 39.66 |
| | 13.04 | 21.74 | 39.13 | 26.09 | 50.00 | 31.25 | 52.94 | 31.58 | | |
| Total | 6 | 16 | 17 | 19 | 58 | 10.34 | 27.59 | 29.31 | 32.76 | 100.00 |

Statistics for Table of Q05 by Q15

| Statistic | DF | Value | Prob |
|-----------------------------|----|--------|--------|
| Chi-Square | 3 | 2.5126 | 0.4730 |
| Likelihood Ratio Chi-Square | 3 | 2.5047 | 0.4744 |
| Mantel-Haenszel Chi-Square | 1 | 0.1460 | 0.7024 |
| Phi Coefficient | | 0.2081 | |
| Contingency Coefficient | | 0.2038 | |
| Cramer's V | | 0.2081 | |

WARNING: 25% of the cells have expected counts less than 5. Chi-Square may not be a valid test.
 Sample Size = 58

Table of Q05 by Q16

| Frequency | Percent | Row Pct | Col Pct | Cash flow, statement | Balance sheet | Income statement | Bank statements | Departmental / internal reports | Other | Total | | | | |
|----------------|---------|---------|---------|----------------------|---------------|------------------|-----------------|---------------------------------|-------|-------|-------|-------|-------|--------|
| LE 7 employees | 14 | 3 | 2 | 2 | 6 | 10 | 37 | 21.54 | 4.62 | 3.08 | 3.08 | 9.23 | 15.38 | 56.92 |
| | 37.84 | 8.11 | 5.41 | 5.41 | 16.22 | 27.03 | 70.00 | 30.00 | 66.67 | 66.67 | 40.00 | 71.43 | | |
| GT 7 employees | 6 | 7 | 1 | 1 | 9 | 4 | 28 | 9.23 | 10.77 | 1.54 | 1.54 | 13.85 | 6.15 | 43.08 |
| | 21.43 | 25.00 | 3.57 | 3.57 | 32.14 | 14.29 | 30.00 | 70.00 | 33.33 | 33.33 | 60.00 | 28.57 | | |
| Total | 20 | 10 | 3 | 3 | 15 | 14 | 65 | 30.77 | 15.38 | 4.62 | 4.62 | 23.08 | 21.54 | 100.00 |

Statistics for Table of Q05 by Q16

| Statistic | DF | Value | Prob |
|-----------------------------|----|--------|--------|
| Chi-Square | 5 | 7.5364 | 0.1837 |
| Likelihood Ratio Chi-Square | 5 | 7.6270 | 0.1780 |
| Mantel-Haenszel Chi-Square | 1 | 0.0226 | 0.8806 |
| Phi Coefficient | | 0.3405 | |
| Contingency Coefficient | | 0.3223 | |
| Cramer's V | | 0.3405 | |

WARNING: 42% of the cells have expected counts less than 5. Chi-Square may not be a valid test.
 Sample Size = 65

Table of Q05 by Q17

| Frequency | Percent | Row Pct | Col Pct | Standard office software, management software | Standard business software | In-house software | Other software | Not applicable | Total | | | |
|----------------|---------|---------|---------|---|----------------------------|-------------------|----------------|----------------|-------|-------|-------|--------|
| LE 7 employees | 9 | 6 | 4 | 2 | 20 | 41 | 12.33 | 8.22 | 5.48 | 2.74 | 27.40 | 56.16 |
| | 21.95 | 14.63 | 9.76 | 4.88 | 48.78 | 42.86 | 66.67 | 36.36 | 66.67 | 68.97 | | |
| GT 7 employees | 12 | 3 | 7 | 1 | 9 | 32 | 16.44 | 4.11 | 9.59 | 1.37 | 12.33 | 43.84 |
| | 37.50 | 9.38 | 21.88 | 3.13 | 28.13 | 57.14 | 33.33 | 63.64 | 33.33 | 31.03 | | |
| Total | 21 | 9 | 11 | 3 | 29 | 73 | 28.77 | 12.33 | 15.07 | 4.11 | 39.73 | 100.00 |

Statistics for Table of Q05 by Q17

| Statistic | DF | Value | Prob |
|-----------------------------|----|--------|--------|
| Chi-Square | 4 | 5.7300 | 0.2202 |
| Likelihood Ratio Chi-Square | 4 | 5.7842 | 0.2159 |
| Mantel-Haenszel Chi-Square | 1 | 2.3973 | 0.1215 |
| Phi Coefficient | | 0.2802 | |
| Contingency Coefficient | | 0.2698 | |
| Cramer's V | | 0.2802 | |

WARNING: 40% of the cells have expected counts less than 5. Chi-Square may not be a valid test.
 Sample Size = 73

Table of Q05 by Q18

| Frequency | Percent | Row Pct | Col Pct | No inves, Less tha, R20000-R, >R50000 | Total |
|-----------------|---------|---------|---------|---------------------------------------|--------|
| LE 7 empl oyees | 20 | 5 | 3 | 6 | 34 |
| | 34.48 | 8.62 | 5.17 | 10.34 | 58.62 |
| | 58.82 | 14.71 | 8.82 | 17.65 | |
| | 66.67 | 45.45 | 42.86 | 60.00 | |
| GT 7 empl oyees | 10 | 6 | 4 | 4 | 24 |
| | 17.24 | 10.34 | 6.90 | 6.90 | 41.38 |
| | 41.67 | 25.00 | 16.67 | 16.67 | |
| | 33.33 | 54.55 | 57.14 | 40.00 | |
| Total | 30 | 11 | 7 | 10 | 58 |
| | 51.72 | 18.97 | 12.07 | 17.24 | 100.00 |

Statistics for Table of Q05 by Q18

| Statistic | DF | Value | Prob |
|-----------------------------|----|--------|--------|
| Chi-Square | 3 | 2.3117 | 0.5103 |
| Likelihood Ratio Chi-Square | 3 | 2.3023 | 0.5121 |
| Mantel-Haenszel Chi-Square | 1 | 0.5539 | 0.4567 |
| Phi Coefficient | | 0.1996 | |
| Contingency Coefficient | | 0.1958 | |
| Cramer's V | | 0.1996 | |

WARNING: 50% of the cells have expected counts less than 5. Chi-Square may not be a valid test.
Sample Size = 58

Table of Q05 by Q19

| Frequency | Percent | Row Pct | Col Pct | Inci dent, Customer, Audi t re, SWOT ana, Brainsto, Using te, Other te, | Total | | | |
|-----------------|---------|---------|---------|---|-------|-------|-------|--------|
| LE 7 empl oyees | 4 | 19 | 4 | 3 | 4 | 2 | 1 | 37 |
| | 6.25 | 29.69 | 6.25 | 4.69 | 6.25 | 3.13 | 1.56 | 57.81 |
| | 10.81 | 51.35 | 10.81 | 8.11 | 10.81 | 5.41 | 2.70 | |
| | 40.00 | 76.00 | 40.00 | 60.00 | 44.44 | 66.67 | 50.00 | |
| GT 7 empl oyees | 6 | 6 | 6 | 2 | 5 | 1 | 1 | 27 |
| | 9.38 | 9.38 | 9.38 | 3.13 | 7.81 | 1.56 | 1.56 | 42.19 |
| | 22.22 | 22.22 | 22.22 | 7.41 | 18.52 | 3.70 | 3.70 | |
| | 60.00 | 24.00 | 60.00 | 40.00 | 55.56 | 33.33 | 50.00 | |
| Total | 10 | 25 | 10 | 5 | 9 | 3 | 2 | 64 |
| | 15.63 | 39.06 | 15.63 | 7.81 | 14.06 | 4.69 | 3.13 | 100.00 |

Statistics for Table of Q05 by Q19

| Statistic | DF | Value | Prob |
|-----------------------------|----|--------|--------|
| Chi-Square | 6 | 6.8082 | 0.3390 |
| Likelihood Ratio Chi-Square | 6 | 6.9924 | 0.3216 |
| Mantel-Haenszel Chi-Square | 1 | 0.1781 | 0.6730 |
| Phi Coefficient | | 0.3262 | |
| Contingency Coefficient | | 0.3101 | |
| Cramer's V | | 0.3262 | |

WARNING: 64% of the cells have expected counts less than 5. Chi-Square may not be a valid test.
Sample Size = 64

Table of Q05 by Q20

| Frequency | Percent | Row Pct | Col Pct | Strategic risks | Reputational risks | Legal risks | Operational risks | Environmental risks | Financial risks | Total |
|----------------|---------|---------|---------|-----------------|--------------------|-------------|-------------------|---------------------|-----------------|-------|
| LE 7 employees | 11 | 6 | 1 | 1 | 12 | 39 | | | | |
| | 16.18 | 8.82 | 1.47 | 1.47 | 17.65 | 57.35 | | | | |
| | 28.21 | 15.38 | 2.56 | 2.56 | 30.77 | | | | | |
| | 52.38 | 54.55 | 100.00 | 50.00 | 66.67 | | | | | |
| GT 7 employees | 10 | 5 | 0 | 1 | 6 | 29 | | | | |
| | 14.71 | 7.35 | 0.00 | 1.47 | 8.82 | 42.65 | | | | |
| | 34.48 | 17.24 | 0.00 | 3.45 | 20.69 | | | | | |
| | 47.62 | 45.45 | 0.00 | 50.00 | 33.33 | | | | | |
| Total | 21 | 11 | 1 | 2 | 18 | 68 | | | | |
| | 30.88 | 16.18 | 1.47 | 2.94 | 26.47 | 100.00 | | | | |

(Continued)

| Frequency | Percent | Row Pct | Col Pct | People risks | Operational risks | Technology risks | Other risks | Total |
|----------------|---------|---------|---------|--------------|-------------------|------------------|-------------|-------|
| LE 7 employees | 2 | 4 | 0 | 2 | 39 | | | |
| | 2.94 | 5.88 | 0.00 | 2.94 | 57.35 | | | |
| | 5.13 | 10.26 | 0.00 | 5.13 | | | | |
| | 50.00 | 57.14 | 0.00 | 66.67 | | | | |
| GT 7 employees | 2 | 3 | 1 | 1 | 29 | | | |
| | 2.94 | 4.41 | 1.47 | 1.47 | 42.65 | | | |
| | 6.90 | 10.34 | 3.45 | 3.45 | | | | |
| | 50.00 | 42.86 | 100.00 | 33.33 | | | | |
| Total | 4 | 7 | 1 | 3 | 68 | | | |
| | 5.88 | 10.29 | 1.47 | 4.41 | 100.00 | | | |

Statistics for Table of Q05 by Q20

| Statistic | DF | Value | Prob |
|-----------------------------|----|--------|--------|
| Chi-Square | 8 | 3.2136 | 0.9202 |
| Likelihood Ratio Chi-Square | 8 | 3.9573 | 0.8610 |
| Mantel-Haenszel Chi-Square | 1 | 0.0883 | 0.7663 |
| Phi Coefficient | | 0.2174 | |
| Contingency Coefficient | | 0.2124 | |
| Cramer's V | | 0.2174 | |

WARNING: 72% of the cells have expected counts less than 5. Chi-Square may not be a valid test.
Sample Size = 68

Table of Q05 by Q21

| Frequency | Percent | Row Pct | Col Pct | Risk assessment matrix | The Bar Chart paradigm | Other | Total |
|----------------|---------|---------|---------|------------------------|------------------------|-------|-------|
| LE 7 employees | 6 | 6 | 11 | 23 | | | |
| | 15.00 | 15.00 | 27.50 | 57.50 | | | |
| | 26.09 | 26.09 | 47.83 | | | | |
| | 37.50 | 75.00 | 68.75 | | | | |
| GT 7 employees | 10 | 2 | 5 | 17 | | | |
| | 25.00 | 5.00 | 12.50 | 42.50 | | | |
| | 58.82 | 11.76 | 29.41 | | | | |
| | 62.50 | 25.00 | 31.25 | | | | |
| Total | 16 | 8 | 16 | 40 | | | |
| | 40.00 | 20.00 | 40.00 | 100.00 | | | |

Statistics for Table of Q05 by Q21

| Statistic | DF | Value | Prob |
|-----------------------------|----|--------|--------|
| Chi-Square | 2 | 4.4501 | 0.1081 |
| Likelihood Ratio Chi-Square | 2 | 4.5062 | 0.1051 |
| Mantel-Haenszel Chi-Square | 1 | 3.1170 | 0.0775 |
| Phi Coefficient | | 0.3335 | |
| Contingency Coefficient | | 0.3164 | |
| Cramer's V | | 0.3335 | |

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.
Sample Size = 40

Table of Q05 by Q22

| Frequency | Percent | Row Pct | Col Pct | Every year | Every 6 months | Every 3 months | Every month | Other | Not applicable | Total |
|----------------|---------|---------|---------|------------|----------------|----------------|-------------|-------|----------------|-------|
| LE 7 employees | 7 | 4 | 5 | 12 | 3 | 10 | 41 | | | |
| | 10.00 | 5.71 | 7.14 | 17.14 | 4.29 | 14.29 | 58.57 | | | |
| | 17.07 | 9.76 | 12.20 | 29.27 | 7.32 | 24.39 | | | | |
| | 46.67 | 36.36 | 55.56 | 66.67 | 60.00 | 83.33 | | | | |
| GT 7 employees | 8 | 7 | 4 | 6 | 2 | 2 | 29 | | | |
| | 11.43 | 10.00 | 5.71 | 8.57 | 2.86 | 2.86 | 41.43 | | | |
| | 27.59 | 24.14 | 13.79 | 20.69 | 6.90 | 6.90 | | | | |
| | 53.33 | 63.64 | 44.44 | 33.33 | 40.00 | 16.67 | | | | |
| Total | 15 | 11 | 9 | 18 | 5 | 12 | 70 | | | |
| | 21.43 | 15.71 | 12.86 | 25.71 | 7.14 | 17.14 | 100.00 | | | |

Statistics for Table of Q05 by Q22

| Statistic | DF | Value | Prob |
|------------|----|--------|--------|
| Chi-Square | 5 | 6.6681 | 0.2465 |

Likelihood Ratio Chi-Square 5 7.0016 0.2205
 Mantel-Haenszel Chi-Square 1 5.2987 0.0213
 Phi Coefficient 0.3086
 Contingency Coefficient 0.2949
 Cramer's V 0.3086

WARNING: 42% of the cells have expected counts less than 5. Chi-Square may not be a valid test.
 Sample Size = 70

Table of Q05 by Q23

| Frequency Percent Row Pct Col Pct | Risk avoidance | Risk sharing | Risk treatment plan | Crisis response management planning | Other tools used | Total |
|--|----------------|--------------|---------------------|-------------------------------------|------------------|--------|
| LE 7 employees | 16 | 6 | 5 | 1 | 3 | 31 |
| | 29.09 | 10.91 | 9.09 | 1.82 | 5.45 | 56.36 |
| | 51.61 | 19.35 | 16.13 | 3.23 | 9.68 | |
| | 53.33 | 75.00 | 55.56 | 25.00 | 75.00 | |
| GT 7 employees | 14 | 2 | 4 | 3 | 1 | 24 |
| | 25.45 | 3.64 | 7.27 | 5.45 | 1.82 | 43.64 |
| | 58.33 | 8.33 | 16.67 | 12.50 | 4.17 | |
| | 46.67 | 25.00 | 44.44 | 75.00 | 25.00 | |
| Total | 30 | 8 | 9 | 4 | 4 | 55 |
| | 54.55 | 14.55 | 16.36 | 7.27 | 7.27 | 100.00 |

Statistics for Table of Q05 by Q23

| Statistic | DF | Value | Prob |
|-----------------------------|----|--------|--------|
| Chi-Square | 4 | 3.4088 | 0.4919 |
| Likelihood Ratio Chi-Square | 4 | 3.5374 | 0.4722 |
| Mantel-Haenszel Chi-Square | 1 | 0.0139 | 0.9060 |
| Phi Coefficient | | 0.2490 | |
| Contingency Coefficient | | 0.2416 | |
| Cramer's V | | 0.2490 | |

WARNING: 70% of the cells have expected counts less than 5. Chi-Square may not be a valid test.
Sample Size = 55

Table of Q05 by Q24

| Frequency | 1 year | 2 years | 5 years | Open | Not applicable | Total |
|----------------|--------|---------|---------|-------|----------------|--------|
| LE 7 employees | 14 | 1 | 0 | 8 | 15 | 38 |
| Percent | 20.90 | 1.49 | 0.00 | 11.94 | 22.39 | 56.72 |
| Row Pct | 36.84 | 2.63 | 0.00 | 21.05 | 39.47 | |
| Col Pct | 50.00 | 100.00 | 0.00 | 57.14 | 71.43 | |
| GT 7 employees | 14 | 0 | 3 | 6 | 6 | 29 |
| Percent | 20.90 | 0.00 | 4.48 | 8.96 | 8.96 | 43.28 |
| Row Pct | 48.28 | 0.00 | 10.34 | 20.69 | 20.69 | |
| Col Pct | 50.00 | 0.00 | 100.00 | 42.86 | 28.57 | |
| Total | 28 | 1 | 3 | 14 | 21 | 67 |
| Percent | 41.79 | 1.49 | 4.48 | 20.90 | 31.34 | 100.00 |

Statistics for Table of Q05 by Q24

| Statistic | DF | Value | Prob |
|-----------------------------|----|--------|--------|
| Chi-Square | 4 | 7.0613 | 0.1327 |
| Likelihood Ratio Chi-Square | 4 | 8.6041 | 0.0718 |
| Mantel-Haenszel Chi-Square | 1 | 1.4295 | 0.2318 |
| Phi Coefficient | | 0.3246 | |
| Contingency Coefficient | | 0.3088 | |
| Cramer's V | | 0.3246 | |

WARNING: 40% of the cells have expected counts less than 5. Chi-Square may not be a valid test.
Sample Size = 67

Table of Q05 by Q25

| Frequency | Separate, risk reporting | Risk report, separate, risk reporting | Other reports, general report, ing | Total |
|----------------|--------------------------|---------------------------------------|------------------------------------|--------|
| LE 7 employees | 7 | 21 | 4 | 32 |
| Percent | 11.86 | 35.59 | 6.78 | 54.24 |
| Row Pct | 21.88 | 65.63 | 12.50 | |
| Col Pct | 46.67 | 53.85 | 80.00 | |
| GT 7 employees | 8 | 18 | 1 | 27 |
| Percent | 13.56 | 30.51 | 1.69 | 45.76 |
| Row Pct | 29.63 | 66.67 | 3.70 | |
| Col Pct | 53.33 | 46.15 | 20.00 | |
| Total | 15 | 39 | 5 | 59 |
| Percent | 25.42 | 66.10 | 8.47 | 100.00 |

Statistics for Table of Q05 by Q25

| Statistic | DF | Value | Prob |
|-----------------------------|----|--------|--------|
| Chi-Square | 2 | 1.6858 | 0.4305 |
| Likelihood Ratio Chi-Square | 2 | 1.8009 | 0.4064 |
| Mantel-Haenszel Chi-Square | 1 | 1.2710 | 0.2596 |
| Phi Coefficient | | 0.1690 | |
| Contingency Coefficient | | 0.1667 | |
| Cramer's V | | 0.1690 | |

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.
Sample Size = 59

Table of Q05 by Q26

| Frequency | Risk Register | Reg. Management | Risk Plan | Risk Profile | Other | Total |
|----------------|---------------|-----------------|-----------|--------------|-------|--------|
| LE 7 employees | 7 | 7 | 4 | 8 | | 26 |
| | 14.89 | 14.89 | 8.51 | 17.02 | | 55.32 |
| | 26.92 | 26.92 | 15.38 | 30.77 | | |
| | 58.33 | 46.67 | 57.14 | 61.54 | | |
| GT 7 employees | 5 | 8 | 3 | 5 | | 21 |
| | 10.64 | 17.02 | 6.38 | 10.64 | | 44.68 |
| | 23.81 | 38.10 | 14.29 | 23.81 | | |
| | 41.67 | 53.33 | 42.86 | 38.46 | | |
| Total | 12 | 15 | 7 | 13 | | 47 |
| | 25.53 | 31.91 | 14.89 | 27.66 | | 100.00 |

Statistics for Table of Q05 by Q26

| Statistic | DF | Value | Prob |
|-----------------------------|----|--------|--------|
| Chi-Square | 3 | 0.7113 | 0.8705 |
| Likelihood Ratio Chi-Square | 3 | 0.7106 | 0.8707 |
| Mantel-Haenszel Chi-Square | 1 | 0.1229 | 0.7259 |
| Phi Coefficient | | 0.1230 | |
| Contingency Coefficient | | 0.1221 | |
| Cramer's V | | 0.1230 | |

WARNING: 25% of the cells have expected counts less than 5. Chi-Square may not be a valid test.
Sample Size = 47

Table of Q05 by Q27_1

| Frequency | Yes | No | Total |
|----------------|-------|-------|--------|
| LE 7 employees | 8 | 26 | 34 |
| | 12.70 | 41.27 | 53.97 |
| | 23.53 | 76.47 | |
| | 47.06 | 56.52 | |
| GT 7 employees | 9 | 20 | 29 |
| | 14.29 | 31.75 | 46.03 |
| | 31.03 | 68.97 | |
| | 52.94 | 43.48 | |
| Total | 17 | 46 | 63 |
| | 26.98 | 73.02 | 100.00 |

Statistics for Table of Q05 by Q27_1

| Statistic | DF | Value | Prob |
|-----------------------------|----|---------|--------|
| Chi-Square | 1 | 0.4474 | 0.5036 |
| Likelihood Ratio Chi-Square | 1 | 0.4465 | 0.5040 |
| Continuity Adj. Chi-Square | 1 | 0.1476 | 0.7009 |
| Mantel-Haenszel Chi-Square | 1 | 0.4403 | 0.5070 |
| Phi Coefficient | | -0.0843 | |
| Contingency Coefficient | | 0.0840 | |
| Cramer's V | | -0.0843 | |

Sample Size = 63

Table of Q05 by Q27_2

| Frequency | Yes | No | Total |
|----------------|-------|-------|--------|
| LE 7 employees | 12 | 21 | 33 |
| | 19.35 | 33.87 | 53.23 |
| | 36.36 | 63.64 | |
| | 52.17 | 53.85 | |
| GT 7 employees | 11 | 18 | 29 |
| | 17.74 | 29.03 | 46.77 |
| | 37.93 | 62.07 | |
| | 47.83 | 46.15 | |
| Total | 23 | 39 | 62 |
| | 37.10 | 62.90 | 100.00 |

Statistics for Table of Q05 by Q27_2

| Statistic | DF | Value | Prob |
|-----------------------------|----|---------|--------|
| Chi-Square | 1 | 0.0163 | 0.8986 |
| Likelihood Ratio Chi-Square | 1 | 0.0162 | 0.8986 |
| Continuity Adj. Chi-Square | 1 | 0.0000 | 1.0000 |
| Mantel-Haenszel Chi-Square | 1 | 0.0160 | 0.8994 |
| Phi Coefficient | | -0.0162 | |
| Contingency Coefficient | | 0.0162 | |
| Cramer's V | | -0.0162 | |

Sample Size = 62

Table of Q05 by Q27_3

| Frequency | Yes | No | Total |
|-----------|-----|----|-------|
|-----------|-----|----|-------|

| Percent | Yes | No | Total |
|----------------|-------|-------|--------|
| Row Pct | | | |
| Col Pct | | | |
| ----- | | | |
| LE 7 employees | 5 | 28 | 33 |
| | 8.06 | 45.16 | 53.23 |
| | 15.15 | 84.85 | |
| | 38.46 | 57.14 | |
| ----- | | | |
| GT 7 employees | 8 | 21 | 29 |
| | 12.90 | 33.87 | 46.77 |
| | 27.59 | 72.41 | |
| | 61.54 | 42.86 | |
| ----- | | | |
| Total | 13 | 49 | 62 |
| | 20.97 | 79.03 | 100.00 |

Statistics for Table of 005 by Q27_3

| Statistic | DF | Value | Prob |
|-----------------------------|----|---------|--------|
| Chi-Square | 1 | 1.4402 | 0.2301 |
| Likelihood Ratio Chi-Square | 1 | 1.4438 | 0.2295 |
| Continuity Adj. Chi-Square | 1 | 0.7876 | 0.3748 |
| Mantel-Haenszel Chi-Square | 1 | 1.4170 | 0.2339 |
| Phi Coefficient | | -0.1524 | |
| Contingency Coefficient | | 0.1507 | |
| Cramer's V | | -0.1524 | |

Sample Size = 62

Table of Q05 by Q27_4

| Frequency | Percent | Row Pct | Col Pct | Yes | No | Total |
|----------------|---------|---------|---------|-------|-------|--------|
| LE 7 employees | 9 | 24 | 33 | 14.75 | 39.34 | 54.10 |
| | 27.27 | 72.73 | | 50.00 | 55.81 | |
| GT 7 employees | 9 | 19 | 28 | 14.75 | 31.15 | 45.90 |
| | 32.14 | 67.86 | | 50.00 | 44.19 | |
| Total | 18 | 43 | 61 | 29.51 | 70.49 | 100.00 |

Statistics for Table of Q05 by Q27_4

| Statistic | DF | Value | Prob |
|-----------------------------|----|---------|--------|
| Chi-Square | 1 | 0.1727 | 0.6777 |
| Likelihood Ratio Chi-Square | 1 | 0.1724 | 0.6780 |
| Continuity Adj. Chi-Square | 1 | 0.0179 | 0.8935 |
| Mantel-Haenszel Chi-Square | 1 | 0.1699 | 0.6802 |
| Phi Coefficient | | -0.0532 | |
| Contingency Coefficient | | 0.0531 | |
| Cramer's V | | -0.0532 | |

Sample Size = 61

Table of Q05 by Q27_5

| Frequency | Percent | Row Pct | Col Pct | Yes | No | Total |
|----------------|---------|---------|---------|-------|-------|--------|
| LE 7 employees | 10 | 23 | 33 | 16.13 | 37.10 | 53.23 |
| | 30.30 | 69.70 | | 58.82 | 51.11 | |
| GT 7 employees | 7 | 22 | 29 | 11.29 | 35.48 | 46.77 |
| | 24.14 | 75.86 | | 41.18 | 48.89 | |
| Total | 17 | 45 | 62 | 27.42 | 72.58 | 100.00 |

Statistics for Table of Q05 by Q27_5

| Statistic | DF | Value | Prob |
|-----------------------------|----|--------|--------|
| Chi-Square | 1 | 0.2948 | 0.5872 |
| Likelihood Ratio Chi-Square | 1 | 0.2962 | 0.5863 |
| Continuity Adj. Chi-Square | 1 | 0.0664 | 0.7967 |
| Mantel-Haenszel Chi-Square | 1 | 0.2900 | 0.5902 |
| Phi Coefficient | | 0.0690 | |
| Contingency Coefficient | | 0.0688 | |
| Cramer's V | | 0.0690 | |

Sample Size = 62

Table of Q05 by Q27_6

| Frequency | Percent | Row Pct | Col Pct | Yes | No | Total |
|----------------|---------|---------|---------|-------|-------|--------|
| LE 7 employees | 15 | 18 | 33 | 25.00 | 30.00 | 55.00 |
| | 45.45 | 54.55 | | 45.45 | 66.67 | |
| GT 7 employees | 18 | 9 | 27 | 30.00 | 15.00 | 45.00 |
| | 66.67 | 33.33 | | 54.55 | 33.33 | |
| Total | 33 | 27 | 60 | 55.00 | 45.00 | 100.00 |

Statistics for Table of Q05 by Q27_6

| Statistic | DF | Value | Prob |
|-----------------------------|----|---------|--------|
| Chi-Square | 1 | 2.6997 | 0.1004 |
| Likelihood Ratio Chi-Square | 1 | 2.7303 | 0.0985 |
| Continuity Adj. Chi-Square | 1 | 1.9107 | 0.1669 |
| Mantel-Haenszel Chi-Square | 1 | 2.6547 | 0.1032 |
| Phi Coefficient | | -0.2121 | |
| Contingency Coefficient | | 0.2075 | |
| Cramer's V | | -0.2121 | |

Sample Size = 60

Table of Q05 by Q27_7

| Frequency | Percent | Row Pct | Col Pct | Yes | No | Total |
|----------------|---------|---------|---------|-------|-------|--------|
| LE 7 employees | 18 | 15 | 33 | 29.51 | 24.59 | 54.10 |
| | 54.55 | 45.45 | | 47.37 | 65.22 | |
| GT 7 employees | 20 | 8 | 28 | 32.79 | 13.11 | 45.90 |
| | 71.43 | 28.57 | | 52.63 | 34.78 | |
| Total | 38 | 23 | 61 | 62.30 | 37.70 | 100.00 |

Statistics for Table of Q05 by Q27_7

| Statistic | DF | Value | Prob |
|-----------------------------|----|---------|--------|
| Chi-Square | 1 | 1.8382 | 0.1752 |
| Likelihood Ratio Chi-Square | 1 | 1.8596 | 0.1727 |
| Continuity Adj. Chi-Square | 1 | 1.1897 | 0.2754 |
| Mantel-Haenszel Chi-Square | 1 | 1.8081 | 0.1787 |
| Phi Coefficient | | -0.1736 | |
| Contingency Coefficient | | 0.1710 | |
| Cramer's V | | -0.1736 | |

Sample Size = 61

Table of Q05 by Q27_8

| Frequency | Percent | Row Pct | Col Pct | Yes | No | Total |
|----------------|---------|---------|---------|-----|-------|-------|
| LE 7 employees | 18 | 29.03 | 54.55 | 15 | 24.19 | 33 |
| | | | 51.43 | | 55.56 | |
| GT 7 employees | 17 | 27.42 | 58.62 | 12 | 19.35 | 29 |
| | | | 48.57 | | 44.44 | |
| Total | 35 | 56.45 | | 27 | 43.55 | 62 |

Statistics for Table of Q05 by Q27_8

| Statistic | DF | Value | Prob |
|-----------------------------|----|---------|--------|
| Chi-Square | 1 | 0.1043 | 0.7468 |
| Likelihood Ratio Chi-Square | 1 | 0.1044 | 0.7467 |
| Continuity Adj. Chi-Square | 1 | 0.0044 | 0.9472 |
| Mantel-Haenszel Chi-Square | 1 | 0.1026 | 0.7487 |
| Phi Coefficient | | -0.0410 | |
| Contingency Coefficient | | 0.0410 | |
| Cramer's V | | -0.0410 | |

Sample Size = 62

Table of Q05 by Q27_9

| Frequency | Percent | Row Pct | Col Pct | Yes | No | Total |
|----------------|---------|---------|---------|-----|-------|-------|
| LE 7 employees | 18 | 29.51 | 54.55 | 15 | 24.59 | 33 |
| | | | 52.94 | | 55.56 | |
| GT 7 employees | 16 | 26.23 | 57.14 | 12 | 19.67 | 28 |
| | | | 47.06 | | 44.44 | |
| Total | 34 | 55.74 | | 27 | 44.26 | 61 |

Statistics for Table of Q05 by Q27_9

| Statistic | DF | Value | Prob |
|-----------------------------|----|---------|--------|
| Chi-Square | 1 | 0.0414 | 0.8387 |
| Likelihood Ratio Chi-Square | 1 | 0.0414 | 0.8387 |
| Continuity Adj. Chi-Square | 1 | 0.0000 | 1.0000 |
| Mantel-Haenszel Chi-Square | 1 | 0.0407 | 0.8400 |
| Phi Coefficient | | -0.0261 | |
| Contingency Coefficient | | 0.0260 | |
| Cramer's V | | -0.0261 | |

Sample Size = 61

The number of years company exist is grouped in "Less and equal median of the number of years (11)" and "Greater than median of the number of years (11)"

Table of Q06 by Q01

| Frequency | Percent | Row Pct | Col Pct | Entrepen, Manager | Owner-Ma, Other | Total |
|-------------|---------|---------|---------|-------------------|-----------------|-------|
| LE 11 years | 1 | 1.22 | 20.00 | 26 | 10 | 36 |
| | | | 31.71 | | 12.20 | |
| | | | 61.90 | | 23.81 | |
| | | | 50.98 | | 71.43 | |
| GT 11 years | 4 | 4.88 | 10.00 | 25 | 4 | 29 |
| | | | 80.00 | | 10.00 | |
| | | | 49.02 | | 28.57 | |
| | | | | | 58.33 | |
| Total | 5 | 6.10 | 51 | 14 | 12 | 82 |

Statistics for Table of Q06 by Q01

| Statistic | DF | Value | Prob |
|-----------------------------|----|--------|--------|
| Chi-Square | 3 | 4.6784 | 0.1969 |
| Likelihood Ratio Chi-Square | 3 | 4.8897 | 0.1801 |
| Mantel-Haenszel Chi-Square | 1 | 0.3238 | 0.5693 |
| Phi Coefficient | | 0.2389 | |
| Contingency Coefficient | | 0.2323 | |
| Cramer's V | | 0.2389 | |

WARNING: 25% of the cells have expected counts less than 5. Chi-Square may not be a valid test.
Sample Size = 82

Table of Q06 by Q02

| Frequency Percent Row Pct Col Pct | <Grade 2 | Grade 1 | Grade 12 | Grade 12, Cert | Undergra, & Dipl | Postgrad, uate deg, ree | Total |
|--|----------|---------|----------|----------------|------------------|-------------------------|-------|
| LE 11 years | 2 | 17 | 10 | 9 | 4 | 42 | |
| | 2.47 | 20.99 | 12.35 | 11.11 | 4.94 | 51.85 | |
| | 4.76 | 40.48 | 23.81 | 21.43 | 9.52 | | |
| | 66.67 | 68.00 | 45.45 | 52.94 | 28.57 | | |
| GT 11 years | 1 | 8 | 12 | 8 | 10 | 39 | |
| | 1.23 | 9.88 | 14.81 | 9.88 | 12.35 | 48.15 | |
| | 2.56 | 20.51 | 30.77 | 20.51 | 25.64 | | |
| | 33.33 | 32.00 | 54.55 | 47.06 | 71.43 | | |
| Total | 3 | 25 | 22 | 17 | 14 | 81 | |
| | 3.70 | 30.86 | 27.16 | 20.99 | 17.28 | 100.00 | |

Statistics for Table of Q06 by Q02

| Statistic | DF | Value | Prob |
|-----------------------------|----|--------|--------|
| Chi-Square | 4 | 6.2829 | 0.1790 |
| Likelihood Ratio Chi-Square | 4 | 6.4400 | 0.1686 |
| Mantel-Haenszel Chi-Square | 1 | 4.6617 | 0.0308 |
| Phi Coefficient | | 0.2785 | |
| Contingency Coefficient | | 0.2683 | |
| Cramer's V | | 0.2785 | |

Sample Size = 81

Table of Q06 by Q04

| Frequency Percent Row Pct Col Pct | Food & B, average | Clothing, e | Textile e | Computer, e | Other e | Total |
|--|----------------------|----------------|--------------|----------------|------------|--------|
| LE 11 years | 6 | 12 | 1 | 3 | 19 | 41 |
| | 7.41 | 14.81 | 1.23 | 3.70 | 23.46 | 50.62 |
| | 14.63 | 29.27 | 2.44 | 7.32 | 46.34 | |
| | 85.71 | 66.67 | 33.33 | 75.00 | 38.78 | |
| GT 11 years | 1 | 6 | 2 | 1 | 30 | 40 |
| | 1.23 | 7.41 | 2.47 | 1.23 | 37.04 | 49.38 |
| | 2.50 | 15.00 | 5.00 | 2.50 | 75.00 | |
| | 14.29 | 33.33 | 66.67 | 25.00 | 61.22 | |
| Total | 7 | 18 | 3 | 4 | 49 | 81 |
| | 8.64 | 22.22 | 3.70 | 4.94 | 60.49 | 100.00 |

Statistics for Table of Q06 by Q04

| Statistic | DF | Value | Prob |
|-----------------------------|----|--------|--------|
| Chi-Square | 4 | 9.3632 | 0.0526 |
| Likelihood Ratio Chi-Square | 4 | 9.8657 | 0.0428 |
| Mantel-Haenszel Chi-Square | 1 | 7.2364 | 0.0071 |
| Phi Coefficient | | 0.3400 | |
| Contingency Coefficient | | 0.3219 | |
| Cramer's V | | 0.3400 | |

WARNING: 60% of the cells have expected counts less than 5. Chi-Square may not be a valid test.
Sample Size = 81

Table of Q06 by Q07

| Frequency Percent Row Pct Col Pct | Very goo, d | Good e | Barely a, ceptabl | Poor r | Very poo, now | Do not k, e | Total |
|--|----------------|-----------|----------------------|-----------|------------------|----------------|--------|
| LE 11 years | 9 | 22 | 4 | 3 | 1 | 3 | 42 |
| | 10.98 | 26.83 | 4.88 | 3.66 | 1.22 | 3.66 | 51.22 |
| | 21.43 | 52.38 | 9.52 | 7.14 | 2.38 | 7.14 | |
| | 37.50 | 53.66 | 80.00 | 60.00 | 33.33 | 75.00 | |
| GT 11 years | 15 | 19 | 1 | 2 | 2 | 1 | 40 |
| | 18.29 | 23.17 | 1.22 | 2.44 | 2.44 | 1.22 | 48.78 |
| | 37.50 | 47.50 | 2.50 | 5.00 | 5.00 | 2.50 | |
| | 62.50 | 46.34 | 20.00 | 40.00 | 66.67 | 25.00 | |
| Total | 24 | 41 | 5 | 5 | 3 | 4 | 82 |
| | 29.27 | 50.00 | 6.10 | 6.10 | 3.66 | 4.88 | 100.00 |

Statistics for Table of Q06 by Q07

| Statistic | DF | Value | Prob |
|-----------------------------|----|--------|--------|
| Chi-Square | 5 | 5.0070 | 0.4150 |
| Likelihood Ratio Chi-Square | 5 | 5.2020 | 0.3917 |
| Mantel-Haenszel Chi-Square | 1 | 1.7595 | 0.1847 |
| Phi Coefficient | | 0.2471 | |
| Contingency Coefficient | | 0.2399 | |
| Cramer's V | | 0.2471 | |

WARNING: 67% of the cells have expected counts less than 5. Chi-Square may not be a valid test.
Sample Size = 82

Table of Q06 by Q08

| Frequency Percent Row Pct Col Pct | Highly important | Important | Not very important | Of no importance | Unsure | Do not know | Total |
|--|-------------------------------|-------------------------------|----------------------------|----------------------------|-----------------------------|----------------------------|--------------|
| LE 11 years | 15 18.75 36.59 44.12 | 16 20.00 39.02 53.33 | 3 3.75 7.32 75.00 | 1 1.25 2.44 50.00 | 5 6.25 12.20 71.43 | 1 1.25 2.44 33.33 | 41 51.25 |
| GT 11 years | 19 23.75 48.72 55.88 | 14 17.50 35.90 46.67 | 1 1.25 2.56 25.00 | 1 1.25 2.56 50.00 | 2 2.50 5.13 28.57 | 2 2.50 5.13 66.67 | 39 48.75 |
| Total | 34 42.50 | 30 37.50 | 4 5.00 | 2 2.50 | 7 8.75 | 3 3.75 | 80 100.00 |

Statistics for Table of Q06 by Q08

| Statistic | DF | Value | Prob |
|-----------------------------|----|--------|--------|
| Chi-Square | 5 | 3.1750 | 0.6730 |
| Likelihood Ratio Chi-Square | 5 | 3.2697 | 0.6585 |
| Mantel-Haenszel Chi-Square | 1 | 0.7404 | 0.3895 |
| Phi Coefficient | | 0.1992 | |
| Contingency Coefficient | | 0.1954 | |
| Cramer's V | | 0.1992 | |

WARNING: 67% of the cells have expected counts less than 5. Chi-Square may not be a valid test.
Sample Size = 80

Table of Q06 by Q09

| Frequency Percent Row Pct Col Pct | to a great extent | Somewhat | Very little | Not at all | Unsure | Do not know | Total |
|--|-------------------------------|-----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|--------------|
| LE 11 years | 29 35.80 69.05 53.70 | 5 6.17 11.90 38.46 | 1 1.23 2.38 50.00 | 2 2.47 4.76 66.67 | 3 3.70 7.14 50.00 | 2 2.47 4.76 66.67 | 42 51.85 |
| GT 11 years | 25 30.86 64.10 46.30 | 8 9.88 20.51 61.54 | 1 1.23 2.56 50.00 | 1 1.23 2.56 33.33 | 3 3.70 7.69 50.00 | 1 1.23 2.56 33.33 | 39 48.15 |
| Total | 54 66.67 | 13 16.05 | 2 2.47 | 3 3.70 | 6 7.41 | 3 3.70 | 81 100.00 |

Statistics for Table of Q06 by Q09

| Statistic | DF | Value | Prob |
|-----------------------------|----|--------|--------|
| Chi-Square | 5 | 1.5463 | 0.9077 |
| Likelihood Ratio Chi-Square | 5 | 1.5636 | 0.9056 |
| Mantel-Haenszel Chi-Square | 1 | 0.0398 | 0.8418 |
| Phi Coefficient | | 0.1382 | |
| Contingency Coefficient | | 0.1369 | |
| Cramer's V | | 0.1382 | |

WARNING: 67% of the cells have expected counts less than 5. Chi-Square may not be a valid test.
Sample Size = 81

Table of Q06 by Q10

| Frequency Percent Row Pct Col Pct | Strongly agree | Agree | Tend to agree | Tend to disagree | Unsure | Do not know | Total |
|--|----------------|-------|---------------|------------------|--------|-------------|--------|
| LE 11 years | 5 | 16 | 8 | 1 | 4 | 6 | 40 |
| | 6.49 | 20.78 | 10.39 | 1.30 | 5.19 | 7.79 | 51.95 |
| | 12.50 | 40.00 | 20.00 | 2.50 | 10.00 | 15.00 | |
| | 41.67 | 48.48 | 66.67 | 50.00 | 57.14 | 54.55 | |
| GT 11 years | 7 | 17 | 4 | 1 | 3 | 5 | 37 |
| | 9.09 | 22.08 | 5.19 | 1.30 | 3.90 | 6.49 | 48.05 |
| | 18.92 | 45.95 | 10.81 | 2.70 | 8.11 | 13.51 | |
| | 58.33 | 51.52 | 33.33 | 50.00 | 42.86 | 45.45 | |
| Total | 12 | 33 | 12 | 2 | 7 | 11 | 77 |
| | 15.58 | 42.86 | 15.58 | 2.60 | 9.09 | 14.29 | 100.00 |

Statistics for Table of Q06 by Q10

| Statistic | DF | Value | Prob |
|-----------------------------|----|--------|--------|
| Chi-Square | 5 | 1.8166 | 0.8739 |
| Likelihood Ratio Chi-Square | 5 | 1.8419 | 0.8706 |
| Mantel-Haenszel Chi-Square | 1 | 0.3583 | 0.5495 |
| Phi Coefficient | | 0.1536 | |
| Contingency Coefficient | | 0.1518 | |
| Cramer's V | | 0.1536 | |

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.
Sample Size = 77

Table of Q06 by Q11

| Frequency Percent Row Pct Col Pct | Strongly agree | Agree | Disagree | Unsure | Do not know | Total |
|--|----------------|-------|----------|--------|-------------|--------|
| LE 11 years | 4 | 28 | 4 | 3 | 2 | 41 |
| | 4.94 | 34.57 | 4.94 | 3.70 | 2.47 | 50.62 |
| | 9.76 | 68.29 | 9.76 | 7.32 | 4.88 | |
| | 44.44 | 56.00 | 50.00 | 33.33 | 40.00 | |
| GT 11 years | 5 | 22 | 4 | 6 | 3 | 40 |
| | 6.17 | 27.16 | 4.94 | 7.41 | 3.70 | 49.38 |
| | 12.50 | 55.00 | 10.00 | 15.00 | 7.50 | |
| | 55.56 | 44.00 | 50.00 | 66.67 | 60.00 | |
| Total | 9 | 50 | 8 | 9 | 5 | 81 |
| | 11.11 | 61.73 | 9.88 | 11.11 | 6.17 | 100.00 |

Statistics for Table of Q06 by Q11

| Statistic | DF | Value | Prob |
|-----------------------------|----|--------|--------|
| Chi-Square | 4 | 2.0191 | 0.7323 |
| Likelihood Ratio Chi-Square | 4 | 2.0415 | 0.7281 |
| Mantel-Haenszel Chi-Square | 1 | 1.0273 | 0.3108 |
| Phi Coefficient | | 0.1579 | |
| Contingency Coefficient | | 0.1560 | |
| Cramer's V | | 0.1579 | |

WARNING: 80% of the cells have expected counts less than 5. Chi-Square may not be a valid test.
Sample Size = 81

Table of Q06 by Q12

| Frequency Percent Row Pct Col Pct | Definite ly | Very pro bably | Probably | Possibly | Do not k now | Total |
|--|-------------------------------|-------------------------------|-------------------------------|-----------------------------|----------------------------|--------------|
| LE 11 years | 11 13.58 26.83 52.38 | 10 12.35 24.39 43.48 | 12 14.81 29.27 57.14 | 6 7.41 14.63 50.00 | 2 2.47 4.88 50.00 | 41 50.62 |
| GT 11 years | 10 12.35 25.00 47.62 | 13 16.05 32.50 56.52 | 9 11.11 22.50 42.86 | 6 7.41 15.00 50.00 | 2 2.47 5.00 50.00 | 40 49.38 |
| Total | 21 25.93 | 23 28.40 | 21 25.93 | 12 14.81 | 4 4.94 | 81 100.00 |

Statistics for Table of Q06 by Q12

| Statistic | DF | Value | Prob |
|-----------------------------|----|--------|--------|
| Chi-Square | 4 | 0.8553 | 0.9309 |
| Likelihood Ratio Chi-Square | 4 | 0.8578 | 0.9305 |
| Mantel-Haenszel Chi-Square | 1 | 0.0095 | 0.9223 |
| Phi Coefficient | | 0.1028 | |
| Contingency Coefficient | | 0.1022 | |
| Cramer's V | | 0.1028 | |

Sample Size = 81

Table of Q06 by Q13

| Frequency Percent Row Pct Col Pct | Board of directo rs | Internal audit | Designat ed risk manager | Head of accounti ng funct ion | Staff of business units | Total |
|--|-------------------------------|----------------------------|--------------------------------|--|-------------------------------|--------------|
| LE 11 years | 11 14.47 28.21 57.89 | 2 2.63 5.13 66.67 | 0 0.00 0.00 0.00 | 1 1.32 2.56 20.00 | 3 3.95 7.69 60.00 | 39 51.32 |
| GT 11 years | 8 10.53 21.62 42.11 | 1 1.32 2.70 33.33 | 4 5.26 10.81 100.00 | 4 5.26 10.81 80.00 | 2 2.63 5.41 40.00 | 37 48.68 |
| Total | 19 25.00 | 3 3.95 | 4 5.26 | 5 6.58 | 5 6.58 | 76 100.00 |

(Continued)

| Frequency Percent Row Pct Col Pct | Manageme nt alone | Designat ed empl ees | Yourself | Other | Total |
|--|-----------------------------|-----------------------------|-----------------------------|-----------------------------|--------------|
| LE 11 years | 7 9.21 17.95 53.85 | 1 1.32 2.56 100.00 | 7 9.21 17.95 50.00 | 7 9.21 17.95 58.33 | 39 51.32 |
| GT 11 years | 6 7.89 16.22 46.15 | 0 0.00 0.00 0.00 | 7 9.21 18.92 50.00 | 5 6.58 13.51 41.67 | 37 48.68 |
| Total | 13 17.11 | 1 1.32 | 14 18.42 | 12 15.79 | 76 100.00 |

Statistics for Table of Q06 by Q13

| Statistic | DF | Value | Prob |
|-----------------------------|----|---------|--------|
| Chi-Square | 8 | 8.1703 | 0.4170 |
| Likelihood Ratio Chi-Square | 8 | 10.2350 | 0.2489 |
| Mantel-Haenszel Chi-Square | 1 | 0.1231 | 0.7256 |
| Phi Coefficient | | 0.3279 | |
| Contingency Coefficient | | 0.3116 | |
| Cramer's V | | 0.3279 | |

WARNING: 56% of the cells have expected counts less than 5. Chi-Square may not be a valid test.
Sample Size = 76

Table of Q06 by Q14

| Frequency Percent Row Pct Col Pct | Board of directo rs | Internal audit | Accounta nt | Control I ng func tion | Self con trol of business unit | Other | Total |
|--|-------------------------------|-----------------------------|-----------------------------|------------------------------|---|------------------------------|--------------|
| LE 11 years | 10 14.08 27.03 55.56 | 1 1.41 2.70 20.00 | 5 7.04 13.51 50.00 | 4 5.63 10.81 80.00 | 9 12.68 24.32 45.00 | 8 11.27 21.62 61.54 | 37 52.11 |
| GT 11 years | 8 11.27 23.53 44.44 | 4 5.63 11.76 80.00 | 5 7.04 14.71 50.00 | 1 1.41 2.94 20.00 | 11 15.49 32.35 55.00 | 5 7.04 14.71 38.46 | 34 47.89 |
| Total | 18 25.35 | 5 7.04 | 10 14.08 | 5 7.04 | 20 28.17 | 13 18.31 | 71 100.00 |

Statistics for Table of Q06 by Q14

| Statistic | DF | Value | Prob |
|-----------|----|-------|------|
|-----------|----|-------|------|

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#####
Chi-Square 5 4.5960 0.4671
Likelihood Ratio Chi-Square 5 4.8497 0.4345
Mantel-Haenszel Chi-Square 1 0.1049 0.7460
Phi Coefficient 0.2544
Contingency Coefficient 0.2466
Cramer's V 0.2544
WARNING: 42% of the cells have expected counts less
than 5. Chi-Square may not be a valid test.
Sample Size = 71

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Table of Q06 by Q15

| Frequency | | | | | Total |
|-------------|--------------------------------------|-------------------------------------|-------|-------|--------|
| Percent | | | | | |
| Row Pct | | | | | |
| Col Pct | Risk Man, General agement, manual | Control I, Other ing manu, al | | | |
| LE 11 years | 3 | 7 | 8 | 10 | 28 |
| | 5.45 | 12.73 | 14.55 | 18.18 | 50.91 |
| | 10.71 | 25.00 | 28.57 | 35.71 | |
| | 50.00 | 46.67 | 47.06 | 58.82 | |
| GT 11 years | 3 | 8 | 9 | 7 | 27 |
| | 5.45 | 14.55 | 16.36 | 12.73 | 49.09 |
| | 11.11 | 29.63 | 33.33 | 25.93 | |
| | 50.00 | 53.33 | 52.94 | 41.18 | |
| Total | 6 | 15 | 17 | 17 | 55 |
| | 10.91 | 27.27 | 30.91 | 30.91 | 100.00 |

Statistics for Table of Q06 by Q15

| Statistic | DF | Value | Prob |
|-----------------------------|----|--------|--------|
| Chi-Square | 3 | 0.6369 | 0.8879 |
| Likelihood Ratio Chi-Square | 3 | 0.6396 | 0.8873 |
| Mantel-Haenszel Chi-Square | 1 | 0.3170 | 0.5734 |
| Phi Coefficient | | 0.1076 | |
| Contingency Coefficient | | 0.1070 | |
| Cramer's V | | 0.1076 | |

WARNING: 25% of the cells have expected counts less than 5. Chi-Square may not be a valid test.
Sample Size = 55

Table of Q06 by Q16

| Frequency Percent Row Pct Col Pct | Cash flo, w statem, ent | Balance sheet | Income s, tatment | Bank sta, tements | Departme, ntal / i, nternal reports | Other | Total |
|--|-------------------------------|------------------|----------------------|----------------------|--|-------|--------|
| LE 11 years | 10 | 4 | 2 | 2 | 9 | 8 | 35 |
| | 15.38 | 6.15 | 3.08 | 3.08 | 13.85 | 12.31 | 53.85 |
| | 28.57 | 11.43 | 5.71 | 5.71 | 25.71 | 22.86 | |
| | 52.63 | 40.00 | 66.67 | 66.67 | 52.94 | 61.54 | |
| GT 11 years | 9 | 6 | 1 | 1 | 8 | 5 | 30 |
| | 13.85 | 9.23 | 1.54 | 1.54 | 12.31 | 7.69 | 46.15 |
| | 30.00 | 20.00 | 3.33 | 3.33 | 26.67 | 16.67 | |
| | 47.37 | 60.00 | 33.33 | 33.33 | 47.06 | 38.46 | |
| Total | 19 | 10 | 3 | 3 | 17 | 13 | 65 |
| | 29.23 | 15.38 | 4.62 | 4.62 | 26.15 | 20.00 | 100.00 |

Statistics for Table of Q06 by Q16

| Statistic | DF | Value | Prob |
|-----------------------------|----|--------|--------|
| Chi-Square | 5 | 1.4947 | 0.9137 |
| Likelihood Ratio Chi-Square | 5 | 1.5074 | 0.9122 |
| Mantel-Haenszel Chi-Square | 1 | 0.3666 | 0.5449 |
| Phi Coefficient | | 0.1516 | |
| Contingency Coefficient | | 0.1499 | |
| Cramer's V | | 0.1516 | |

WARNING: 42% of the cells have expected counts less than 5. Chi-Square may not be a valid test.
Sample Size = 65

Table of Q06 by Q17

| Frequency Percent Row Pct Col Pct | Standard, office software, ware | Standard, business management software | In-house, software | Other so, ftware | Not appl, icable | Total |
|--|--|---|-----------------------|---------------------|---------------------|--------|
| LE 11 years | 6 | 8 | 7 | 1 | 14 | 36 |
| | 8.11 | 10.81 | 9.46 | 1.35 | 18.92 | 48.65 |
| | 16.67 | 22.22 | 19.44 | 2.78 | 38.89 | |
| | 30.00 | 88.89 | 63.64 | 16.67 | 50.00 | |
| GT 11 years | 14 | 1 | 4 | 5 | 14 | 38 |
| | 18.92 | 1.35 | 5.41 | 6.76 | 18.92 | 51.35 |
| | 36.84 | 2.63 | 10.53 | 13.16 | 36.84 | |
| | 70.00 | 11.11 | 36.36 | 83.33 | 50.00 | |
| Total | 20 | 9 | 11 | 6 | 28 | 74 |
| | 27.03 | 12.16 | 14.86 | 8.11 | 37.84 | 100.00 |

Statistics for Table of Q06 by Q17

| Statistic | DF | Value | Prob |
|-----------------------------|----|---------|--------|
| Chi-Square | 4 | 12.0841 | 0.0167 |
| Likelihood Ratio Chi-Square | 4 | 13.1746 | 0.0105 |
| Mantel-Haenszel Chi-Square | 1 | 0.0926 | 0.7609 |
| Phi Coefficient | | 0.4041 | |
| Contingency Coefficient | | 0.3747 | |
| Cramer's V | | 0.4041 | |

WARNING: 40% of the cells have expected counts less than 5. Chi-Square may not be a valid test.
Sample Size = 74

Table of Q06 by Q18

| Frequency | Percent | Row Pct | Col Pct | Total |
|-------------|---------|---------|---------|-------|
| LE 11 years | 26 | 47.27 | | |
| GT 11 years | 29 | 52.73 | | |
| Total | 55 | 100.00 | | |

Statistics for Table of Q06 by Q18

| Statistic | DF | Value | Prob |
|-----------------------------|----|--------|--------|
| Chi-Square | 3 | 2.4397 | 0.4863 |
| Likelihood Ratio Chi-Square | 3 | 2.4949 | 0.4762 |
| Mantel-Haenszel Chi-Square | 1 | 2.0500 | 0.1522 |
| Phi Coefficient | | 0.2106 | |
| Contingency Coefficient | | 0.2061 | |
| Cramer's V | | 0.2106 | |

WARNING: 63% of the cells have expected counts less than 5. Chi-Square may not be a valid test.
Sample Size = 55

Table of Q06 by Q19

| Frequency | Percent | Row Pct | Col Pct | Total |
|-------------|---------|---------|---------|-------|
| LE 11 years | 32 | 50.79 | | |
| GT 11 years | 31 | 49.21 | | |
| Total | 63 | 100.00 | | |

Statistics for Table of Q06 by Q19

| Statistic | DF | Value | Prob |
|-----------------------------|----|--------|--------|
| Chi-Square | 6 | 7.7502 | 0.2570 |
| Likelihood Ratio Chi-Square | 6 | 8.6532 | 0.1940 |
| Mantel-Haenszel Chi-Square | 1 | 1.0782 | 0.2991 |
| Phi Coefficient | | 0.3507 | |
| Contingency Coefficient | | 0.3310 | |
| Cramer's V | | 0.3507 | |

WARNING: 57% of the cells have expected counts less than 5. Chi-Square may not be a valid test.
Sample Size = 63

Table of Q06 by Q20

| Frequency Percent Row Pct Col Pct | Strategic risks | Reputati on risks | Legal risks | Environ mental risks | Financial risks | Total |
|--|-------------------------------|------------------------------|-----------------------------|-----------------------------|-------------------------------|--------------|
| LE 11 years | 9 13.64 25.71 45.00 | 7 10.61 20.00 53.85 | 0 0.00 0.00 100.00 | 2 3.03 5.71 100.00 | 11 16.67 31.43 61.11 | 35 53.03 |
| GT 11 years | 11 16.67 35.48 55.00 | 6 9.09 19.35 46.15 | 1 1.52 3.23 100.00 | 0 0.00 0.00 0.00 | 7 10.61 22.58 38.89 | 31 46.97 |
| Total | 20 30.30 | 13 19.70 | 1 1.52 | 2 3.03 | 18 27.27 | 66 100.00 |

(Continued)

| Frequency Percent Row Pct Col Pct | People risks | Operati onal risks | Technolo gy risks | Other risks | Total |
|--|----------------------------|-----------------------------|-----------------------------|-----------------------------|--------------|
| LE 11 years | 2 3.03 5.71 66.67 | 3 4.55 8.57 42.86 | 1 1.52 2.86 100.00 | 0 0.00 0.00 0.00 | 35 53.03 |
| GT 11 years | 1 1.52 3.23 33.33 | 4 6.06 12.90 57.14 | 0 0.00 0.00 0.00 | 1 1.52 3.23 100.00 | 31 46.97 |
| Total | 3 4.55 | 7 10.61 | 1 1.52 | 1 1.52 | 66 100.00 |

Statistics for Table of Q06 by Q20

| Statistic | DF | Value | Prob |
|-----------------------------|----|--------|--------|
| Chi-Square | 8 | 6.4232 | 0.5999 |
| Likelihood Ratio Chi-Square | 8 | 8.3457 | 0.4004 |
| Mantel-Haenszel Chi-Square | 1 | 0.2092 | 0.6474 |
| Phi Coefficient | | 0.3120 | |
| Contingency Coefficient | | 0.2978 | |
| Cramer's V | | 0.3120 | |

WARNING: 67% of the cells have expected counts less than 5. Chi-Square may not be a valid test.
Sample Size = 66

Table of Q06 by Q21

| Frequency Percent Row Pct Col Pct | Risk assessment matrix | assess, The Chart pa, radi gma | Other | Total |
|--|-------------------------------|--------------------------------------|------------------------------|--------------|
| LE 11 years | 3 7.89 15.79 20.00 | 7 18.42 36.84 87.50 | 9 23.68 47.37 60.00 | 19 50.00 |
| GT 11 years | 12 31.58 63.16 80.00 | 1 2.63 5.26 12.50 | 6 15.79 31.58 40.00 | 19 50.00 |
| Total | 15 39.47 | 8 21.05 | 15 39.47 | 38 100.00 |

Statistics for Table of Q06 by Q21

| Statistic | DF | Value | Prob |
|-----------------------------|----|---------|--------|
| Chi-Square | 2 | 10.5000 | 0.0052 |
| Likelihood Ratio Chi-Square | 2 | 11.4484 | 0.0033 |
| Mantel-Haenszel Chi-Square | 1 | 4.6737 | 0.0306 |
| Phi Coefficient | | 0.5257 | |
| Contingency Coefficient | | 0.4653 | |
| Cramer's V | | 0.5257 | |

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.
Sample Size = 38

Table of Q06 by Q22

| Frequency Percent Row Pct Col Pct | Every year | Every 6 months | Every 3 months | Every month | Other | Not applicable | Total |
|--|------------------------------|------------------------------|-----------------------------|-------------------------------|----------------------------|-----------------------------|--------------|
| LE 11 years | 6 8.70 17.14 40.00 | 6 8.70 17.14 46.15 | 5 7.25 14.29 50.00 | 10 14.49 28.57 55.56 | 3 4.35 8.57 60.00 | 5 7.25 14.29 62.50 | 35 50.72 |
| GT 11 years | 9 13.04 26.47 60.00 | 7 10.14 20.59 53.85 | 5 7.25 14.71 50.00 | 8 11.59 23.53 44.44 | 2 2.90 5.88 40.00 | 3 4.35 8.82 37.50 | 34 49.28 |
| Total | 15 21.74 | 13 18.84 | 10 14.49 | 18 26.09 | 5 7.25 | 8 11.59 | 69 100.00 |

Statistics for Table of Q06 by Q22

| Statistic | DF | Value | Prob |
|-----------------------------|----|--------|--------|
| Chi-Square | 5 | 1.5850 | 0.9031 |
| Likelihood Ratio Chi-Square | 5 | 1.5960 | 0.9017 |
| Mantel-Haenszel Chi-Square | 1 | 1.5428 | 0.2142 |
| Phi Coefficient | | 0.1516 | |
| Contingency Coefficient | | 0.1498 | |
| Cramer's V | | 0.1516 | |

WARNING: 42% of the cells have expected counts less than 5. Chi-Square may not be a valid test.
Sample Size = 69

Table of Q06 by Q23

| Frequency Percent Row Pct Col Pct | Risk avoidance | Risk sharing | Risk treatment plan | Crisis response management planning | Other tools used | Total |
|--|-------------------------------|-----------------------------|-----------------------------|-------------------------------------|------------------------------|--------------|
| LE 11 years | 14 25.93 53.85 46.67 | 5 9.26 19.23 62.50 | 5 9.26 19.23 55.56 | 2 3.70 7.69 50.00 | 0 0.00 0.00 0.00 | 26 48.15 |
| GT 11 years | 16 29.63 57.14 53.33 | 3 5.56 10.71 37.50 | 4 7.41 14.29 44.44 | 2 3.70 7.14 50.00 | 3 5.56 10.71 100.00 | 28 51.85 |
| Total | 30 55.56 | 8 14.81 | 9 16.67 | 4 7.41 | 3 5.56 | 54 100.00 |

Statistics for Table of Q06 by Q23

| Statistic | DF | Value | Prob |
|-----------------------------|----|--------|--------|
| Chi-Square | 4 | 3.6754 | 0.4517 |
| Likelihood Ratio Chi-Square | 4 | 4.8349 | 0.3047 |
| Mantel-Haenszel Chi-Square | 1 | 0.4547 | 0.5001 |
| Phi Coefficient | | 0.2609 | |
| Contingency Coefficient | | 0.2524 | |
| Cramer's V | | 0.2609 | |

WARNING: 80% of the cells have expected counts less than 5. Chi-Square may not be a valid test.
Sample Size = 54

Table of Q06 by Q24

| Frequency Percent Row Pct Col Pct | 1 year | 2 years | 5 years | Open | Not applicable | Total |
|--|-------------------------------|-----------------------------|----------------------------|------------------------------|-------------------------------|--------------|
| LE 11 years | 14 21.54 43.75 50.00 | 0 0.00 0.00 0.00 | 1 1.54 3.13 33.33 | 6 9.23 18.75 42.86 | 11 16.92 34.38 57.89 | 32 49.23 |
| GT 11 years | 14 21.54 42.42 50.00 | 1 1.54 3.03 100.00 | 2 3.08 6.06 66.67 | 8 12.31 24.24 57.14 | 8 12.31 24.24 42.11 | 33 50.77 |
| Total | 28 43.08 | 1 1.54 | 3 4.62 | 14 21.54 | 19 29.23 | 65 100.00 |

Statistics for Table of Q06 by Q24

| Statistic | DF | Value | Prob |
|-----------------------------|----|--------|--------|
| Chi-Square | 4 | 2.0778 | 0.7214 |
| Likelihood Ratio Chi-Square | 4 | 2.4731 | 0.6495 |
| Mantel-Haenszel Chi-Square | 1 | 0.0900 | 0.7642 |
| Phi Coefficient | | 0.1788 | |
| Contingency Coefficient | | 0.1760 | |
| Cramer's V | | 0.1788 | |

WARNING: 40% of the cells have expected counts less than 5. Chi-Square may not be a valid test.
Sample Size = 65

Table of Q06 by Q25

| Frequency | Percent | Row Pct | Col Pct | Total |
|-------------|---------|---------|--|--------|
| | | | Separate, Risk rep, Other re, risk re, orting i, porting, porting, s part o, f genera, l report, ing | |
| LE 11 years | 5 | 22 | 1 | 28 |
| | 8.77 | 38.60 | 1.75 | 49.12 |
| | 17.86 | 78.57 | 3.57 | |
| | 35.71 | 55.00 | 33.33 | |
| GT 11 years | 9 | 18 | 2 | 29 |
| | 15.79 | 31.58 | 3.51 | 50.88 |
| | 31.03 | 62.07 | 6.90 | |
| | 64.29 | 45.00 | 66.67 | |
| Total | 14 | 40 | 3 | 57 |
| | 24.56 | 70.18 | 5.26 | 100.00 |

Statistics for Table of Q06 by Q25

| Statistic | DF | Value | Prob |
|-----------------------------|----|--------|--------|
| Chi-Square | 2 | 1.8592 | 0.3947 |
| Likelihood Ratio Chi-Square | 2 | 1.8819 | 0.3903 |
| Mantel-Haenszel Chi-Square | 1 | 0.5205 | 0.4706 |
| Phi Coefficient | | 0.1806 | |
| Contingency Coefficient | | 0.1777 | |
| Cramer's V | | 0.1806 | |

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.
Sample Size = 57

Table of Q06 by Q26

| Frequency | Percent | Row Pct | Col Pct | Total |
|-------------|---------|---------|--|--------|
| | | | Risk Reg, Risk man, Risk pro, Other, i ster, agement, file, plan | |
| LE 11 years | 3 | 10 | 5 | 24 |
| | 6.52 | 21.74 | 10.87 | 52.17 |
| | 12.50 | 41.67 | 20.83 | |
| | 27.27 | 66.67 | 71.43 | |
| GT 11 years | 8 | 5 | 2 | 22 |
| | 17.39 | 10.87 | 4.35 | 47.83 |
| | 36.36 | 22.73 | 9.09 | |
| | 72.73 | 33.33 | 28.57 | |
| Total | 11 | 15 | 7 | 46 |
| | 23.91 | 32.61 | 15.22 | 100.00 |

Statistics for Table of Q06 by Q26

| Statistic | DF | Value | Prob |
|-----------------------------|----|--------|--------|
| Chi-Square | 3 | 5.2250 | 0.1560 |
| Likelihood Ratio Chi-Square | 3 | 5.3756 | 0.1463 |
| Mantel-Haenszel Chi-Square | 1 | 0.4192 | 0.5174 |
| Phi Coefficient | | 0.3370 | |
| Contingency Coefficient | | 0.3194 | |
| Cramer's V | | 0.3370 | |

WARNING: 25% of the cells have expected counts less than 5. Chi-Square may not be a valid test.
Sample Size = 46

Table of Q06 by Q27_1

| Frequency | Percent | Row Pct | Col Pct | Yes | No | Total |
|-------------|---------|---------|---------|-------|-------|--------|
| LE 11 years | 6 | 26 | 32 | 9.68 | 41.94 | 51.61 |
| | 18.75 | 81.25 | | 37.50 | 56.52 | |
| GT 11 years | 10 | 20 | 30 | 16.13 | 32.26 | 48.39 |
| | 33.33 | 66.67 | | 62.50 | 43.48 | |
| Total | 16 | 46 | 62 | 25.81 | 74.19 | 100.00 |

Statistics for Table of Q06 by Q27_1

| Statistic | DF | Value | Prob |
|-----------------------------|----|---------|--------|
| Chi-Square | 1 | 1.7199 | 0.1897 |
| Likelihood Ratio Chi-Square | 1 | 1.7310 | 0.1883 |
| Continuity Adj. Chi-Square | 1 | 1.0425 | 0.3072 |
| Mantel-Haenszel Chi-Square | 1 | 1.6921 | 0.1933 |
| Phi Coefficient | | -0.1666 | |
| Contingency Coefficient | | 0.1643 | |
| Cramer's V | | -0.1666 | |

Sample Size = 62

Table of Q06 by Q27_2

| Frequency | Percent | Row Pct | Col Pct | Yes | No | Total |
|-------------|---------|---------|---------|-------|-------|--------|
| LE 11 years | 10 | 22 | 32 | 16.39 | 36.07 | 52.46 |
| | 31.25 | 68.75 | | 43.48 | 57.89 | |
| GT 11 years | 13 | 16 | 29 | 21.31 | 26.23 | 47.54 |
| | 44.83 | 55.17 | | 56.52 | 42.11 | |
| Total | 23 | 38 | 61 | 37.70 | 62.30 | 100.00 |

Statistics for Table of Q06 by Q27_2

| Statistic | DF | Value | Prob |
|-----------------------------|----|---------|--------|
| Chi-Square | 1 | 1.1940 | 0.2745 |
| Likelihood Ratio Chi-Square | 1 | 1.1962 | 0.2741 |
| Continuity Adj. Chi-Square | 1 | 0.6859 | 0.4076 |
| Mantel-Haenszel Chi-Square | 1 | 1.1744 | 0.2785 |
| Phi Coefficient | | -0.1399 | |
| Contingency Coefficient | | 0.1386 | |
| Cramer's V | | -0.1399 | |

Sample Size = 61

Table of Q06 by Q27_3

| Frequency | Percent | Row Pct | Col Pct | Yes | No | Total |
|-------------|---------|---------|---------|-------|-------|--------|
| LE 11 years | 4 | 28 | 32 | 6.56 | 45.90 | 52.46 |
| | 12.50 | 87.50 | | 33.33 | 57.14 | |
| GT 11 years | 8 | 21 | 29 | 13.11 | 34.43 | 47.54 |
| | 27.59 | 72.41 | | 66.67 | 42.86 | |
| Total | 12 | 49 | 61 | 19.67 | 80.33 | 100.00 |

Statistics for Table of Q06 by Q27_3

| Statistic | DF | Value | Prob |
|-----------------------------|----|---------|--------|
| Chi-Square | 1 | 2.1911 | 0.1388 |
| Likelihood Ratio Chi-Square | 1 | 2.2150 | 0.1367 |
| Continuity Adj. Chi-Square | 1 | 1.3404 | 0.2470 |
| Mantel-Haenszel Chi-Square | 1 | 2.1552 | 0.1421 |
| Phi Coefficient | | -0.1895 | |
| Contingency Coefficient | | 0.1862 | |
| Cramer's V | | -0.1895 | |

Sample Size = 61

Table of Q06 by Q27_4

| Frequency | Percent | Row Pct | Col Pct | Yes | No | Total |
|-------------|---------|---------|---------|-------|-------|--------|
| LE 11 years | 7 | 25 | 32 | 11.67 | 41.67 | 53.33 |
| | 21.88 | 78.13 | | 41.18 | 58.14 | |
| GT 11 years | 10 | 18 | 28 | 16.67 | 30.00 | 46.67 |
| | 35.71 | 64.29 | | 58.82 | 41.86 | |
| Total | 17 | 43 | 60 | 28.33 | 71.67 | 100.00 |

Statistics for Table of Q06 by Q27_4

| Statistic | DF | Value | Prob |
|------------|----|--------|--------|
| Chi-Square | 1 | 1.4085 | 0.2353 |

Likelihood Ratio Chi-Square 1 1.4100 0.2351
 Continuity Adj. Chi-Square 1 0.8094 0.3683
 Mantel-Haenszel Chi-Square 1 1.3851 0.2392
 Phi Coefficient -0.1532
 Contingency Coefficient 0.1515
 Cramer's V -0.1532

Sample Size = 60

Table of Q06 by Q27_5

| Frequency | Percent | Row Pct | Col Pct | Yes | No | Total |
|-------------|---------|---------|---------|-----|----|-------|
| LE 11 years | 16.39 | 31.25 | 62.50 | 10 | 22 | 32 |
| GT 11 years | 9.84 | 20.69 | 37.50 | 6 | 23 | 29 |
| Total | 26.23 | 73.77 | 100.00 | 16 | 45 | 61 |

Statistics for Table of Q06 by Q27_5
 Chi-Square 1 0.8768 0.3491
 Likelihood Ratio Chi-Square 1 0.8853 0.3468
 Continuity Adj. Chi-Square 1 0.4160 0.5190
 Mantel-Haenszel Chi-Square 1 0.8624 0.3531
 Phi Coefficient 0.1199
 Contingency Coefficient 0.1190
 Cramer's V 0.1199

Sample Size = 61

Table of Q06 by Q27_6

| Frequency | Percent | Row Pct | Col Pct | Yes | No | Total |
|-------------|---------|---------|---------|-----|----|-------|
| LE 11 years | 32.20 | 59.38 | 57.58 | 19 | 13 | 32 |
| GT 11 years | 23.73 | 51.85 | 42.42 | 14 | 13 | 27 |
| Total | 55.93 | 44.07 | 100.00 | 33 | 26 | 59 |

Statistics for Table of Q06 by Q27_6
 Chi-Square 1 0.3363 0.5620
 Likelihood Ratio Chi-Square 1 0.3363 0.5620
 Continuity Adj. Chi-Square 1 0.1003 0.7515
 Mantel-Haenszel Chi-Square 1 0.3306 0.5653
 Phi Coefficient 0.0755
 Contingency Coefficient 0.0753
 Cramer's V 0.0755

Sample Size = 59

Table of Q06 by Q27_7

| Frequency | Percent | Row Pct | Col Pct | Yes | No | Total |
|-------------|---------|---------|---------|-----|----|-------|
| LE 11 years | 33.33 | 62.50 | 52.63 | 20 | 12 | 32 |
| GT 11 years | 30.00 | 64.29 | 47.37 | 18 | 10 | 28 |
| Total | 63.33 | 36.67 | 100.00 | 38 | 22 | 60 |

Statistics for Table of Q06 by Q27_7
 Chi-Square 1 0.0205 0.8861
 Likelihood Ratio Chi-Square 1 0.0205 0.8861
 Continuity Adj. Chi-Square 1 0.0000 1.0000
 Mantel-Haenszel Chi-Square 1 0.0202 0.8871
 Phi Coefficient -0.0185
 Contingency Coefficient 0.0185
 Cramer's V -0.0185

Sample Size = 60

Table of Q06 by Q27_8

| Frequency | Percent | Row Pct | Col Pct | Yes | No | Total |
|-------------|---------|---------|---------|-----|----|-------|
| LE 11 years | 32.79 | 62.50 | 57.14 | 20 | 12 | 32 |
| GT 11 years | 24.59 | 47.52 | 24.59 | 15 | 14 | 29 |
| Total | 57.38 | 55.02 | 100.00 | 35 | 26 | 61 |

| | | | |
|-------|-------|-------|--------|
| | 51.72 | 48.28 | |
| | 42.86 | 53.85 | |
| Total | 35 | 26 | 61 |
| | 57.38 | 42.62 | 100.00 |

Statistics for Table of Q06 by Q27_8

| Statistic | DF | Value | Prob |
|-----------------------------|----|--------|--------|
| Chi-Square | 1 | 0.7223 | 0.3954 |
| Likelihood Ratio Chi-Square | 1 | 0.7231 | 0.3951 |
| Continuity Adj. Chi-Square | 1 | 0.3489 | 0.5547 |
| Mantel-Haenszel Chi-Square | 1 | 0.7105 | 0.3993 |
| Phi Coefficient | | 0.1088 | |
| Contingency Coefficient | | 0.1082 | |
| Cramer's V | | 0.1088 | |

Sample Size = 61

Table of Q06 by Q27_9

| Frequency | Percent | Row Pct | Col Pct | Yes | No | Total |
|-------------|---------|---------|---------|-------|-------|--------|
| LE 11 years | 16 | 16 | 32 | 26.67 | 26.67 | 53.33 |
| | 50.00 | 50.00 | | 48.48 | 59.26 | |
| GT 11 years | 17 | 11 | 28 | 28.33 | 18.33 | 46.67 |
| | 60.71 | 39.29 | | 51.52 | 40.74 | |
| Total | 33 | 27 | 60 | 55.00 | 45.00 | 100.00 |

Statistics for Table of Q06 by Q27_9

| Statistic | DF | Value | Prob |
|-----------------------------|----|---------|--------|
| Chi-Square | 1 | 0.6926 | 0.4053 |
| Likelihood Ratio Chi-Square | 1 | 0.6947 | 0.4046 |
| Continuity Adj. Chi-Square | 1 | 0.3274 | 0.5672 |
| Mantel-Haenszel Chi-Square | 1 | 0.6811 | 0.4092 |
| Phi Coefficient | | -0.1074 | |
| Contingency Coefficient | | 0.1068 | |
| Cramer's V | | -0.1074 | |

Sample Size = 60

ANNEXURE H

Table 5. 2: Descriptive statistics for variables with respect to risk management

| Variables | Categories | Frequency | Percentage out of total |
|--|-----------------------|-----------|-------------------------|
| Section B: Personal Identification | | | |
| 1. What position do you hold in the firm? | Entrepreneur | 5 | 5.7% |
| | Manager | 54 | 61.4% |
| | Owner-Manager | 16 | 18.2% |
| | Other | 13 | 14.8% |
| 2. What is your highest academic qualification? | < Grade 12 | 3 | 3.4% |
| | Grade 12 | 28 | 31.8% |
| | Grade 12 & Dipl./Cert | 23 | 26.1% |
| | Undergraduate degrees | 17 | 19.3% |
| | Postgraduate degree | 16 | 18.2% |
| | Doctorate | 0 | 0.0% |
| | Unknown | 1 | 1.1% |
| Section C: Business Identification | | | |
| 4. In what industry does your business fall? | Food and Beverage | 8 | 9.1% |
| | Clothing | 20 | 22.7% |
| | Textile | 3 | 3.4% |
| | Computer | 4 | 4.6% |
| | Other | 52 | 59.1% |
| | Unknown | 1 | 1.1% |
| Section D: General knowledge with regards to Risk Management | | | |
| 7. How would you rate your understanding of risk management? | Very Good | 26 | 29.6% |
| | Good | 44 | 50.0% |
| | Barely acceptable | 5 | 5.7% |
| | Poor | 6 | 6.8% |
| | Very poor | 3 | 3.4% |
| | Do not know | 4 | 4.6% |
| 8. How would you rate the importance of risk management within a small business? | Highly important | 37 | 42.0% |
| | Important | 33 | 37.5% |
| | Not very important | 4 | 4.6% |
| | Of no importance | 2 | 2.3% |

| Variables | Categories | Frequency | Percentage out of total |
|--|---------------------|-----------|-------------------------|
| | Unsure | 7 | 8.0% |
| | Do not know | 3 | 3.4% |
| | Unknown | 2 | 2.3% |
| 9. To what extent can Risk Management participate towards a business growth and sustainability? | To a great extent | 57 | 64.8% |
| | Somewhat | 15 | 17.0% |
| | Very little | 2 | 2.3% |
| | Not at all | 3 | 3.4% |
| | Unsure | 6 | 6.8% |
| | Do not know | 4 | 4.6% |
| | Unknown | 1 | 1.1% |
| 10. According to your knowledge ERM is a framework for RM? | Strongly agree | 14 | 15.9% |
| | Agree | 34 | 38.6% |
| | Tend to agree | 13 | 14.8% |
| | Tend to disagree | 2 | 2.3% |
| | Disagree | 0 | 0.0% |
| | Disagree strongly | 0 | 0.0% |
| | Unsure | 9 | 10.2% |
| | Do not know | 11 | 12.5% |
| | Unknown | 5 | 5.7% |
| 11. According to your knowledge RM when well implemented and monitored always keep enterprises from failure? | Strongly agree | 10 | 11.4% |
| | Agree | 51 | 58.0% |
| | Disagree | 11 | 12.5% |
| | Strongly disagree | 0 | 0.0% |
| | Unsure | 9 | 10.2% |
| | Do not know | 6 | 6.8% |
| | Unknown | 1 | 1.1% |
| 12. According to your knowledge do you think that RM could improve any business performances? | Definitely | 22 | 25.0% |
| | Very probably | 25 | 28.4% |
| | Probably | 22 | 25.0% |
| | Possibly | 14 | 15.9% |
| | Probably not | 0 | 0.0% |
| | Very definitely not | 0 | 0.0% |
| | Unsure | 0 | 0.0% |

| Variables | Categories | Frequency | Percentage out of total |
|---|-------------------------------|------------------|--------------------------------|
| | Do not know | 4 | 4.6% |
| | Unknown | 1 | 1.1% |
| Section E: RM in your business | | | |
| 13. Who is responsible for your risk management? | Board of directors | 21 | 23.9% |
| | Internal audit | 3 | 3.4% |
| | Designated risk manager | 4 | 4.6% |
| | Head of accounting function | 6 | 6.8% |
| | Controlling function | 0 | 0.0% |
| | Staff of business unit | 5 | 5.7% |
| | Management alone | 13 | 14.8% |
| | Designated employees | 1 | 1.1% |
| | Yourself | 16 | 18.2% |
| | Other | 13 | 14.8% |
| | Unknown | 6 | 6.8% |
| 14. Who supervises and reviews your risk management process? | Board of directors | 19 | 21.6% |
| | Internal audit | 7 | 8.0% |
| | Accountant | 10 | 11.4% |
| | Controlling function | 5 | 5.7% |
| | Staff of business unit | 22 | 25.0% |
| | Other | 14 | 15.9% |
| | Unknown | 11 | 12.5% |
| 15. How are the practices of your risk management circulated? | Risk management manual | 6 | 6.8% |
| | General Manual | 16 | 18.2% |
| | Controlling manual | 18 | 20.4% |
| | Other | 20 | 22.7% |
| | Unknown | 28 | 31.8% |
| 16. Where do you get the information from to risk manage? | Cash flow statement | 20 | 22.7% |
| | Balance sheet | 10 | 11.4% |
| | Income statement | 3 | 3.4% |
| | Bank statements | 3 | 3.4% |
| | Departmental internal reports | 18 | 20.4% |
| | Other | 15 | 17.0% |

| Variables | Categories | Frequency | Percentage out of total |
|--|---|------------------|--------------------------------|
| | Unknown | 19 | 21.6% |
| 17. Which kind of software do you use for risk management? | Standard office software | 21 | 23.8% |
| | Standard business management software | 9 | 10.2% |
| | Special RM software | 0 | 0.0% |
| | In-house software | 11 | 12.5% |
| | Other software | 6 | 6.8% |
| | Not applicable | 31 | 35.2% |
| | Unknown | 10 | 11.4% |
| 18. Which amount of investment in rand do you plan for your risk management? | No investment planned | 31 | 35.2% |
| | < R20000 | 11 | 12.5% |
| | R20000-R50000 | 7 | 8.0% |
| | >R50000 | 10 | 11.4% |
| | Unknown | 29 | 33.0% |
| 19. What do you use to identify risk? | Incident registers | 12 | 13.6% |
| | Customer complaints | 25 | 28.4% |
| | Audit reports | 11 | 12.5% |
| | SWOT analysis | 5 | 5.7% |
| | Brainstorming | 9 | 10.2% |
| | Risk questionnaires and risk surveys. | 0 | 0.0% |
| | Using technology | 3 | 3.4% |
| | Other techniques | 3 | 3.4% |
| | Unknown | 20 | 22.7% |
| | 20. In which categories do you evaluate risk? | Strategic risks | 21 |
| Reputation risks | | 14 | 15.9% |
| Legal risks | | 1 | 1.1% |
| Environmental and ethical risks | | 2 | 2.3% |
| Financial risks | | 18 | 20.4% |
| People risks | | 4 | 4.6% |
| Operational risks | | 7 | 8.0% |
| Safety risks | | 0 | 0.0% |

| Variables | Categories | Frequency | Percentage out of total |
|---|---|------------------|--------------------------------|
| | Technology risks | 1 | 1.1% |
| | Other | 3 | 3.4% |
| | Unknown | 17 | 19.3% |
| 21. What tool or activities do you use to determine your risk appetite? | Risk assessment matrix | 16 | 18.2% |
| | The Bar Chart paradigm | 8 | 9.1% |
| | Other | 17 | 19.3% |
| | Unknown | 47 | 53.4% |
| 22. How often are risks identified and evaluated? | Every year | 15 | 17.0% |
| | Every 6 months | 13 | 14.8% |
| | Every 3 months | 10 | 11.4% |
| | Every month | 19 | 21.6% |
| | Other | 5 | 5.7% |
| | Not applicable | 12 | 13.6% |
| | Unknown | 14 | 15.9% |
| 23. What tools or activities do you use to treat your enterprise risks? | Risk avoidance | 31 | 35.2% |
| | Risk sharing | 8 | 9.1% |
| | Risk treatment plan | 9 | 10.2% |
| | Crisis or emergency management planning | 4 | 4.6% |
| | Other | 4 | 4.6% |
| | Unknown | 32 | 36.4% |
| 24. What time horizon is considered when risks are reviewed? | 1 year | 28 | 31.8% |
| | 2 years | 1 | 1.1% |
| | 3 years | 0 | 0.0% |
| | 5 years | 3 | 3.4% |
| | Open | 14 | 15.9% |
| | Not applicable | 23 | 26.1% |
| | Unknown | 19 | 21.6% |
| 25. How do you get informed about risks? | Separate risk reporting | 15 | 17.0% |
| | Risk reporting is part of general reporting | 40 | 45.4% |
| | Other reporting | 6 | 6.8% |
| | Unknown | 27 | 30.7% |

| Variables | Categories | Frequency | Percentage out of total |
|--|----------------------|------------------|--------------------------------|
| 26. In what document do you record risks? | Risk register | 12 | 13.6% |
| | Risk management plan | 15 | 17.0% |
| | Risk profile | 7 | 8.0% |
| | Other | 15 | 17.0% |
| | Unknown | 39 | 44.3% |
| 27.1 Risk policies and/or mission statement are established. | Yes | 17 | 19.3% |
| | No | 39 | 44.3% |
| | Unknown | 32 | 36.4% |
| 27.2 A risk strategy for the organisation is established. | Yes | 24 | 27.3% |
| | No | 30 | 34.1% |
| | Unknown | 34 | 38.6% |
| 27.3 An adopted or developed common risk language | Yes | 13 | 14.8% |
| | No | 41 | 46.6% |
| | Unknown | 34 | 38.6% |
| 27.4 An adopted or developed risk framework. | Yes | 18 | 20.4% |
| | No | 35 | 39.8% |
| | Unknown | 35 | 39.8% |
| 27.5 A risk appetite is set. | Yes | 17 | 19.3% |
| | No | 37 | 42.0% |
| | Unknown | 34 | 38.6% |
| 27.6 Individual risks are proactively identified, categorised and prioritised before being assessed. | Yes | 34 | 38.6% |
| | No | 20 | 22.7% |
| | Unknown | 34 | 38.6% |
| 27.7 The process is reported monitored and kept up to date. | Yes | 39 | 44.3% |
| | No | 19 | 21.6% |
| | Unknown | 30 | 34.0% |
| 27.8 Risk management is included in key employees' job descriptions. | Yes | 36 | 40.9% |
| | No | 24 | 27.3% |
| | Unknown | 28 | 31.8% |
| 27.9 Risk management is included in the budgeting function. | Yes | 34 | 38.6% |
| | No | 21 | 23.9% |
| | Unknown | 33 | 37.5% |

ANNEXURE I

PERSONAL INFORMATION

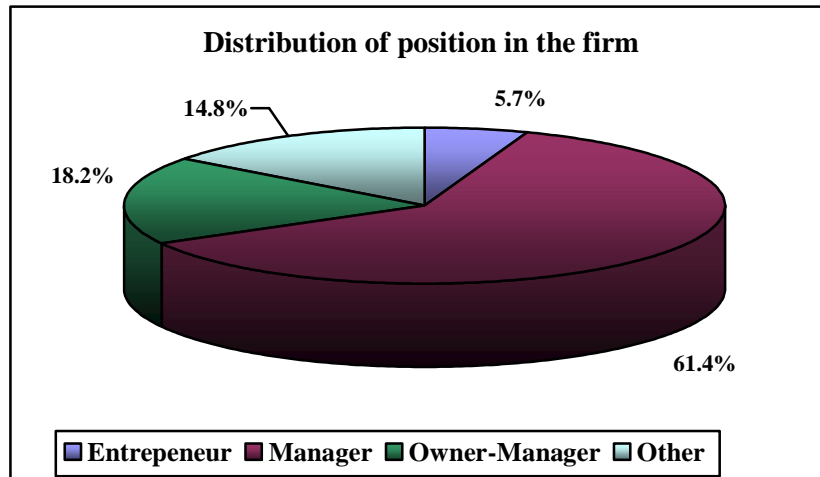


Figure 5.4: Distribution of “Position in firm”.

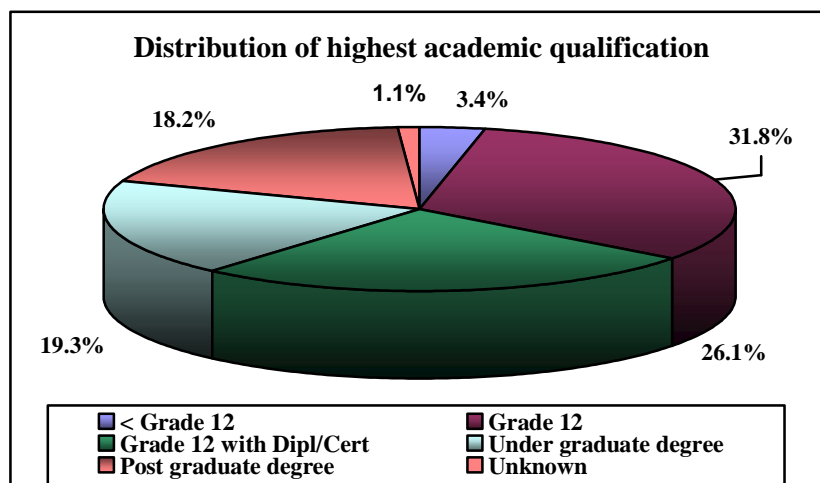


Figure 5.5: Distribution of “Highest academic qualification”

BUSINESS IDENTIFICATION

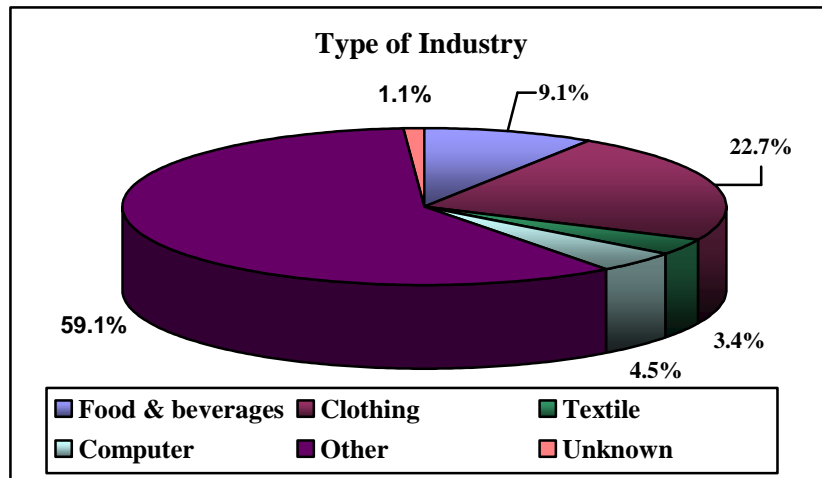


Figure 5.6: Type of Industry

GENERAL KNOWLEDGE REGARDING RM

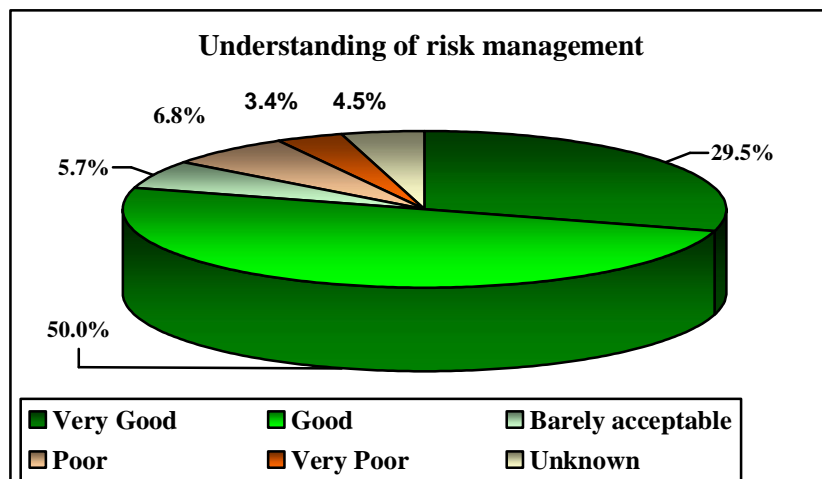


Figure 5.7: Understanding of risk management.

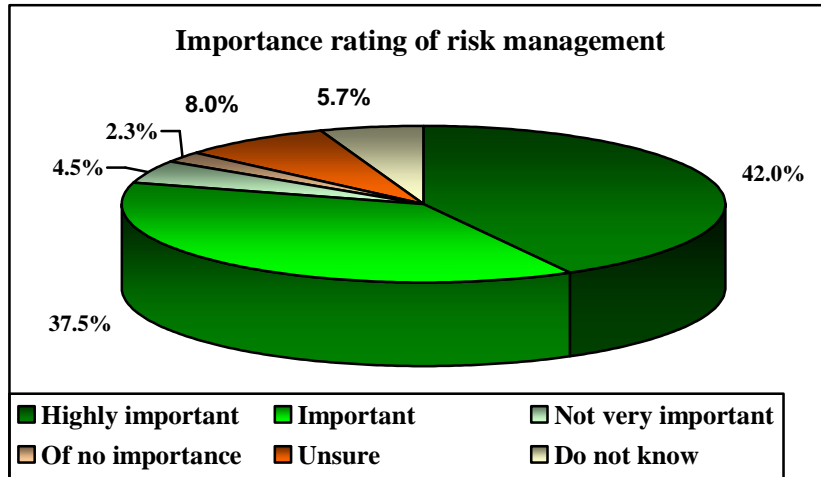


Figure 5.8: Importance of risk management.

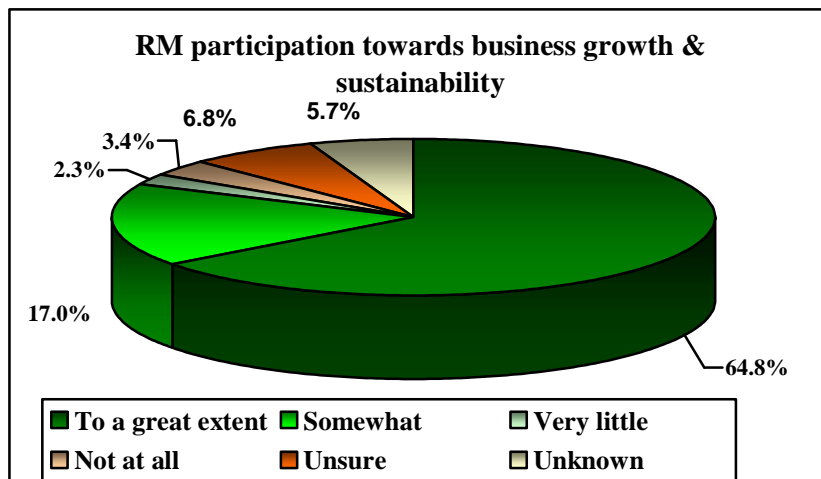


Figure 5.9: Understanding of risk management.

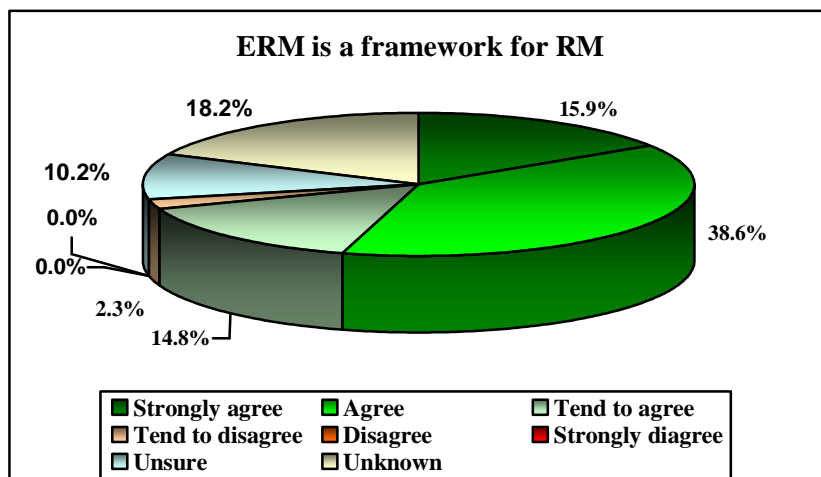


Figure 5.10: “ERM as a framework for RM”.

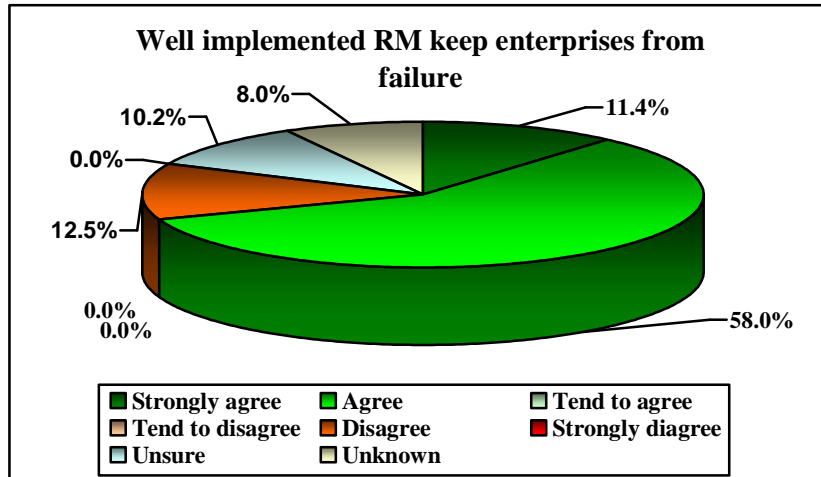


Figure 5.11: “Well implemented RM”.

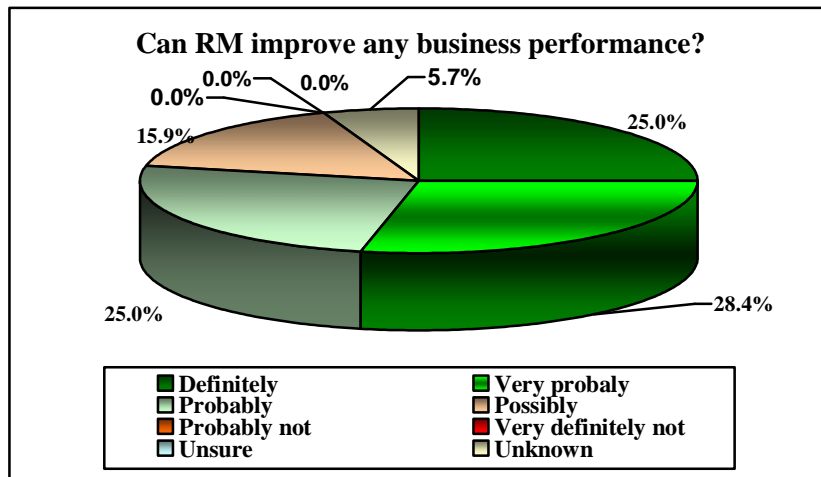


Figure 5.12: “Can RM improve any business performance?”

RISK MANAGEMENT IN YOUR BUSINESS

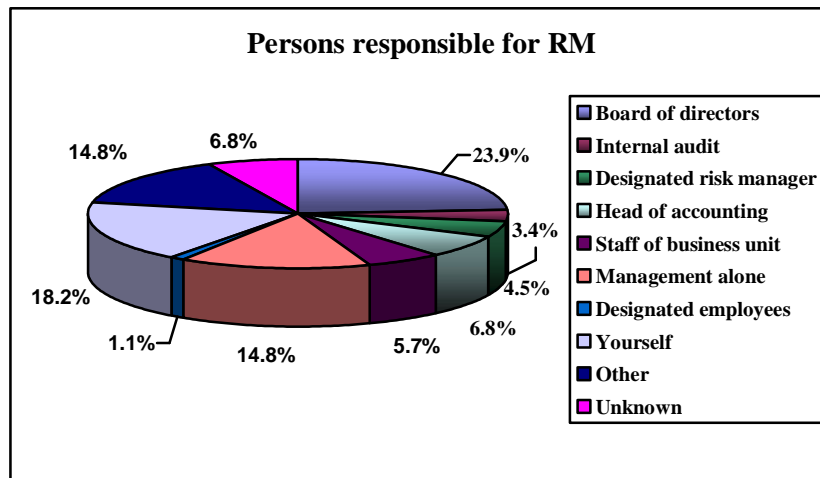


Figure 5.13: Persons responsible for RM.

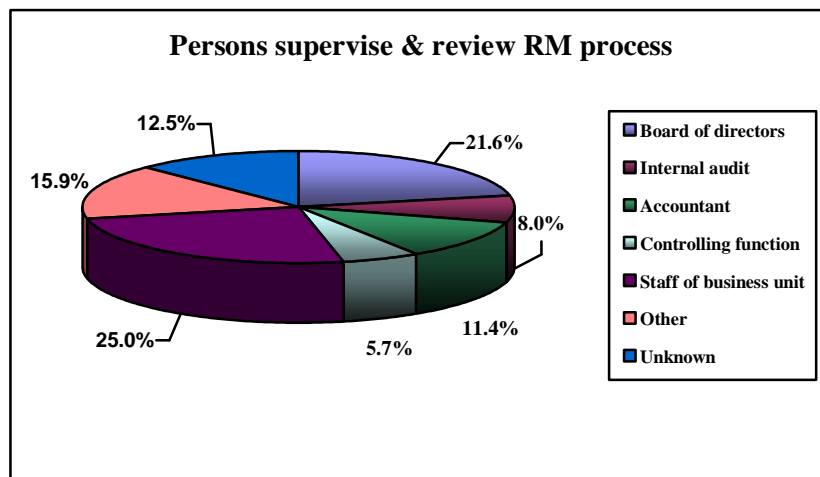


Figure 5.14: Persons who supervise and review RM process.

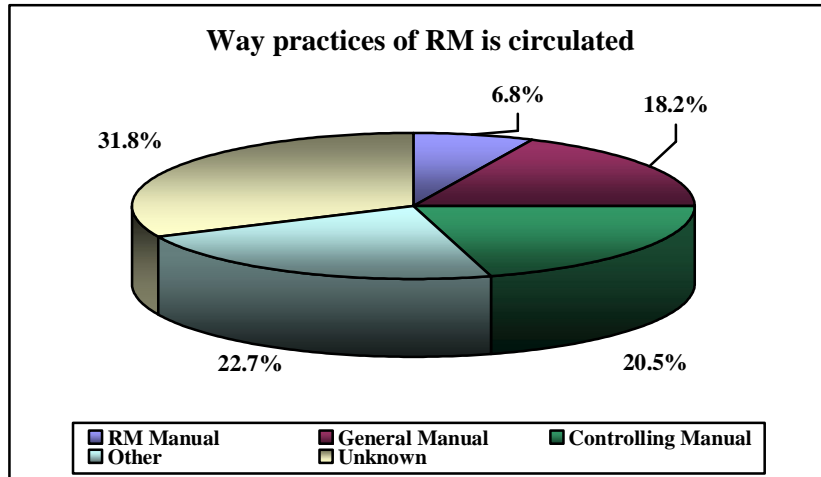


Figure 5.15: The way practices of RM is circulated.

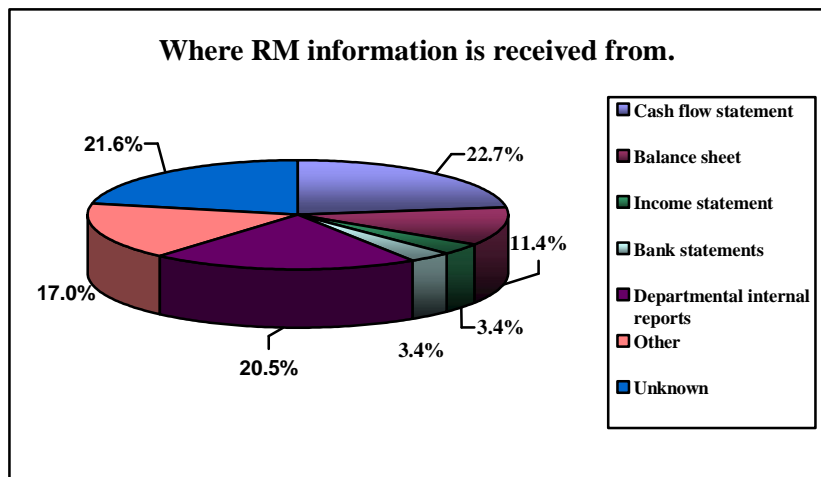


Figure 5.16: Where RM information is received from.

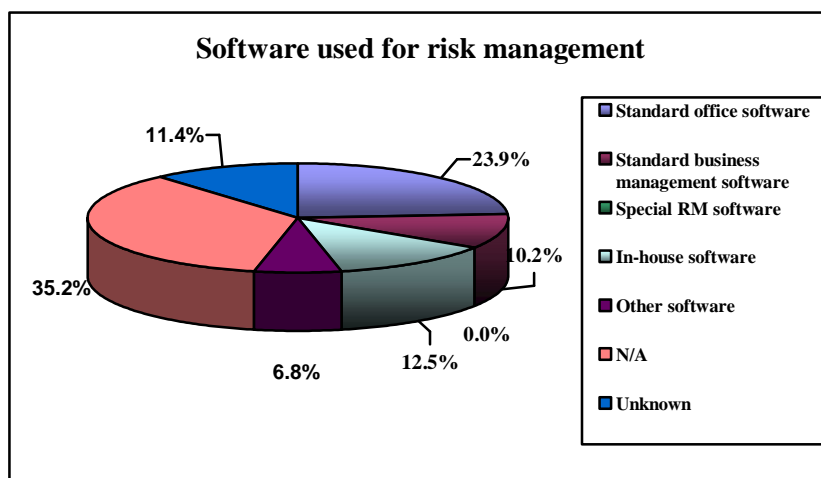


Figure 5. 17: Software used for risk management.

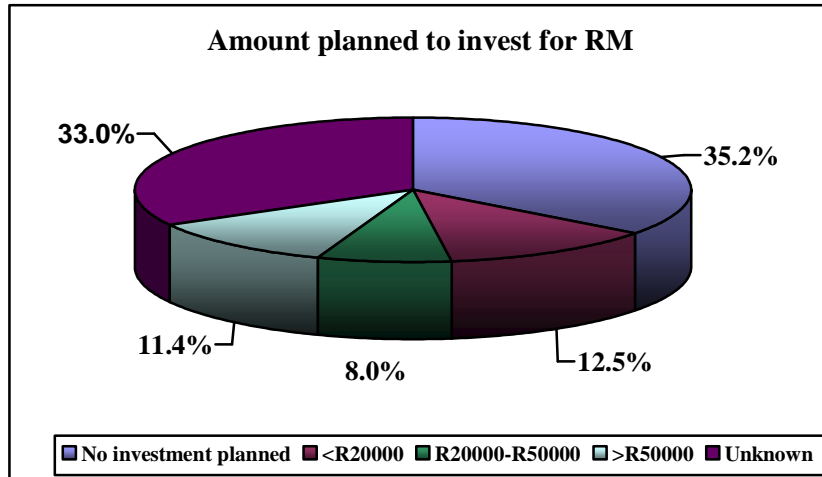


Figure 5.18: Amount planned to invest for RM.

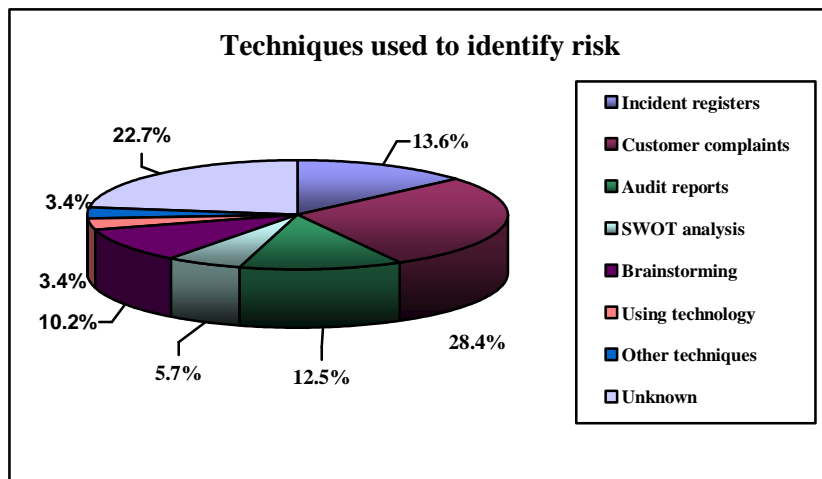


Figure 5.19: Techniques used to identify risk.

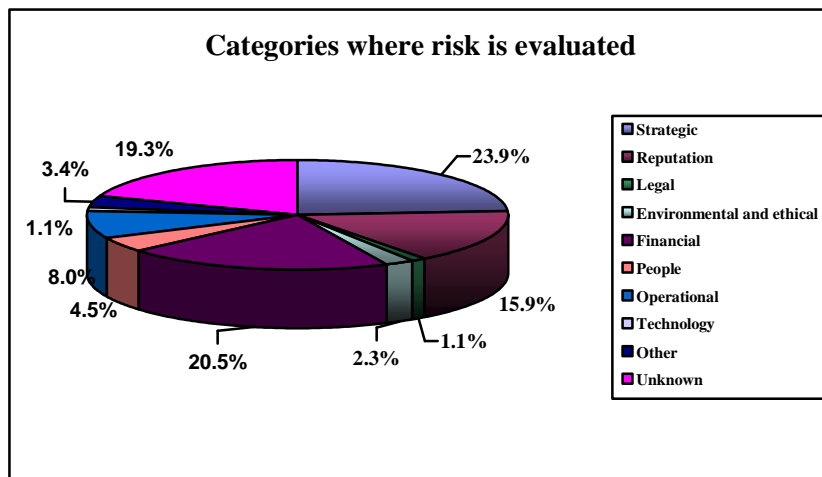


Figure 5.20: Categories where risk is evaluated.

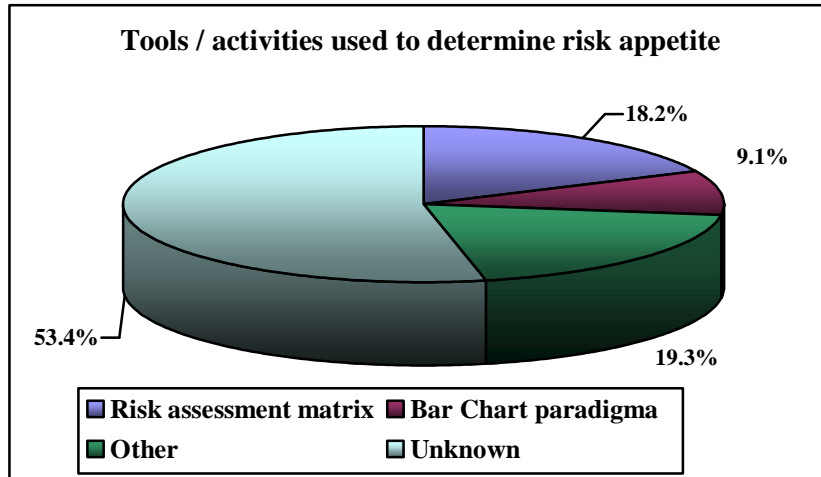


Figure 5.21: Number of tools / activities used to determine risk appetite.

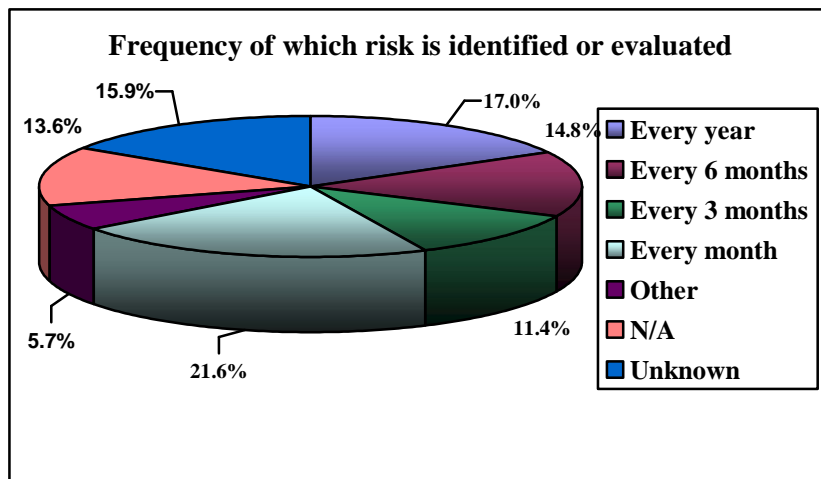


Figure 5.22: Number of the frequency of which risk is identified or evaluated.

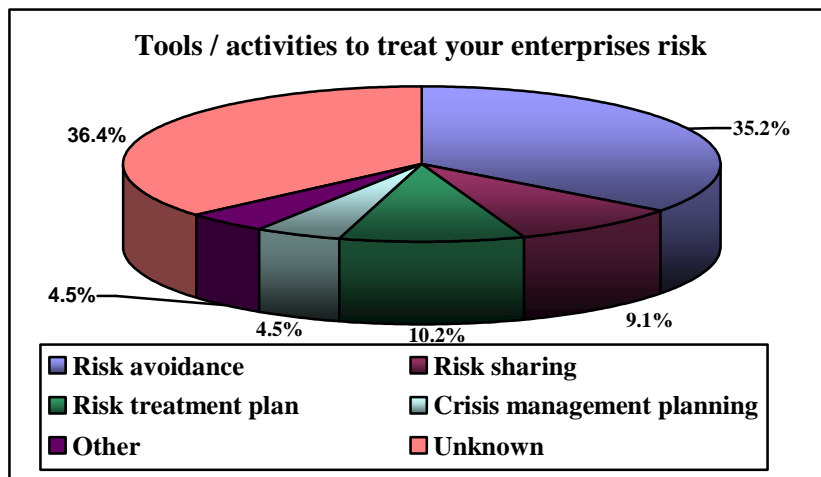


Figure 5.23: Number of tools / activities to treat your enterprises risk.

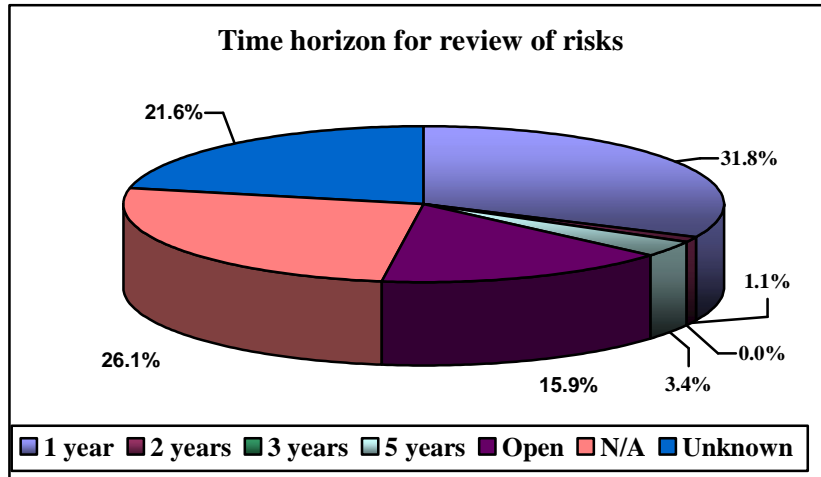


Figure 5.24: Number of time horizon for review of risks.

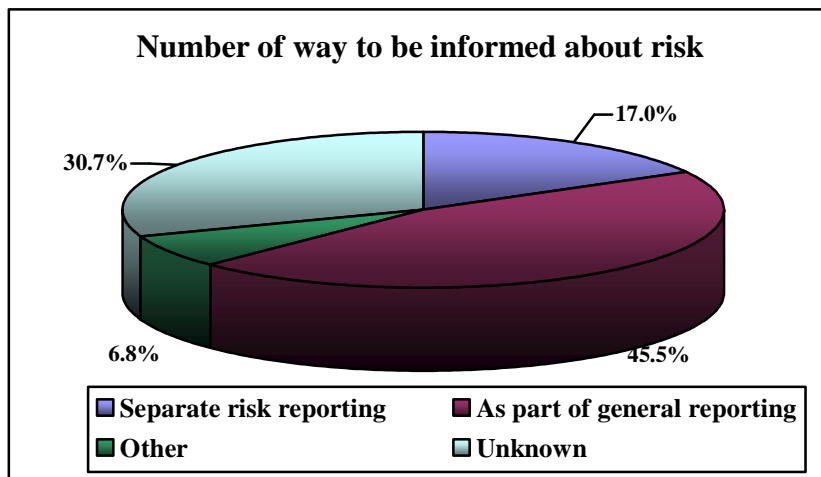


Figure 5.25: Number of way being informed about risks.

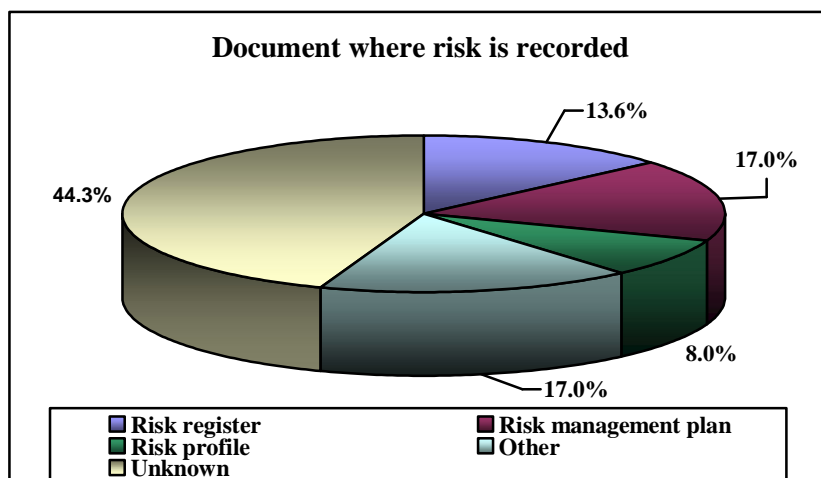


Figure 5.26: Number of document where risk is recorded.

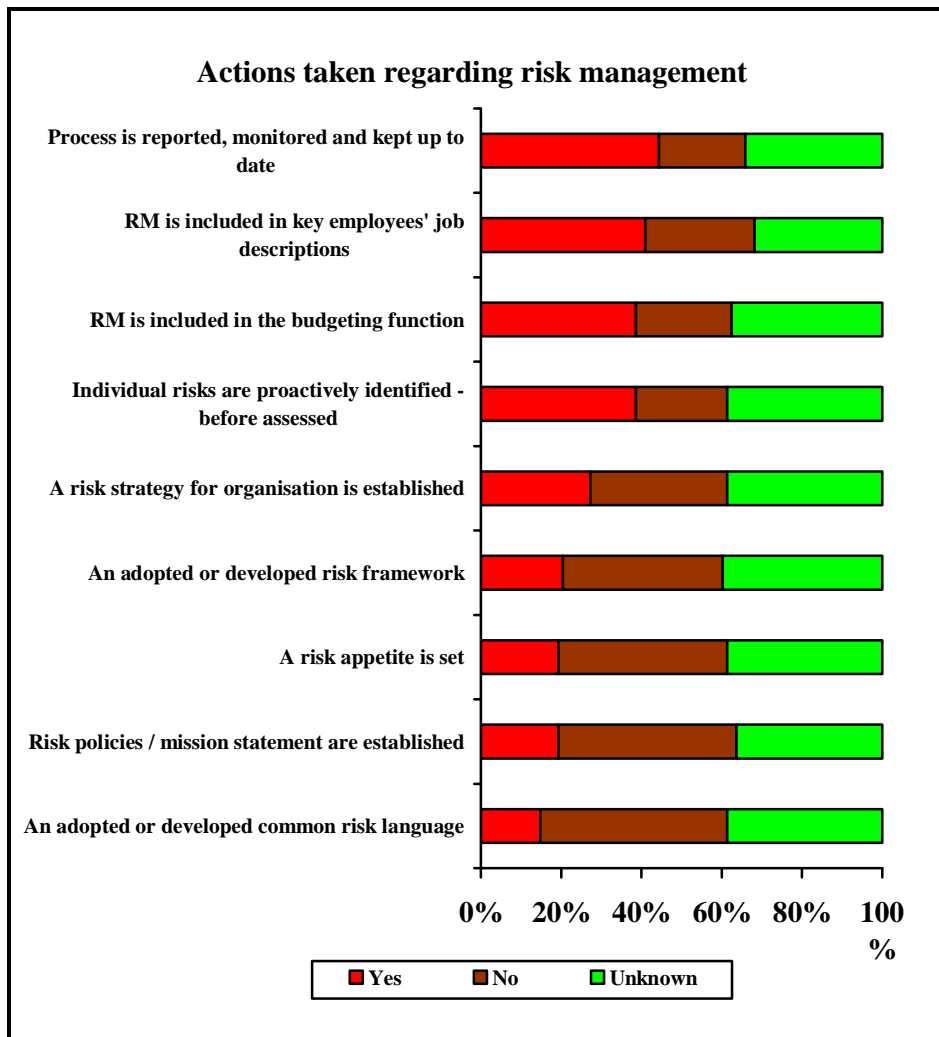


Figure 5.27: Actions taken regarding risk management.