

THE IMPLEMENTATION OF RISK MANAGEMENT IN THE GOVERNMENT

تطبيق إدارة المخاطر على المستوى الحكومي

by

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Abstract

The theory of risk management is meant to effectively manage the problems faced by a government agency or business organizations. Risk are generally measured as an obstacle that limits the operative functions of business organizations or a governmental agency. The scope of threats is more in the governmental activities of a country, as the government has to control the external and internal matters of the entire country. This research sheds light on the necessity of risk management in government agency of the UAE particularly in the digital departments of the Ajman Government. This study also focuses on recognizing the various types of risk faced by the government agencies in operating numerous actions and also the agenda for classification and mitigating the risks. The paper gives a clear vision of the dangers including globalization, financial troubles, and technological risks and more; these risks not only create hazardous situations for the government in controlling operations but also affect the development process of any country. This study involves creating a framework to identify and mitigate the risks by using quantitative and qualitative methods of data collection. The information and material about this topic are composed by questioning the government officials and employees. Also, a survey was conducted and the officials and employees were asked to participate and provide their valuable information in regards to effective risk management functions initiated by their governmental agency. Besides, the study has been finalized by using appropriate research methods, tools and techniques.

The paper also provides some future scopes to conduct research about the procedures and strategies of overcoming or managing the risks faced in various governmental activities. Therefore, ultimately this paper provides foresight and ability to control the risks and increase the efficiency of the government regarding risk management.

Abstract in Arabic

تهدف نظرية إدارة المخاطر إلى التطبيق الفعّال لإدارة المخاطر والثغرات التي تواجهها الجهات الحكومية أو منظمات الأعمال. يتم قياس المخاطر بشكل عام كعقبة تحد من الوظائف التشغيلية لمنظمات الأعمال أو الجهات العمل الحكومية، فإن نطاق التهديدات هو أكثر في تفاعلاً هو في الأنشطة الحكومية، حيث يتعين على الحكومة السيطرة على الشؤون الخارجية والداخلية للبلد بأكمله. يلقي هذا البحث الضوء على ضرورة إدارة المخاطر في الجهات الحكومية لدولة الإمارات العربية المتحدة وخاصة في الدائرة الرقمية لحكومة عجمان. تركز هذه الدراسة أيضاً على التعرف على أنواع المخاطر المختلفة التي تواجهها الجهات الحكومية في تنفيذ العديد من الإجراءات وأيضاً جدول أعمال التصنيف والتخفيف من المخاطر. يوضح هذا البحث رؤية واضحة للمخاطر بما في ذلك في استحداث العولمة ، والمشاكل المالية ، والمخاطر التكنولوجية وغيرها ؛ هذه المخاطر لا تخلق فقط مواقف خطرة للحكومة في السيطرة على العمليات ولكنها تؤثر أيضاً على عملية التنمية في أي بلد. تتضمن هذه الدراسة إنشاء إطار لتحديد وتخفيف المخاطر باستخدام الأساليب الكمية والنوعية لجمع البيانات. تتكون المعلومات والمواد المتعلقة بهذا الموضوع من خلال استجواب المسؤولين والموظفين الحكوميين. كما تم إجراء مسح وطلب من المسؤولين والموظفين المشاركة وتقديم معلوماتهم القيمة فيما يتعلق بوظائف إدارة المخاطر الفعالة التي بدأتها جهاتهم الحكومية. إلى جانب ذلك ، تم الانتهاء من الدراسة باستخدام طرق وأدوات وتقنيات البحث المناسبة.

كما تقدم الورقة البحثية بعض النطاقات المستقبلية لإجراء البحوث حول إجراءات واستراتيجيات التغلب على إدارة المخاطر التي تواجهها الأنشطة الحكومية المختلفة. لذلك ، توفر هذه الورقة في نهاية البحث بعض التوصيات والحلول للقدرة على التحكم في المخاطر وزيادة كفاءة الحكومة فيما يتعلق بإدارة المخاطر.

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List of abbreviation

- ISO: International Organization for Standardization
- UAE: United Arab Emirates
- WBS: Work Breakdown Structure
- ERM: Enterprise risk management

I. Chapter 1- Introduction

ISO 31000, standards are effectively organizing the aspects of risk assessment, employed with a governmental agency. It provides certain principles and guidelines that functions to accomplish specific tasks. Risk management through ISO 31000, functions with various stages that can rapidly analyze the factors of risk. It also functions to effectively highlight and promote the aspects of ISO 31000 that are used by governmental agencies. This research will critically focus on highlighting the possible factors of risk management that is meant to improve the practical approach of a governmental agency. The research focus on a particular governmental agency “The Department of Digital Ajman”. It critically analyses the problems of the management. It further sheds light on the activities of the Digital Ajman government who fails to effectively to progress the aspects of risk assessment for the growth of agency.

In regards to the topic of the research it remarks how the practical approach of risk management improves the actions of governmental agencies. However, in order to address the proper methods, tools, and framework practices of risk management it is important to analyses the current standing of the government agency. The progress of risk assessment is mainly used to address the systematic functions of risk assessment functioning to improve the actions of a Digital Ajman government. The guidelines of ISO 31000 presented towards Digital Ajman government ensures that the agency implements proactive measures to eradicate he risk factors and improve the operative style of the management with significant efficiency.

Moreover, to effectively address the problems regarding risk management of Digital Ajman government, a problem statement has been incorporated. The statement outlines the present problems of the agency. Moreover, in order to effectively eradicate the problems, this research will provide a perfect assessment, through methodological aspects. The use of qualitative and quantitative study has been addressed to identify the problem and make necessary strategies on based on risk management.

Research background

The effective utilization of the risk management strategies might help to enhance the superior leadership decision making through strengthening both the quality as well as quantity of the information available. It also helps in offering the opportunity relevant to the fact-based information flow, which might challenge the assumptions of the leadership team. However, the

two significant ways through which the risk management might be used within the leadership of the organization is to strengthen the decision-making and to improve the information flow. The world tends to evolve in different ways, which make sound decision making gradually more difficult. Moreover, technologies within the organization considered to make the processes, services and products increasingly more complex. Therefore, risk management intends to play a significant role in the process of various decisions making within the organization. An executive officer relevant to the risk might facilitate the appearance of important information while implementing different decision-making procedures. It is essential for the leaders of the organizations to develop a framework in respect to a dialogue among individuals responsible for proponents of an innovative program and assessing risk or other relevant decision. This might help the organization to identify an approach, which optimizes the risk-reward exchange through borrowing imminent from an individual perspective.

Organizational background

The Ajman Digital Government considered among the major hub in the entity of UAE. It is located at the northern emirates. It has its headquarters in Manama and Masfout. In 2012, the organization was commenced by Emiri Decree- 17 of 2012 considered as a unit associated to the executive council of Ajman. The strategic plan of the organization is to develop functions and endorse digital transformation within the Emirate (ajman.ae, 2020). However, the digital government intends to be responsible for facilitating the legislative tools as well as dictatorial means to the government bodies in Ajman, in respect to allow the digital transformation procedure. It helps in developing digital process in Ajman by coordinating with the different government agencies, in order to take maximum benefit of modern technologies. The mission of the organization is to enhance the experience of Ajman community and support the competitiveness of UAE through providing them with smart management services. In addition, it seeks to enchant the community by providing high standard, responsive, innovative and integrated government.

Problem Statement

Risk management focuses on highlighting the effective actions that can significantly affect the operative style of any governmental agency. In order to critically address the risk factors, it is important to incorporate proper risk assessment tools. It was readily identified that due to the inefficiency in implement risk assessment tools and failure in performing proper management.

The Digital Ajman government was unable to effectively progress their governance functions and failed with inefficiency towards their activities. The agency has miserably failed due to usage of traditionally measures on managing matters with different types of risks. It is indispensable for the agency of Digital Ajman to be more comprehensive towards their operative matters so that the possible factors of risk assessments can be solved.

Fundamentally, the agency failed to follow the principles and regulations of the management that was effectively implemented ISO 31000 standards. The changes that take place within the surroundings of the organization tends to be the source of several risks over which the organization has no control. The main issues that are encountered by the Department of Digital Ajman is that of the various transformations in the technology. Due to this, the agency faced many problems and this even resulted in reducing the market acquisition of the government. Moreover, the problems from external sources also impacted the overall functioning of the agency and this led to the improper control resulting in inefficiency towards risk management.

Research aim

The aim of the research is to outline a framework for a better as well as integrated risk management system to be used in the Digital Ajman Government. The frameworks will effectively outline the problems of the agency and focus on regulating strategies that can be useful to eradicate the possible problems. This will significantly help the agency I proper assessment of the risk management. The possible risk assessment system will be effectively implemented to improve the possibility of decision-making and strategic method in Digital Ajman's government. The study will also help to enhance the standard of public and the decision of a public organization, as well as to recognize the risks before it manages to improve the research.

Research objective

The main objectives of the research study described below:

- To identify he possible factors that hampers the effectiveness of risk management.
- To outline the aspects of risk assessments and identify the operations that functions poorly, creating a negativity for the government agencies.

- Develop a prioritization of risks and standard mitigation plans for better assessment of the risk management activities.
- To critically explore the framework and organize the same in the management.
- To advance the performance matrix which is consequential for an improved operation of risk management in the governmental agencies.

Research Question

The questions relevant to the research content are as follows:

- What framework, tools and process government use to identify and manage risk?
- What types of risks are associated with government WBS?
- Is Risk Management embedded in the Government decision-making process?

Significance of the study

The research study will help to develop a framework that a governmental organization needs to implement, with respect to governing different risk management activities. EMR (Enterprise Risk Management) considered being ongoing and coordinated application relevant to risk management throughout the organization, regarding all the standards, through strategic development to service delivery (Hopkinson, 2017). However, according to various researches, there has been diminutive work made relevant to the research content in earlier empirical and theoretical research. The researchers of the study tend to focus on the main contents regarding the issues and risks that government faces within their organizations. Therefore, the findings of the research study aimed to cover the loopholes in the literature through ascertaining the chief characteristics relevant to the superior governance as well as the successful aspects of the ERM in the context of the research.

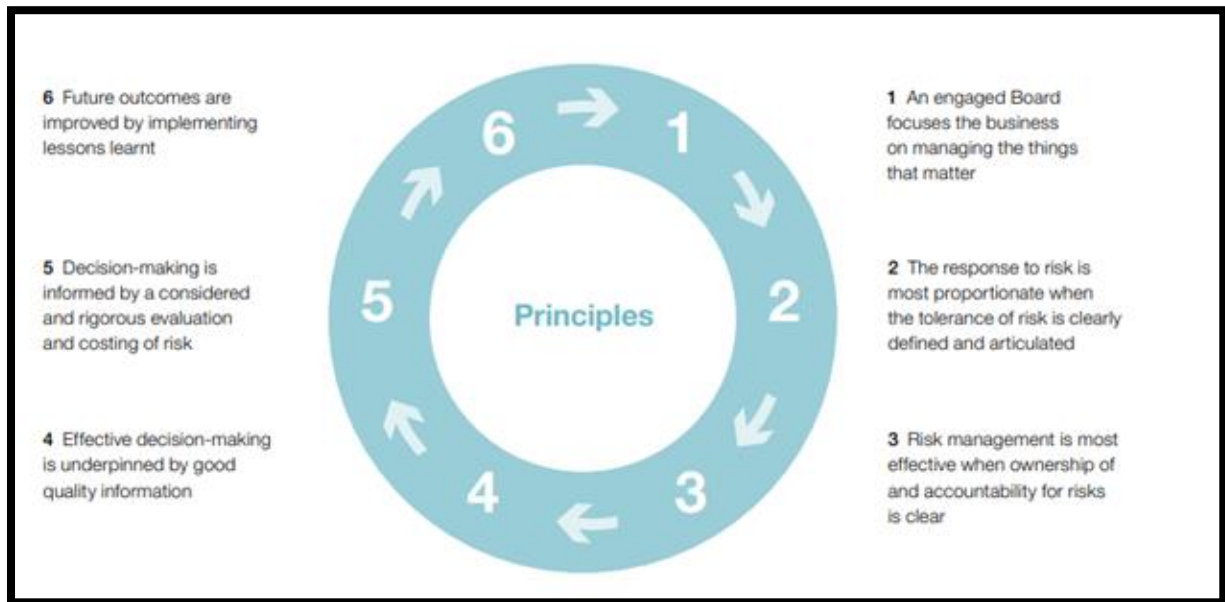


Figure: The six principles relevant to risk management

(Source:Hopkinson, 2017)

Scope and limitation of the study

The impartial scope of the study is to evaluate the connection among the administrations and the risk management approaches. The study seeks to achieve visions and awareness of administration in implementing strategies applicable to risk organization for their growth. The targeted persons of the study considered as the board associates, employees, and executive leaders of the governments. However, the chief method of the research has aided in analyzing the issues applicable to the study content more professionally, as comparative to the subordinate research methodology. Conferring to the researcher, the qualitative approaches not considered as effectual in terms of depth study of the topic. Therefore, the researcher of the study tends to have further research by using both the survey and questionnaire approaches so that it facilitates them to obtain more expressive and logical as well as a methodical deduction. However, the recommendations and discussion made while analyzing the outcome of the study have tended to add more value to the research content.

Organization of dissertation chapters

The following structure illustrating the flow of different organization steps commenced with respect to execute the flow of information within the respective chapters relevant to the research study:

Introduction: Research Background, problem statement, Research aim, research objective, research question, significance of the study and scope and limitation



Literature Review: Enterprise risk management, key risks of government, Risk assessment and strategic mitigation planning, risk management and legal reliability and gap analysis



Research Methodology: Research philosophy, approach, design and data collection methods



Discussion: It includes the discussion based on the research analysis



Recommendations & Conclusion: linking with objectives, Implications for Future Research, and Conclusion

Figure 1: Organization of dissertation chapters

According to the above-mentioned figure, the first chapter of the study illustrates the introduction relevant to the research content, which includes research background; followed by the problem statement, research aim, research objective and importance of the study. It also involves the scope and limitation that the research might have faced while performing the research.

The second chapter involves a thorough and vital part considered as the literature review. The commenced theoretical part tends to integrate all the conceptual insights gathered through different scholars and articles. It helped to provide basic understanding relevant to the research content.

However, the third chapter aims at the methodology and analysis of the data collected through qualitative and quantitative methods. The entire procedure includes a survey or questionnaire methods, with respect to gathering more accurate and meaningful information relevant to the content.

The fourth part includes the discussion part relevant to the findings and repercussion comparative to the analysis of previous research as well as empirical studies that have been implemented over the research topic.

The last chapter tends to involve various recommendations that have been made by the researchers based on the entire research study that might help the governmental organization to obtain an effective framework of risk management in mitigating the issue.

II. Chapter 2- Literature Review

Government organizations are mainly public based organizations that functions its business process with the rapid support and actions of the professional government officials. Risk management is the first priority in corporate governance, mainly in public sector organizations. The structures, corporate values and behaviors in the organization need a continual risk assessment. Risk management by the government is very important as it helps in managing the risk and identifies success. It is regularly reported that value for money is the value for money audit program. This determines the effectiveness of the risk management program by meeting the aim and objectives of business priorities.

Enterprise Risk management framework

As opined by Sweeting (2017), the framework of business risk management is one of the common yet delicate features to work with. The functions of operation are meant to effectively understand the risk assessment functions of the governmental agencies of the UAE. By sympathetic operations of the risk management, the business environment functions with better results and profitable assessments. The importance of effectively analyzing the situation and then implementation of effective risk management functions allows business organizations or governmental agencies to monitor their operations with effectivity. It is crucial for the management to carry out their operative functions with full potentiality of the It is very important to carry out potential analysis that will nurture the interest of stakeholders and understand issues that are caused (Sweeting, 2017). The external factors as well as the internal operative style of the agencies also impacts the effectiveness of the risk management. In this regard, it is vital to incorporate proper management style that can amplify the functions of the governmental agencies.

Moreover, for proper assessment of the risk management functions it is essential that the guidelines are effectively followed and processed for higher profitability. In this regards, taxable testimony of the organization or the governmental agencies are organized and perfected with positive actions. As per the opinion of Brustbauer (2016), a flawless and continued process should be maintained so that proper risk management functions can be followed. Internal communication plays an important role in demonstrating the quality of risk management among numerous numbers of stakeholders. Sweeting (2017) asserted that Enterprise risk management is mainly conducted among small and medium-sized enterprises. This framework

helps in developing the structural model of based on analyzing and conducting a survey among random people regarding the knowledge based on the risk management by the government. Brustbauer (2016) contrasted, implementation of enterprise risk management mainly affects the strategic orientation of the organization. Further, it helps to derive results with defensive and offensive strategies, which is also known to be as an active and passive approach to business success.

Sweeting (2017), that proper assessment and outlining of the risk management in an enterprise should be entertained. It should be entertained with positivity and the level of operation should result in proper resolving of the identified risks. In order to correctly assess the promotive principles and guidelines of the Iso 31000, the level of risk should be ascertained so that effective managerial functions can be entertained in the governmental agencies. For example, many government industries or business organizations functions to identify the level of risk. Once the level is ascertained they function to innovate new strategies that can help in properly resolving the managerial loopholes. It is applied within the administrations to recognize the good morals for the company boards and also for any leading society that includes legacies and trustees for improved allowance arrangements. In order to gain planned and further increasing competitive edge as well as the achievement of business. Corporate supremacy is the procedure of an innovativeness for an effective style of risk management agenda. The controlling aspect of business or governance is discussed in this investigation article, as it is the key attitude in the market with various economic or political instruments. Brustbauer (2016) argued, good corporate governance implies transparency in dealing with stakeholders and further, it also includes regulators, customers and employees by sharing all the possible information. As opined by Brustbauer (2016), in an ERM framework, risk management is the central risk function that is interacting with the organization. This might have a big impact in exploring the high-level issues and analyzing the common distinction, which involves Three Lines of defense Models.

Key risks of government that impact with the structure of WBS

The effective actions of WBS (Work Breakdown Structure) deliberately breaks down a project into smaller components for optimized actions of the delivery-oriented works. Examining the risk of a government is very important as it will help to analyze the potential impact and also identify the probability of occurrence. Risks are bound up with the business life, and it is the essential element of business governance. This article emphasizes on all the risk that is involved

in the structure of risk analysis. Moreover, it helps in allocating and categorizing different risks relating to the strategic and operational level of the government. There are two types of risk categorized in a strategic and operational level. This will analyze the probability of risk among materials and hazards. Stoel, Ballou, & Heitger (2017) stated that there are two types of strategic risk raised from the fundamental decisions of the government by concerning the organizational objectives. These risks are known to be as business risks and non-business risks. This risk helps in achieving the business objectives and analyzing the useful subdivision.

Risks in business enterprise or government functions are meant with functions activities that can significant advance the positive functions of risk management. The functions of the risk management should be incorporated with proper managerial actions or it might result in inefficiency of the agencies. If a business management or a governmental agency fails to incorporate proper risk management functions and further fails to follow the principles then it might lead to the destruction of the authorities (Strategic and Operational Risk, 2020). For example, in the present time, due to the misuse and improper implementation of the risk assessment the governmental agencies and many business enterprises have significantly failed in this recent time. The rapid spread of COVID-19 virus throughout the world have highlighted the improper functions of many governmental authorities. Due the rate of contamination many countries have suffered, and mostly the governmental agencies have failed to properly stabilize the situation. This highlights that due to the improper functions of risk management, how an infectious disease or a virus can endanger the lives of millions of citizens.

Leitch, Smith, & Ritch (2019) contrasted that strategic risks are determined by the board directors. Assessing this strategic risk, the government reports the balance in skills, knowledge and experience. This helps in following the practices of corporate governance and ensures to make correct decisions regarding the rescue of enterprise governance. Stoel, Ballou, & Heitger (2017) asserted that operational risk incorporates an awareness of strategic risk into decision making. The operational risk is connected with the internal systems, sources, employees and the processes of the organization. It mainly focuses on the high-level risk strategy. Operational risk of the governments has serious impacts, and it cannot be avoided (strategic and Operational Risk, 2020). The actual move of risk administration along with other features of the planned management inclines to advance the critical construction of the corporate or governmental agencies. In his regards, it signifies progressing the potentials of numerous levels of the group.

It was further identified that the any government organization lacks in effective application in almost all the top as well as lower levels of the management. This uncertainty results in increasing the illegal activities which further boosts the applications of loopholes that harms the effective actions of business. Although, organizations are capable enough to withstand the changing exposures of the industry, it was also observed that if this problem is not fixed by the effective actions of the risk management strategies of the association may lose its success in terms of advanced productivity. This might create a significant impact on the risk management activities of an organization. In addition to the problems of management, there are several issues such as assurance towards work and the functions of business process, Implementation of communicative strategies and other managerial actions. Government's functioning for risk regulates the failure concerning the established materials for proper functioning. In order to transaction with economic or other commercial risk, it is imperative to be afraid regarding security events and averting crimes in the accountability of operative risk managing. Along with these, the practical approach of the managements work culture caused problematic issues for the employees' during the course of work actions.

Risk assessment and Standard mitigation planning

This article infers the development of risk administration in the residual government in the UAE. In the setting of the possible risk, identifying the unsuccessful results, the expansion of jeopardy as well as management of certain risks are crucial. In the valuation of peril administration, supervision of governmental agencies indicates the real consequence of a development that may differ from the expected outcomes. Leitch, Smith, & Ritch (2019) asserted, the inception of the risk management framework is mainly focused on governmental reforms that will lead to improving the risk management system aiding to prevent all the financial losses. Maintaining the risk-mitigating system from the management database includes analysis of risk objects and representing the real-world risk-mitigating factor. Chauhan et al. (2018) contrasted; the risk-mitigating system has the risk recommendation engine that helps to communicate with the database of risk management and providing a risk-mitigating plan that will help in contemplating with systems and processes. Risk management facilities are promoting the customers and the real actions of situation with high normal risk assessment system. In addition to this various tool allow better coordination and deliver of accompanied services for preventing the unrequired loss of organizational resources. The further embodiment of the risk management system is based on analyzing the shortcomings of

risk management and determining the outcomes of risk management within the organization. The assessment of risk is the process of assessing the probabilities and the consequences that are faced in real events. As per the opinion of Leitch, Smith, & Ritch (2019), it is essential to provide insights to the project management where resources are required to be managed and realized with high probability. In order to Work with the government programs, it is necessary for government officials to analyze the risk, which will impact probabilities, dependencies and timeframe. This will help to facilitate the decision-making process of business.

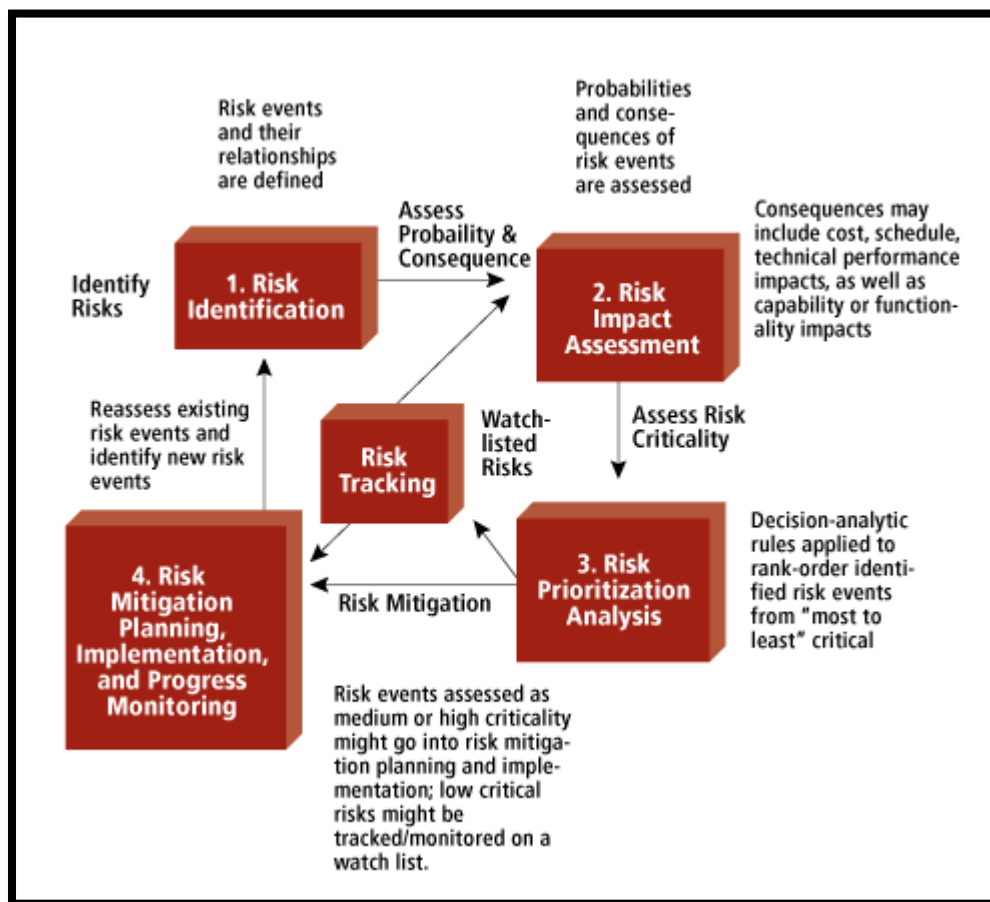


Figure 2: Standardized risk-mitigation plan

(Source: Chauhan et al. 2018)

Risk management and Legal Liability

This research examines the concept of legal liability for risks and appropriate risk management programs. Chauhan et al. (2018) stated that there are various concepts of risk acceptable to the businesses that help in analyzing successful management and experiencing numerous

challenges by inheriting numerous challenges in the organization. As per the opinion of Stoel, Ballou, &Heitger (2017), the liability risk involves threatening of individuals to bear all the damages and consequences that are related to the standards of operations. In order to improve the aspect of risk management, it is required to deal with numerous solutions that are practical and cost-effective for the organization. Analyzing full spectrum of services regardless of any business operation, analyzing the international professionals and determining the largest risk management units are useful in the setting of ambiguous high standard risks (Risk Mitigation Planning, Implementation, and Progress Monitoring, 2020).

Steinberg (2016) asserted that managing liability risk will help the organization to improve threats and bearing all the damages. It will also bear the consequences that are caused mainly because of the operations or neglecting of any act. The risk liability is analyzed from reviewing numerous documents and highlighting the key liability risk. A tool that is specifically used in determining the liability risk is named be as liability navigator. The product liabilities refer to analyze the risk of the products and services that are launched within the organization. Moreover, fulfilling the risk of contracts are limiting the time that results in losses and facing various consequences in the organization (Risk Impact Assessment and Prioritization, 2020).

Perspective of Risk-based active decision making

A decision involving risk often means possibilities of adverse consequences. The article discusses the possibilities and usefulness of decision-making tools in mitigating risk management by the governments. Decision-making in the process of risk management tends to depend on the intuitions. Leitch, Smith, & Ritch (2019) stated that risk-based decision-making process defines the issues that are caused and further tends to examine the implementation of the decisions by understanding the risk-reward balance and undermining the uncertainties. Evaluation of risk is mainly followed by identification of the risk responses. These responses include numerous options such as terminate, tolerate, treat and transfer of the legal responsibilities that are causing an impact on the feasible financial risk (Risk Impact Assessment and Prioritization, 2020). To deal with the decision-making process, it is very important for the government and for the organization to determine the risk appetite, cost-benefit, mandatory requirements, and analyzing stakeholders' values. This will help to assess the 4T's of the risk response strategies and focus on reducing the risk that is occurring in the organization. Stoel, Ballou&Heitger (2017) contrasted that in order to ensure an effective

reputation of management and ensure business continuity, evaluation of risk responses are important. This will identify the value for risk reduction and value the cost of control.

Steinberg (2016) highlighted, there are some practical difficulties that need to overcome the assessment of risk management by identifying various issues and perceptions, managing and avoiding hidden assumptions or biases. Dealing with the uncertainties and differences, setting of assessment criteria and ensuring relevant objectives are some of the practical difficulties that are faced in mitigating risk management and active decision-making process. On this ground, Chauhan et al. (2018) contrasted that risk-based decision-making process can be cost-effective and powerful for the organization. It will also help in structuring the risk-based decision-making process and functioning with all the problems associated with the assessment of risk management (Risk Management services, 2020). Risk-based decision making will be presented with the help of using structured analytical hierarchy process.

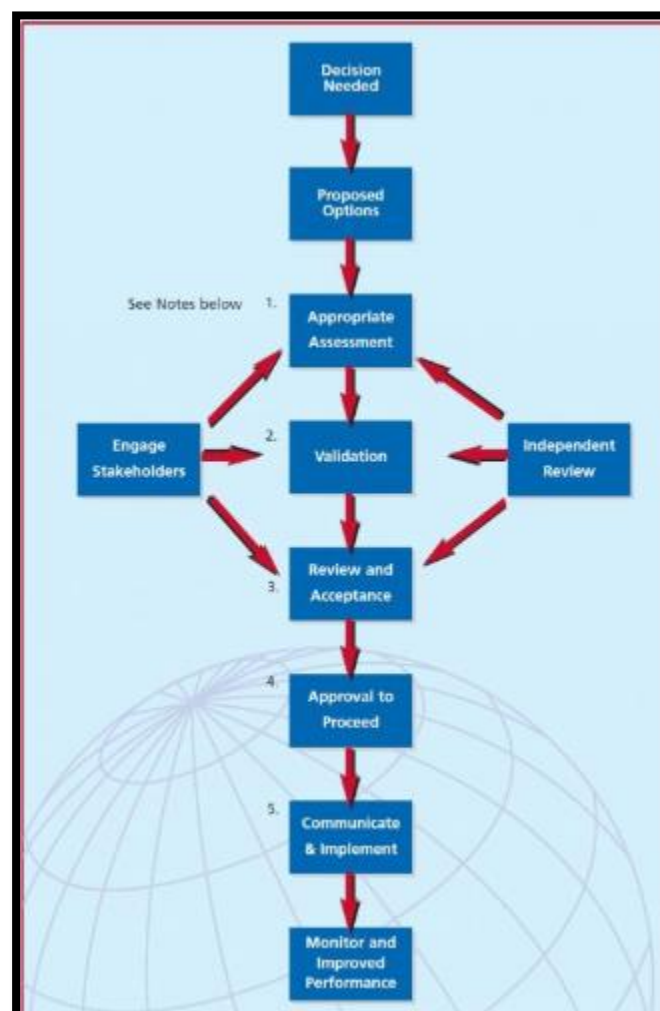


Figure 3: Standard process of decision making in risk management

(Source: PERSPECTIVES ON RISK AND DECISION MAKING, 2020)

Risk framework in the governmental departments

In an organization, there are risks related to government issues. When an organization is going to start the business, then they have to take some steps which are very necessary for the organization like- getting a license. Authorization of the business is getting patent for the business, and so on. It is very important for an organization to make a framework to get help to mitigate the risks. For mitigating the risk, the first step of the framework is to categorize the information system. This information system is related to laws, directives, policy guidance, resource availability, security requirement and objective of the organization. The second step is to select the security controls like confidential information, financial information, partnership papers of the organization. It is very important to keep this thing secret for the competitors. In this case, the government can help organizations by implementing security controls. Implementing security controls is not the solution for the risks, but it is very important to assess the security control for helping the organization. Next step is to give authority to the information system which help the organization to make their own field and gain competitive advantages. Last and the most important part of the framework is to monitor the security control. For monitoring the security control, there are some websites and software provided by the government, which helps the organization to mitigate the risks. Managing liability risk includes general liability risk, product liability risk and analyzing the contractual risk. These risks are generated from the company's operations or from the contractual parties.

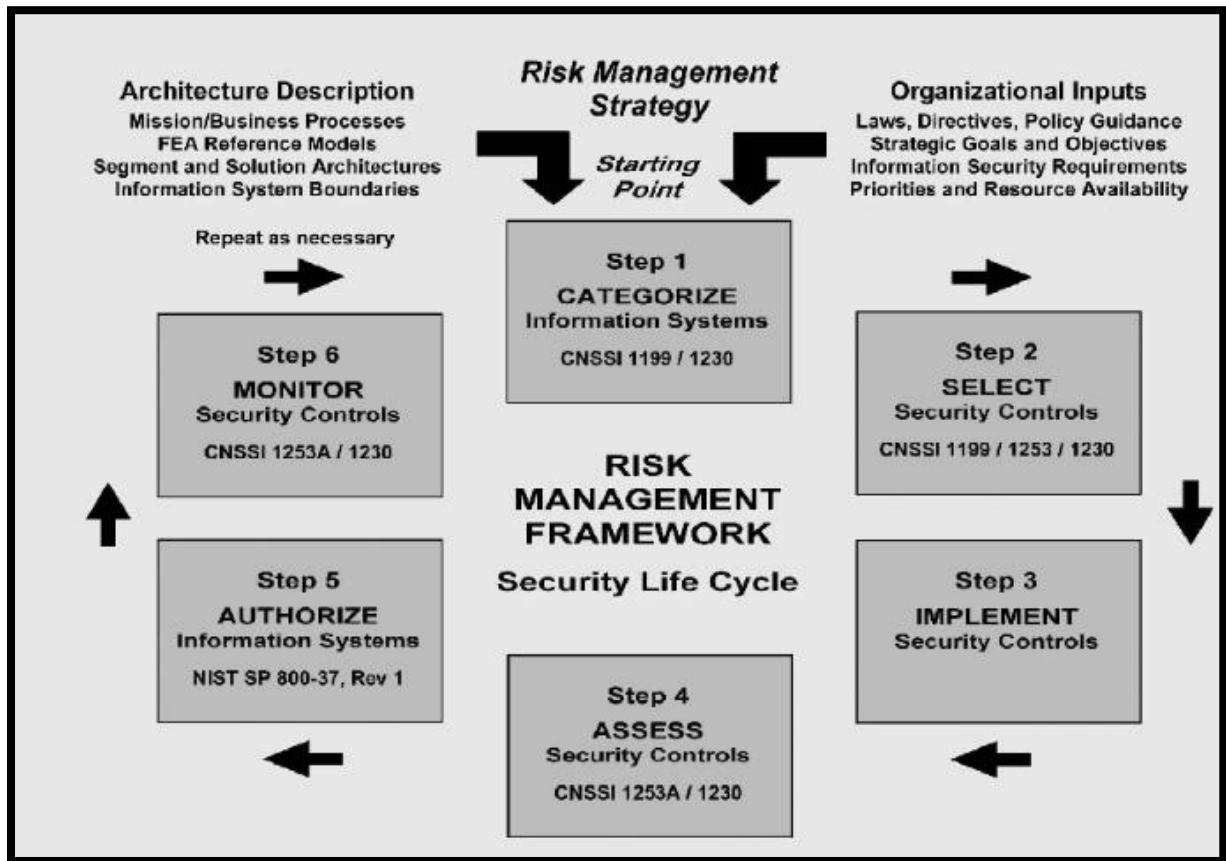


Figure 4: Risk management framework

(Source: Fulford & Hodgson, 2016)

Gap analysis

Numerous concepts are discussed in the literature review in assessing risk management. The research discusses numerous key findings that are effective in addressing the issues regarding the risk management framework. There are some of the aspects that are not taken into consideration because of the lack of time in research work. This happens to be a gap in the literature review. The research aims to address and procure all the relevant information based on the identification and assessment of the risk management process. The information highlighted and interpreted in the research work emphasizes on the proper results and activities conducted by the government. The research mainly highlights the diverse viewpoints of assessing the risk management and identification of the standard mitigation planning in the organization. The research has identified various strategies to overcome risk and lead to a successful organization by following the perspectives of standardized risk mitigation planning in the organization. In order to conduct the research and highlight all the necessary points

stating about the risk management among the stakeholders and analyzing strategic improvement that is required is lacking because of the lack of information that is present in the relevant sources. In order to interpret proper result and conclusion, it is effective to deal with time and coordinators. The research analysis is based on focusing on mitigating risk and improving risk in governance. While researching about risk management, much older and important article was found; however, due to the inclusion and exclusion method of the article (selected 2015 onwards), many of them were not included in this research.

Research Hypotheses

- H1: The impact of risk management frameworks on outlining the aspects of risk management.
- H2: The effectiveness development of the prioritization of risks to influence the various legal activities on the risk management framework.
- H3: The impact of risk management framework for achieving the performance matrix and preparing the standard mitigation plan.

Conceptual framework

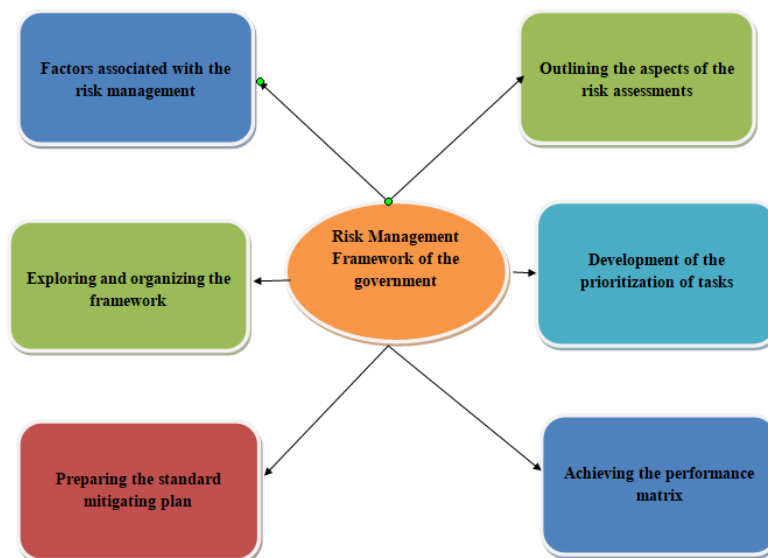


Figure 5: Conceptual framework

(Source: Self-created by the researcher)

In the conceptual factors the risk management framework of the government is the dependent factor and factors associated with the risk management, exploring and organizing the framework, preparing the standard mitigation plan, outlining the aspects of the risk assessments, development of the prioritization of tasks and achieving the performance matrix are the independent factors. All those factors are directly links with the dependent factor.

The conceptual framework is based on the research objectives discussed in the previous section. The concerned framework is essential for evaluating and analyzing the research objectives effectively. The conceptual framework is generally depicts for the risk management framework which is important for outlining the risks which are associated with the framework. The risk assessments were done in the previous chapter of the study. However, the framework is important for achieving the performance matrix and important for preparation of the standard mitigation plan. It is important to note that the framework is essential for exploration of the government risk assessment framework. The prioritization of the tasks can also be developed through the concerned framework. The aspects of the risk assessments are based on the governmental agency which is relevant as per the hypothesis statement. However, the framework is important for implementing the risk assessment tools and ensuring the capabilities of the decision making which is appropriate as per the hypothesis. The framework signifies the managerial functions adequately. The framework is useful for testing the hypothesis of the various factors. It is essential to identify the factors properly by which the hypothesis test can be done.

III. Chapter 3-Research Methodology

Data Collection Method

Research method is chosen for conducting the research adequately. The questionnaires are prepared by analyzing the research objectives and the research questions. The data collection research method is appropriate as per the objectives of the research. It is more time effective than other research methods. There are close-ended questions prepared as per the research objectives. The researcher implemented a positivism philosophical approach to improve the effectiveness of the research and further improve the quality of the data. The process of positivism affects implements through various advantages and disadvantages of the research topic. Along with this the effective implementation of a descriptive design and a deductive approach was used to enhance the factors of the research methodology. Moreover, in regards to the choose for selecting the methods for collecting data were conducted on the basis of the data collective methods. In order to effectively evaluate the results of the research study both quantitative as well as qualitative data collection method has been used. The effective use of Quantitative or Survey tends to provide and accurate information. It consists the viewpoints of people regarding the operations of the governmental authorities and also provide genuine feedback regarding the process and success of their work. Furthermore, it is a general practice that during the process of a social experiment in public places, surveys are initiated with questionnaires method for gathering the maximum amount of data.

The Survey “Questionnaire” was initiated through the website “[surveymonkey.com](https://www.surveymonkey.com)” for accurate and effective means of data collection. In regards to gathering accurate data, 57 government officials were asked to participate in the survey and provide their valuable feedback in respect to the content of the topic. Moreover, the participants were also asked to provide their personal information which might help in better acquisition of the results. The respondents were asked to answer all the 15 questions which would result in better productivity in regards to the research. Furthermore, there were additional blank spaces in specific questions for the respondents to provide their personal comments. In similar to the survey method, an interview was also initiated. Two officials from the governmental organisations were interviewed with a series of few questions that have helped in proper productivity of the gathered result. The overall result of both this data collection method helped with accurate research methodology that not only provides highly effective information but also some variability in regards to the research topic.

Reliability and validity

The key target respondents of this research are the government officials from various heads and departments of the government. In terms of reliability and validity, the researcher has proposed to provide a genuine confirmation letter to all the respondents, which serves as an ethical approach and supports the standardisation of the research. Through the practice of descriptive research design, the reliability factor of this study has been increased. Nevertheless, the researcher has used emails and telephone as data collection tools to send surveys to government officials. The participants were asked to provide information after proper assessment of the research's introductory section and stay true to their best knowledge. In general, the major part of the research data collection has relied on the permission of the government officials for both survey and interview methods. This very step allowed the researcher to conduct the research with ethnicity and without any type of hindrance.

The result of the survey was surprisingly effective and accurate that also fulfils the ethnicity of the research. Since the study initiated both qualitative and quantitative method of research, it was necessary to opt for a testing emphasis for accurate reliability and validity of this study. For further enhancement of this studies reliability, the researcher has thoroughly implemented the research aim, objective as well as research questions for effective refinement of the study. In regards to the validity of the data, the survey was initiated through a secured portal of "[surveymonkey.com](https://www.surveymonkey.com)" which is a highly reliable and secure server for managing data. In addition, only one researcher was involved in the study which also supports better reliability and validity to the collected evidence. In order to improve the reliability and validity factor of the study, the survey questions were purposefully amended and rectified.

Analysis Techniques

In order to collect the data and detailed information about the topic, [surveymonkey.com](https://www.surveymonkey.com) has been used. The statistical data analysis tools have been used to analyze the statistical data. Moreover, correlation test and regression test have also been applied to test the hypotheses provided in this research paper.

Descriptive statistics

This particular section of the research paper contains the demographic data collected by conducting survey among the government employees. The researcher has prepared a list of

questions. On the basis of question list, the survey has been conducted to collect data about the topic. However, the detail of the survey is given below –

Hypothesis test

This section of research paper involves testing the given hypothesis of the research. The hypothesis test has been conducted through the correlation test and regression analysis. Hypothesis test has been very useful to present the statistical evidence of the relationship between the dependent variable (departments of government) and independent variable (effective framework of risk management). The coefficients of the tests are identified by the concerned test. The value of the independent value is 1.00 which is identified by the hypothesis test.

Model Summary									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change
1	1.000 ^a	1.000	.	.	1.000	.	1	0	.

Table 1: Model Summary

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.500	1	.500	.	. ^b
	Residual	.000	0	.		
	Total	.500	1			

Table 2: ANOVA Test

Coefficients										
Model		Unstandardized Coefficients		Standardized Coefficients		95.0% Confidence Interval for B		Correlations		
		B	Std. Error	Beta	t	Sig.	Lower Bound	Upper Bound	Zero-order	Partial
1	(Constant)	.000	.000		.	.	.000	.000		

How far do you think improving risk management capability of government enhances the overall process of management of risk?	1.000	.000	1.000	.	.	1.000	1.000	1.000	1.000	1.000
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Table 3: Coefficients

After analysing the above tables, it is evident that the values of regression coefficient are positive. Therefore, the hypotheses are valid and fulfil the requirements of this research.

Correlation test

Pearson's Correlation Test is greatly beneficial to understand the nature of the relationship between the dependent as well as independent variables. In this research paper, Correlation Test has been used to justify the relationship between the effective framework for improving risk management (independent variable) and the governmental departments that need to manage risks in governmental operations. Moreover, the test also involves testing the effectiveness of the relationship between governmental development and risk mitigation plans. The table given below shows the Correlation Test of the hypothesis given in this paper. According to the model summary it has identified the value of the independent value is 1.00 and the difference between the first variable is 1 and the second variable is 0. The sum of ANOVA is .5, .0 and .5. The mean square of the model is .5.

Regression test

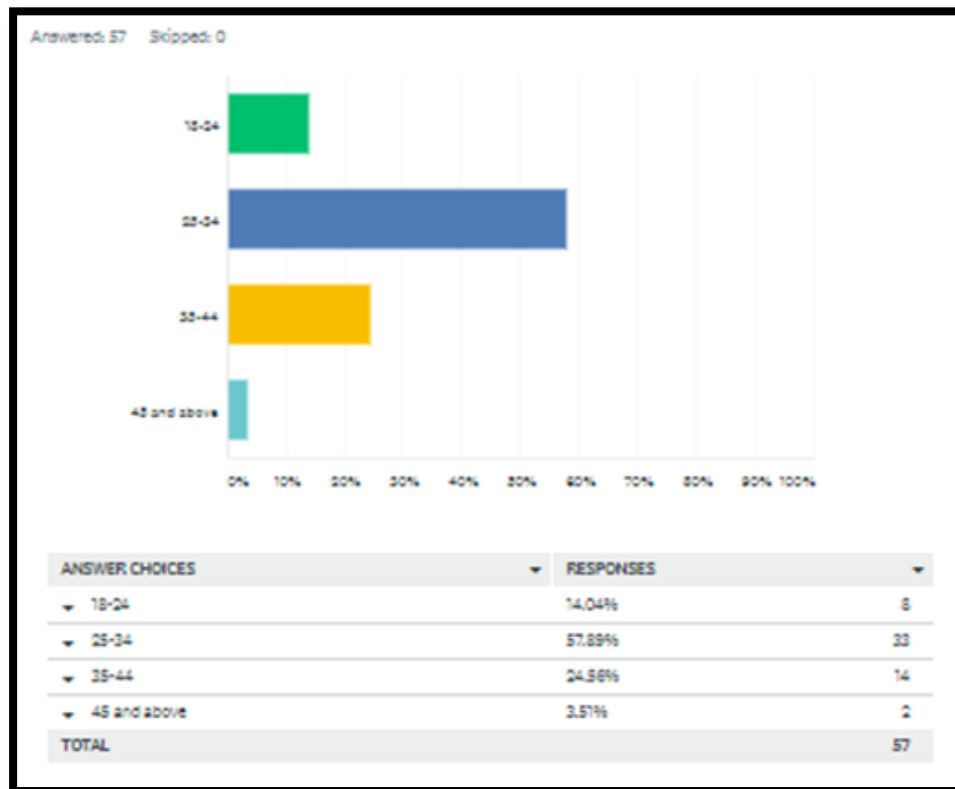
In order to predict the value of a variable based on the value of another variable. In this paper, the regression test has been used to value of governmental effectiveness and the improvement of performance (dependent variable) from the effectiveness of risk management framework (independent variable). The value of coefficient is 1.0 and there no standard coefficients used. There is 95% confidence interval there based on the lower and upper bound. It signifies that the governments have the potential to manage the risk assessment adequately. 2 is the coefficient of the beta which signifies that there are no errors in the risk management framework.

IV. Chapter 4- Data Analysis and Discussion

Analysis

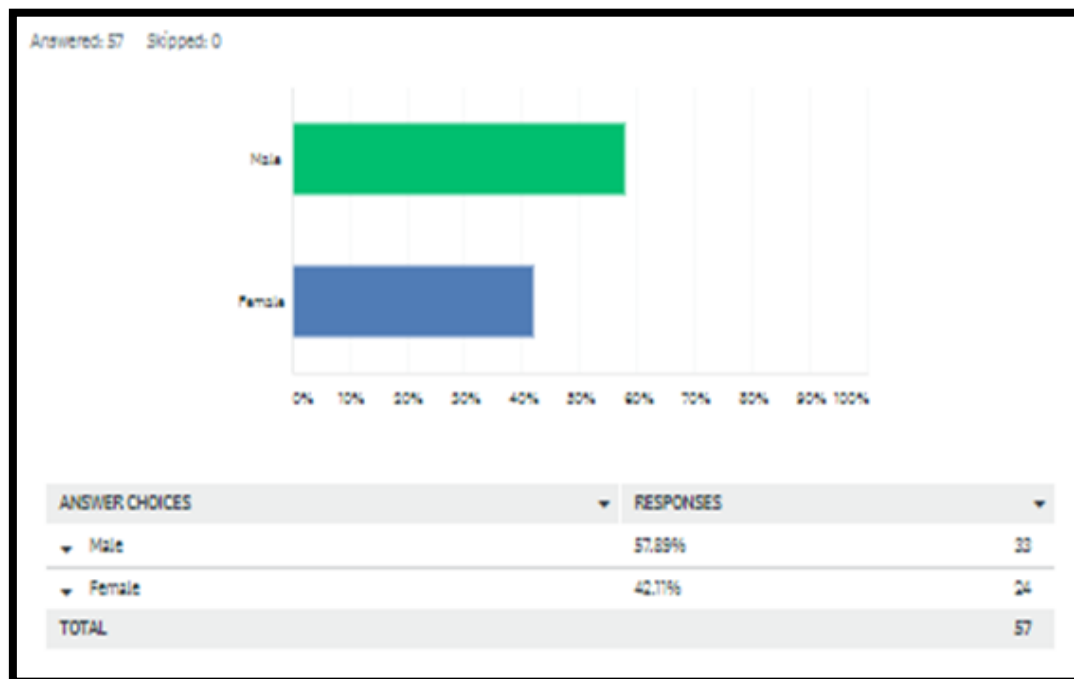
Survey questionnaire (quantitative data)

Q1. What is your age?



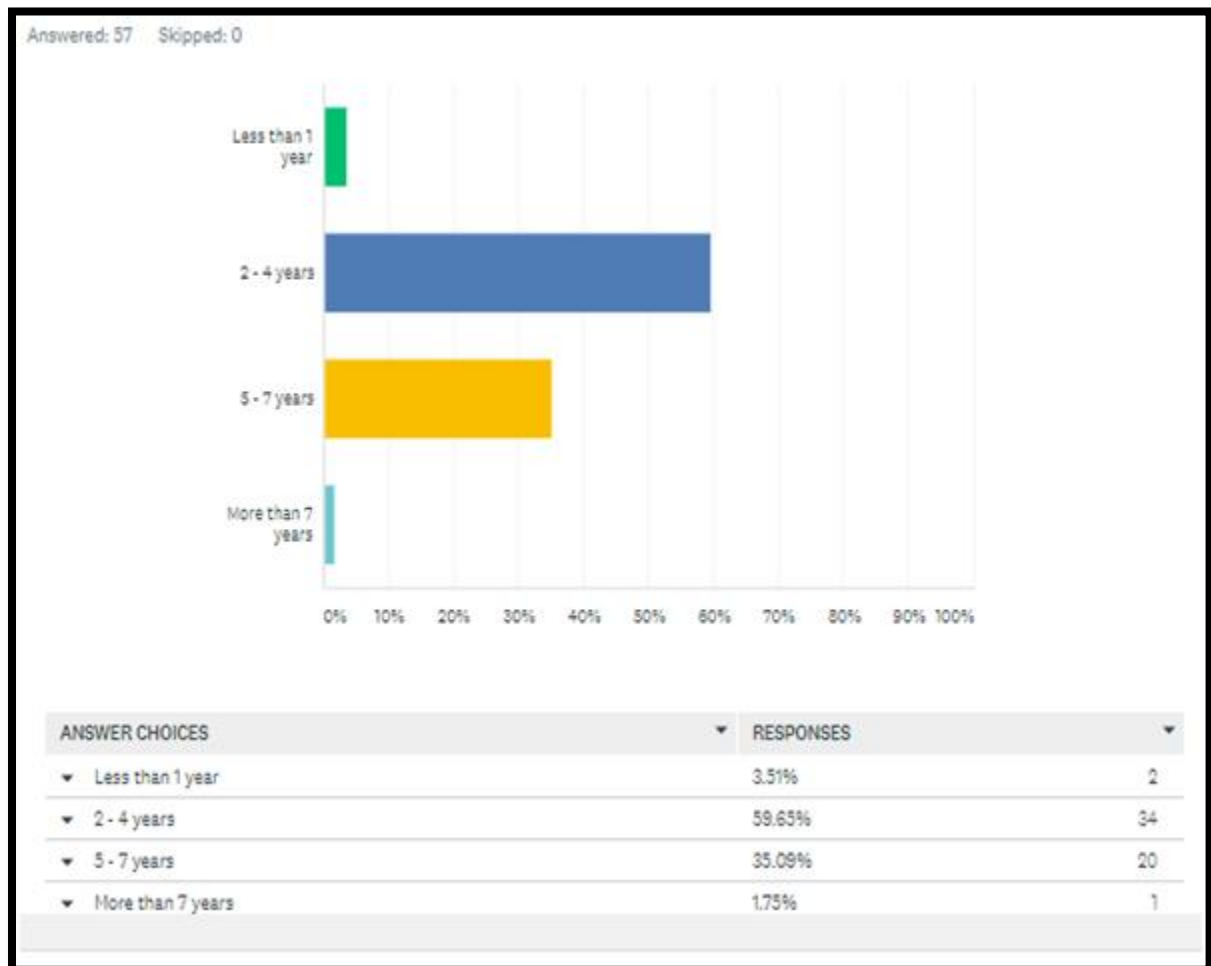
As per the result of the survey it was observed that mainly 25-34 years aged government officials mainly participated in the survey. The above graph states that majority of the governmental employees engaged in the risk management process are youth and enthusiastic, ranging from 25 years to 34 years ago. Employees aged above 34 comprised of a total of 16 percentages among the total number of staffs.

Q2. What is your gender?



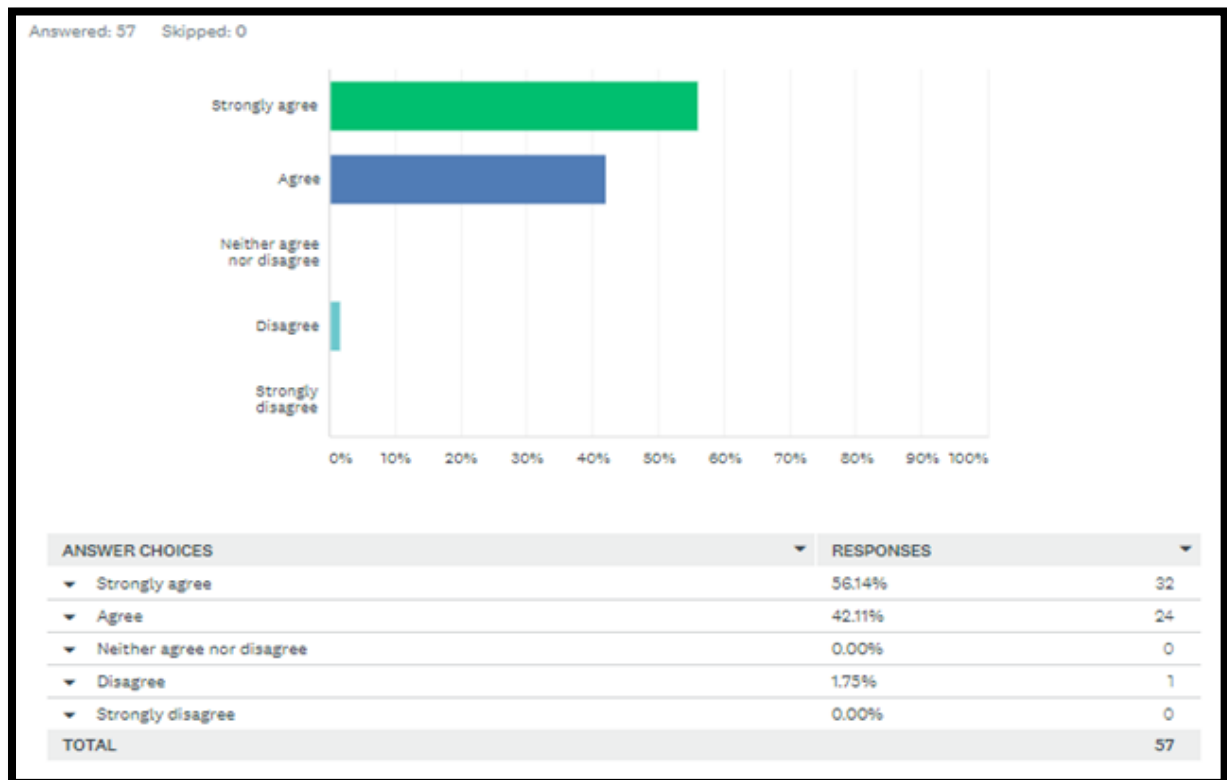
It was observed that a majority of 57.89% of male, while 42.1% of the female government officials participated in the survey. The above graph depicts a slight divergence in the ratio of male to female employees. Male employees represent about 58 per cent of the total workforce, while the ratio for females is 42 per cent.

Q3. How many years you are associated with governmental risks management operations?



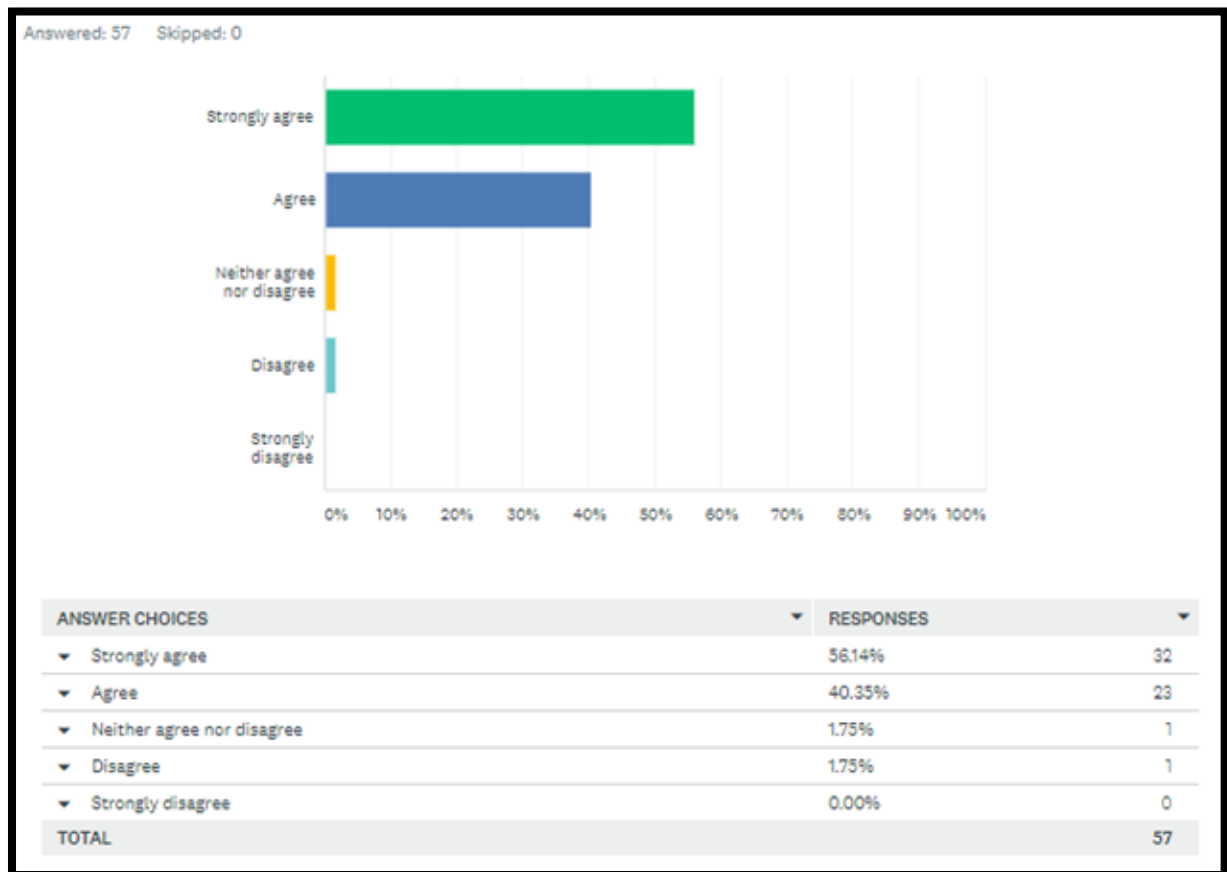
According to the results it can be stated that a majority of government employees' had 2-4 years of experience in their respective field. The above graph demonstrates that the maximum number of the employees associated with the governmental risks management operation served a period of 2 -4 years followed by experienced employees with a span of 5 – 7 years. The percentage of new employees and employees worked for more than seven years is negligible.

Q4. How far do you think widespread of globalization has increased the chances of internal and external risks of the government?



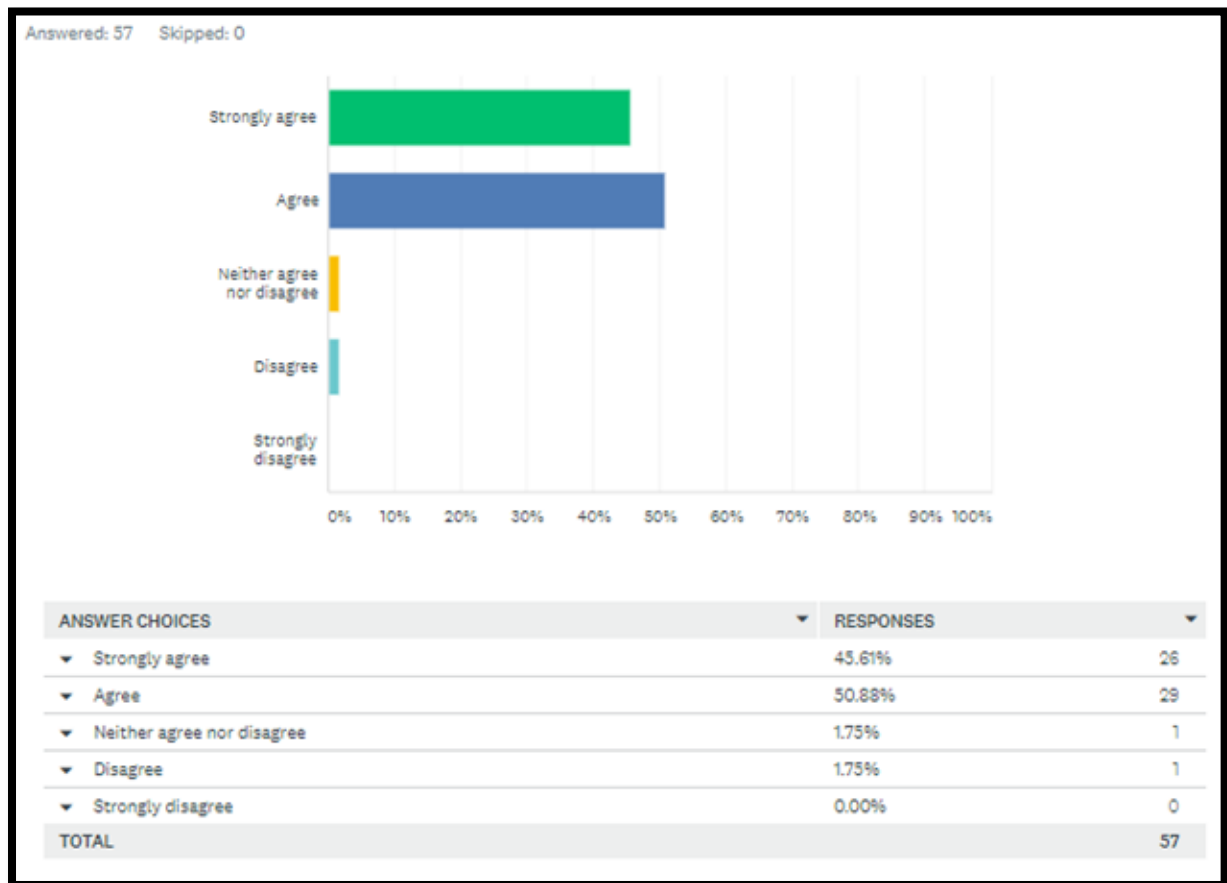
As per the observation it can be justified that the actions of globalized factors has inflicted a great deal of impact on the internal as well as external aspects of a governments risk management system. The data obtained from 98.25% of the positive respondents proves that.

Q5. How far do you think advancement of technology has posed strong challenges for government to handle the risks factors effectively?



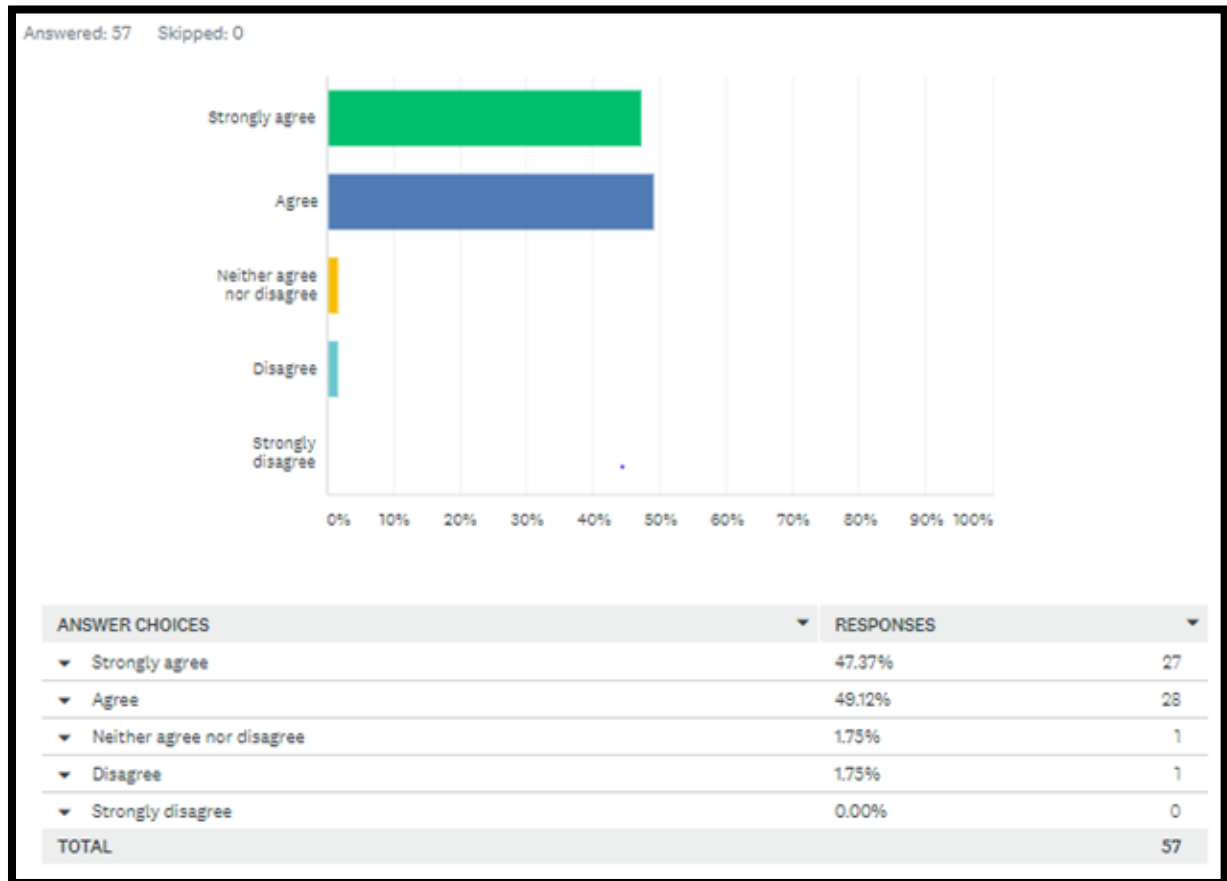
A majority of 56.14% of the people strongly agree with the fact that advanced implementation of technological tools helps in removing the factorial threats of risk management.

Q6. How far do you think globalization has created major impact in the strategic and operation management for controlling internal and external risks?



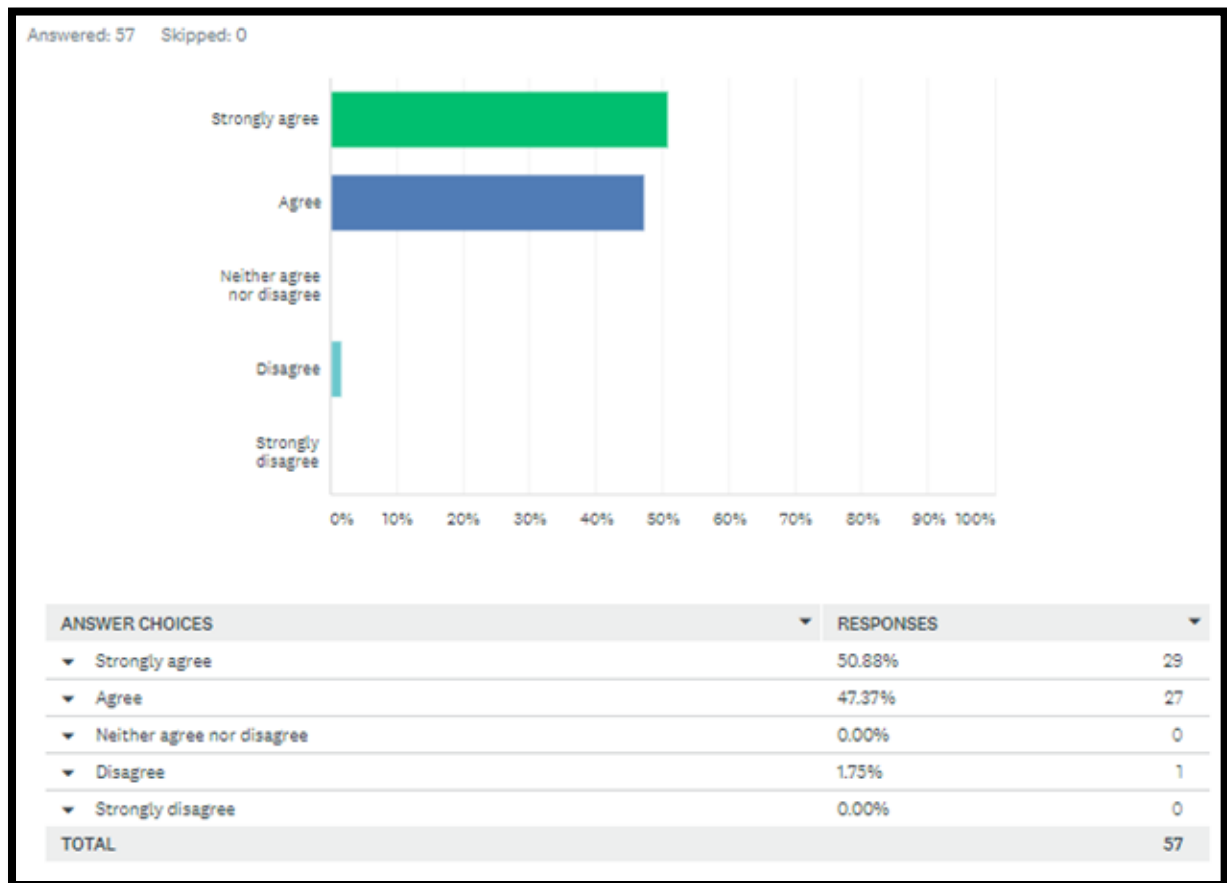
It was observed that the functions of the globalization is seriously impacting the operative process of many government based organisation in the Middle East. The statement is backed up by the justified as well as positive feedback of the government employees.

Q7. How far do you think adoption of the six principles will improve the sourcing of information for enhancing decision making process?



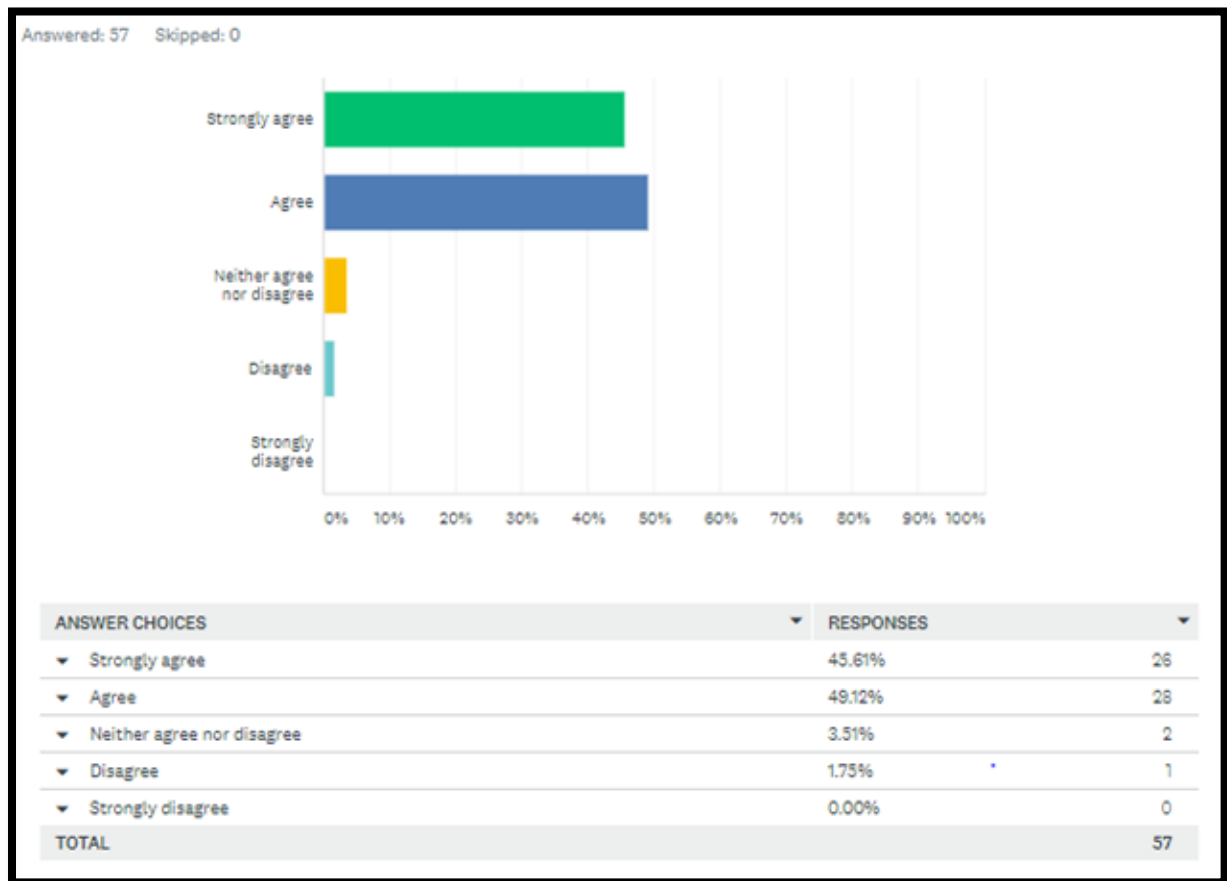
According to the results it can be evaluated that a majority of respondents agreed to the fact that implementation of six principles of effective risk management will help in enhancement of the organisations work.

Q8. How far do you think increased engagement of government boards aids to develop an effective risk management plan?



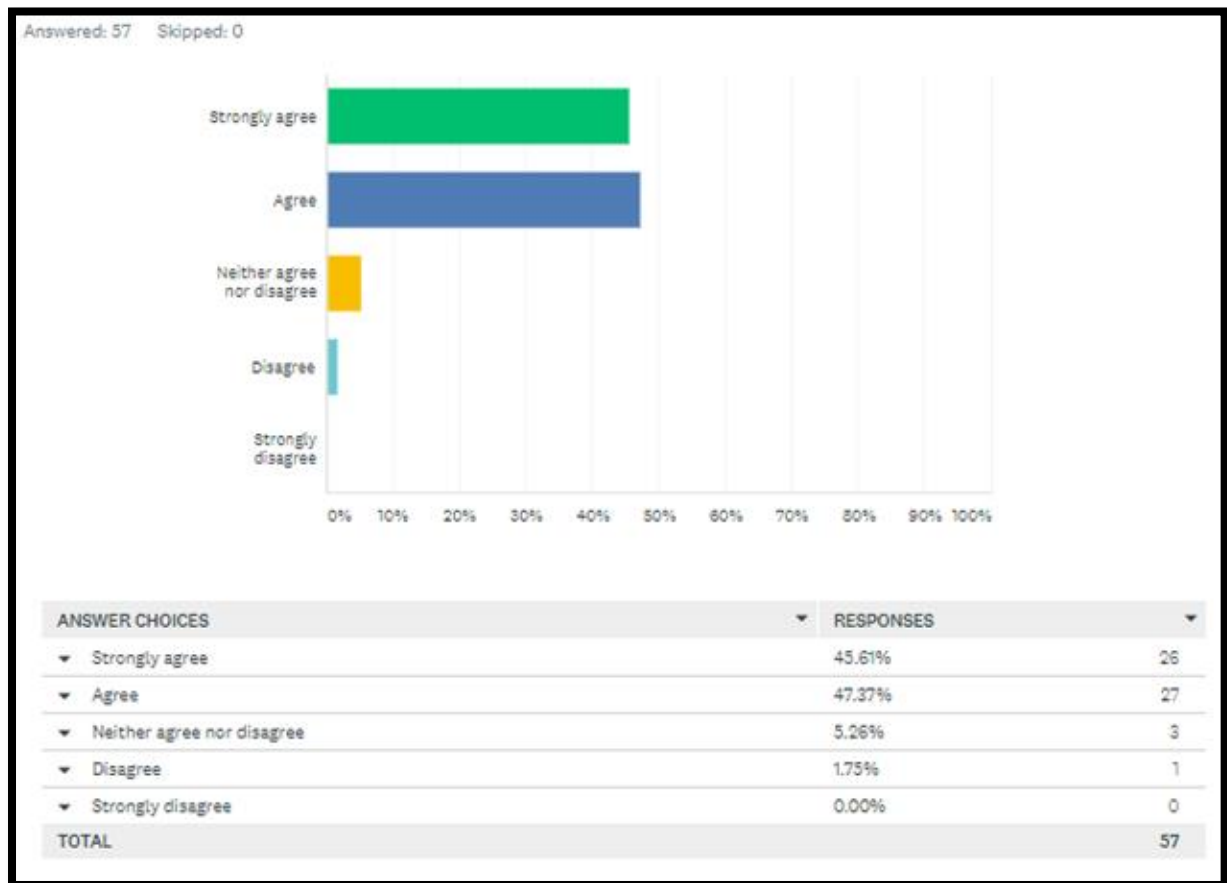
As per the information obtained from the survey it can be accentuated that a majority of people agreed with the context of the work and supported the factors to implement improving the engagement for enhancement of government based organisational plans.

Q9. How far do you think identification of risk tolerance constitute a pivotal aspect in developing a strategic risk management plan?



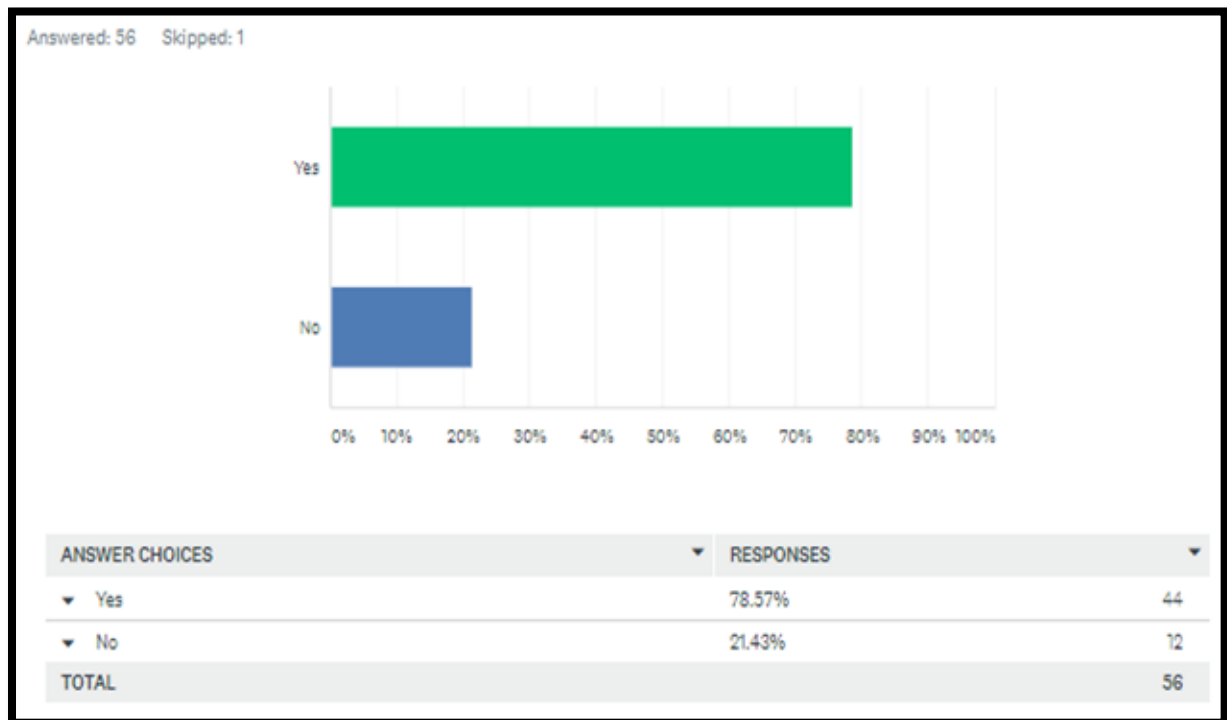
As per the essence of the data obtained from the survey it can be accentuated that 94.73% of the respondents agreed with the context aof the question and provides their result in a positive manner.

Q10. How far do you think good quality of information forms the base for effective decision making process?



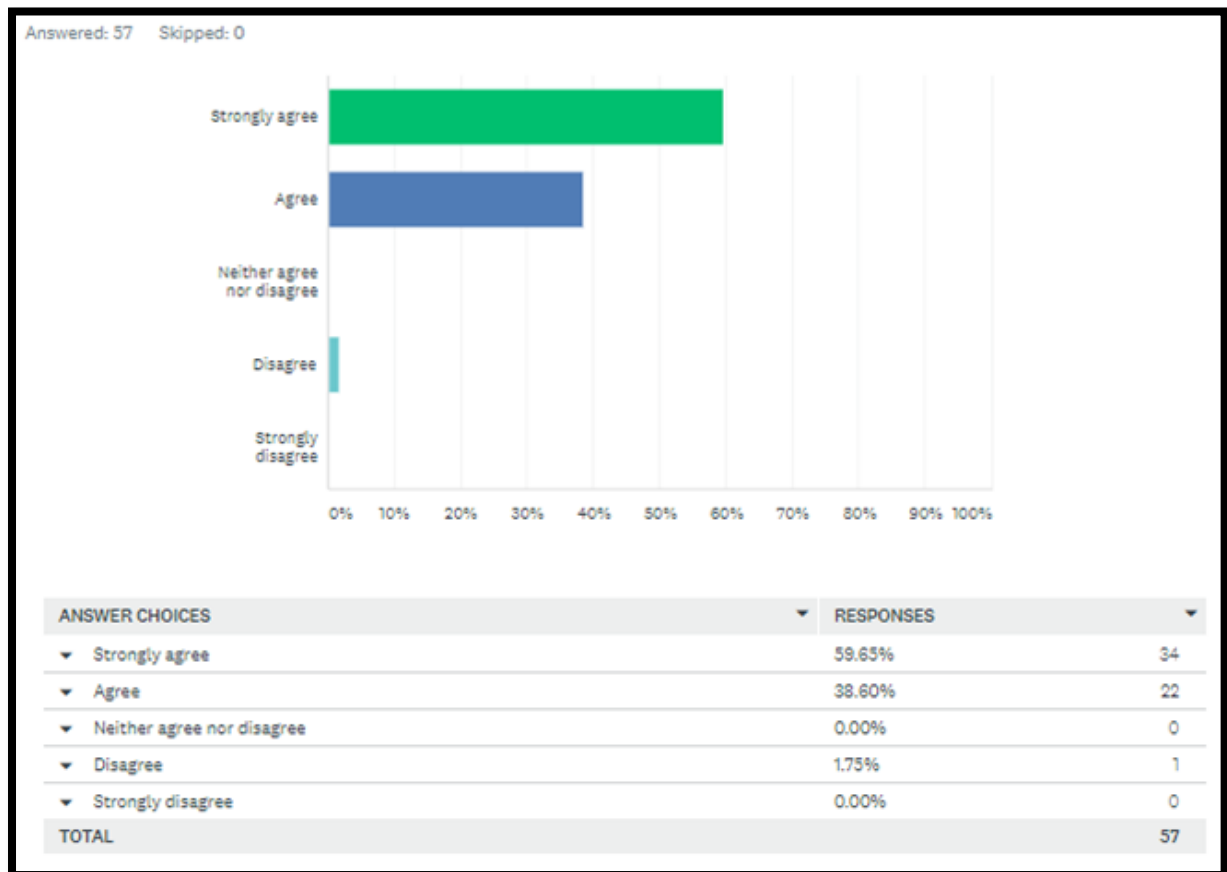
It was identified that the 92.98% people supported that good quality information benefits the functions of the risk management in government organisations.

Q11. Do you think decision making is underpinned by precise evaluation and costing of risk?



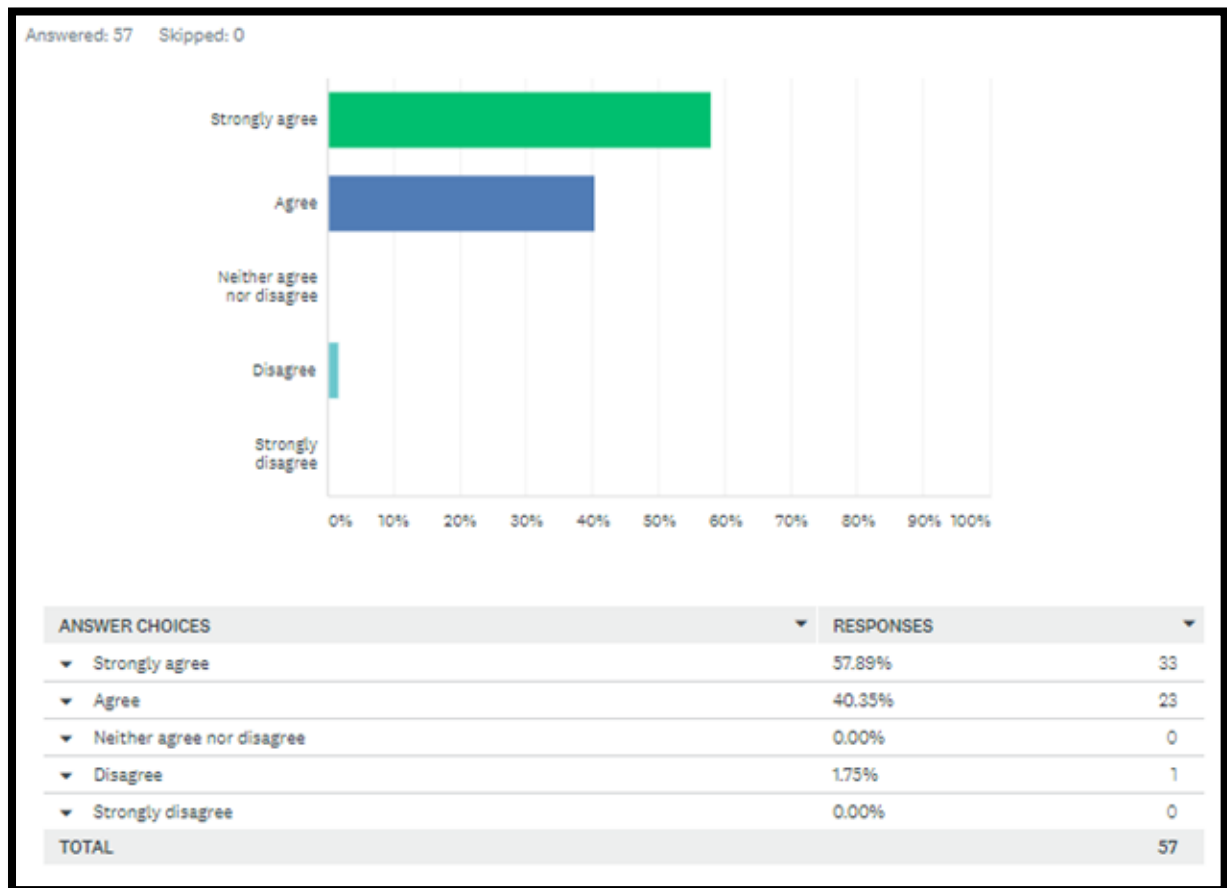
It was deliberately understood that the factors of decision-making capabilities were underpinned and it was also supported by the answers given by 78.57% of the respondents.

Q12. How far do you think establishment of risk governance framework will help the government officials to control the risks effectively?



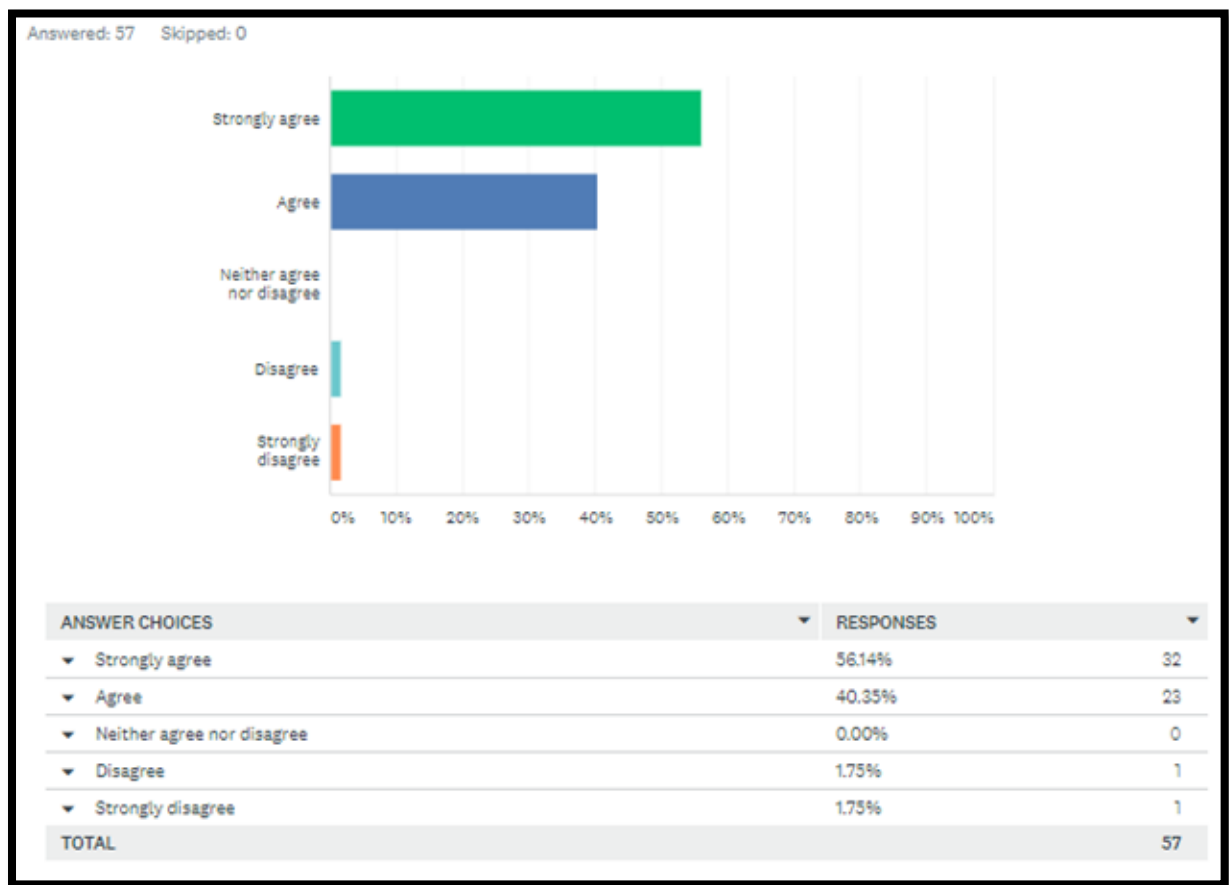
The positivity of the results explains that the respondents agreed with the factors regarding the establishment of risk framework in the management of governmental officials.

Q13. How far do you think developing risk awareness program within government council helps to overcome the effects of globalization?



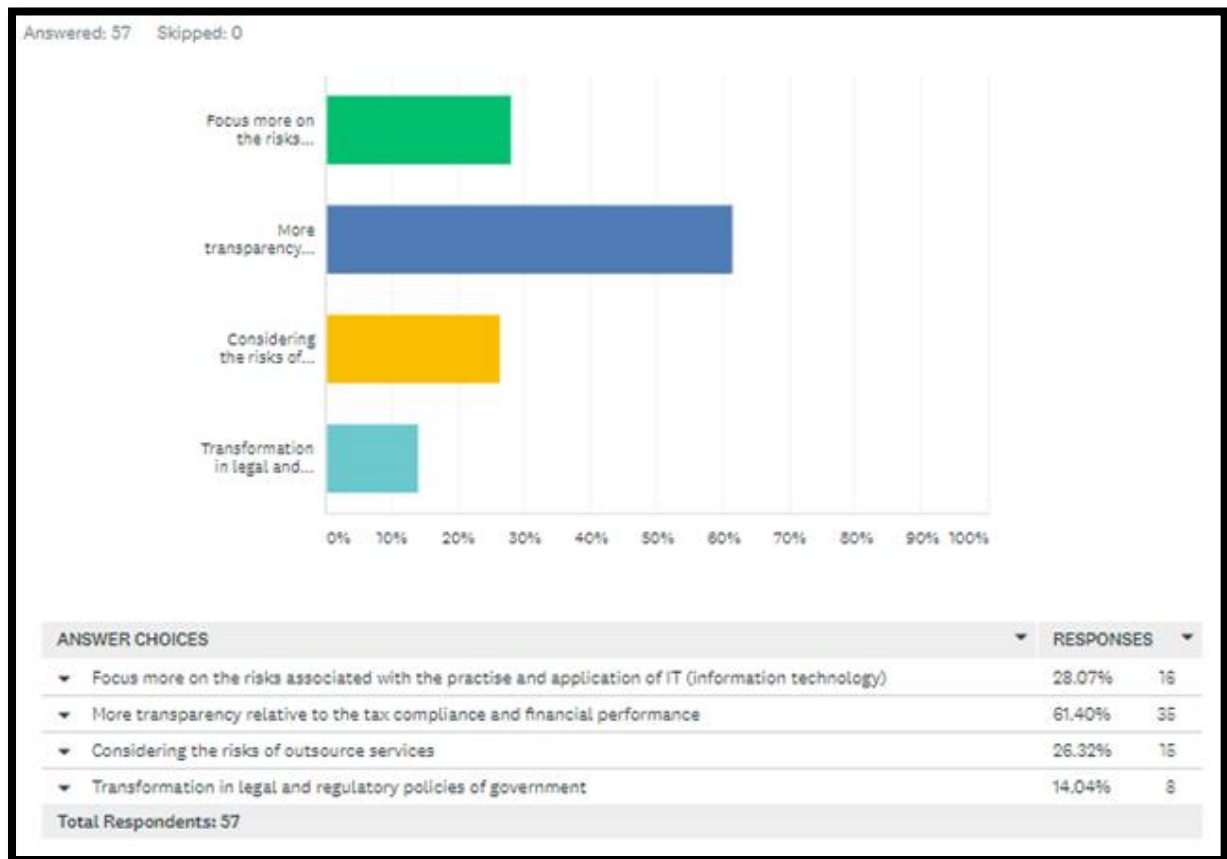
It was evaluated that the aspects of the risk awareness programs significance was positively accepted by 98.65% of the government officials.

Q14. How far do you think improving risk management capability of government enhances the overall process of management of risk?



According to the data obtained from the survey it was evaluated that 56.14% and 40.35% of the respondents agreed with the positive statement towards the factors of the questions.

Q15. What would you recommend to improve and develop the risk management program of the government?



In regards to this question it was observed that a majority of respondents agreed with better transparency in terms of risk management programs used in government sectors.

Interview questionnaire (qualitative data)

Q1. Do you think the internal and external risks associated with the government have increased with rapid spread of globalization?

Government Official 1	Government Official 2
"Yes, the internal and external factors of the risk management have been enhanced by the effects of globalization".	"Yes, it is somewhat believed that the factors of the globalization have affected the process of the risk management".

Q2. What are the major challenges, the government is facing in handling risks?

Government Official 1	Government Official 2
"Handling the effects of change management process and training the employees of the organization".	"Identification of various management tools with additional implementation of the technological system".

Q3. Do you think the advancement in technology has made it difficult for the government to handle risk management efficiently?

Government Official 1	Government Official 2
"No, the advanced use of technology has significantly evolved the functional operations of our business".	"Not Specifically, however, it is not recommended to completely rely on the process of the technological aspects".

Q4. How are the increasing risks creating impacting at both strategic and operation management of the government?

Government Official 1	Government Official 2
“The possible factors of the human resources, total quality management and effective leadership qualities are essentially impacting the strategic management of the government organization”.	“It can be stated that the different functions of the management practices and the work environment of the a government organizations is slow to implement the factors of change which hampers the effectiveness of the organization”.

Q5. How the risk management process of the government can be improved?

Government Official 1	Government Official 2
“By the effective function of limiting the use of new technology can help in further improvement of the governments business operations”.	“By the evaluation of managerial process through effective monitoring of the activities”.

4.2 Introduction

The main purpose of this study is to present the necessity of managing the risks faced by the government in operating various governmental activities. Moreover, creating or suggesting an effective framework of managing risks in various departments of government is also one of the most significant aims of this research. The research also involves identifying the type of risks faced by the government, explaining the significance of the risk management, and recommending better techniques and strategies to improve risk management. The objectives made on basis of research aims are –

- The principal aim of the research study is to broaden a framework for higher level of integrated risk management into the decision-making and strategic method in the government.

- The study will also help to enhance the standard of public and the decision of a public organization, as well as to recognize the risks before it manages to improve the research.
- The study also aims to maintain the risks relevant to budget uncertainty and enhance the flow of information, transversely throughout the administration for better management of the associated risks management activities of Digital Ajman Government.

The questions relevant to the research content are as follows:

- What framework, tools and process government use to identify and manage risk?
- What types of risks are associated with government WBS?
- Is Risk Management embedded in the Government decision-making process?

After setting up the research objectives and research questions, some assumptions are formulated to understand the topic and research investigation. Therefore, the hypotheses made for this research are

- H1: The impact of risk management frameworks on outlining the aspects of risk management.
- H2: The effectiveness development of the prioritization of risks to influence the various legal activities on the risk management framework.
- H3: The impact of risk management framework for achieving the performance matrix and preparing the standard mitigation plan.

After getting the results from the survey and the descriptive statistics, the hypothesis were proved. The main outcome of the study that, risk management framework of the Ajman Digital Government is important for managing and mitigating the risks. It is important to note that the risk management framework of the concerned government is important for preparing the standard mitigation plan by which the risk can be mitigated. However, based on the investigations, the various legal activities also identified and the risks are prioritized as per the said framework.

Discussion

As per the results attained from the survey and tables it sheds light the issues of risk organization it can be determined that Ajman Digital Government lacks approximately new approaches for implementing risk administration in their association. According to the survey

outcomes, it was recognized that only 2 to 4 skilled employees were familiar with the theoretical theory of risk organization. Moreover, workforces with higher qualified were very less in figures and this caused the party to face certain issues in the application of risk organization. According to the digital agencies of the Ajman government, they lacked the framework of risk management and the theoretical loopholes for effective operation kept on growing. These extremely pretentious the operative purposes of the organization as they lacked the process for executing risk administration in their organization.

It was further recognized that the association of “Ajman Digital Government” lacked in actual application in nearly all the top as well as lower stages of the subdivisions. This indecision augmented the illegal actions of the gaps that harmed the actions of business. Though, the group is accomplished sufficient to sustain the altering exposures of the industry, it was also experiential that if this problematic is not fixed the association may lose its success for productivity. In accumulation to the glitches of management, issues like promise towards work and commercial procedure, message between various levels of the society. Along with these, the practical approach of the managements work culture caused difficult issues for the operatives ‘through the course of work movements.

Based on the hypothesis test, it has identified that the “Ajman Digital Government” is having the potential to identify the risks and the factors of the risks adequately. But sometimes, there is a lack of technology used by the concerned government by which the government not yet successful in the digital projects. However, the result from the hypothesis tests signifies that the organization is having lower with comparison to the inexperienced employees. The factors identified in the hypothesis test are important for increasing the ability of the government for accessing the risks.

Nevertheless, the company has still not started the implementation of advance technological types of equipment’s in its organization. This is also one of the major causes that uplifted the problems if risk management in the organization of “Ajman Digital Government”. The government personnel of the organization are more focused toward earlier practices and lacked the ideology to incorporate better professionals in the team. This statement was also highlighted during the results of the survey. As per the information of the results the total numbers of professional workers with relevant information about the process of the organization are relatively lower in comparison to inexperienced employees. The Ajman Digital Government was a significantly successful organization, yet they were getting slow down because of the

changing method of the industry and their inability to adapt to those changes. Moreover, since the activities of Ajman Digital government has started its operations since 2017, despite such a short time it has made some outstanding achievement.

Surprisingly, the organization of ADG (Ajman Digital Government) requires specific help from various semi-governmental as well as governmental institutes of the UAE. This practice will allow ADG to improve its business activities and execute the tasks with professionalism. The laws of the UAE's federal states that if a company fails to contribute in the development of an economy, the operation of that particular organization will be seized from continuity. This type of actions also creates extreme pressure for newly established organization and it significantly affects the implementation of proper risk management system. Thus, process of the business gets hampered and the possible factors of risk create additional threat for an effective implementation of ADG's risk management policies.

The essential structure of reward management also affected the strategies and policies of efficient risk management programs. Moreover, the factors of trust issues, teamwork and competitiveness were extremely low which hampered the productiveness of the organization. Since the activities of risk management is extremely crucial in the industry of financial sectors, and IT sectors including some of the governmental as well as semi-governmental organizations. The assessment must be done under the supervision of information asset owners. ADG management of Ajman Digital Government must determine the acceptable level of risk from the risk assessment outcomes. Every activity related to the risk management operation of the organization is dealt by the managers who are extremely capable of identifying the nature of risks and the way in which the risks can be managed.

The consequence of the investigation procedure tends to be less reliable while seeing the quantity to which risk organization is a main driver in dissimilar decision-making within the association. It also assists in evaluating the costing as well as evaluative features applicable to the risk organization that are underdeveloped agencies. However, the sectors of the association face risks in emerging combined and reliable approach, with admiration to overseeing risks in a lively setting. From the study, it can be stated that the majority of the organizations follows the six ideologies relevant to the risk organization, to progress capable framework in justifying the problems. The moralities state that capable decision-making measured supported through higher quality material. In addition, betrothed panel tends to importance on the commercial and to accomplish the belongings that tend to stock or worth.

The hazards of internal and peripheral factors can be moved effectively over the application of six ideologies of risk administration. Enhanced association and vigorous contribution of the administration officials will advance the risks management competence of entities and help to progress capable plan of risk administration.

If we consider Ajman Digital Government as an example and discuss their risk management strategies and framework, the topic of this study will be crystal cleared. Ajman Digital Government has aimed to ensure the information security and business continuity being aware of the internal and external risks as well as the market threats. The organization has implemented several significant policies and strategies to manage the risks. First of all, the organization involves assessing the type of risk that can arise in their development process. According to the policies of the organization the risk assessment should be established, implemented and maintained with great sincerity. A proper framework of risk assessment must be implemented and followed by each member of the organization. Moreover, the risk assessment must be done every year and each type of change should be dealt with essential framework. The hypothesis test signifies that there is a misbalance between the risk management and the communication of the concerned government in this pandemic situation. Effective risk management is having a vital role by which the government can adopt the significant management style for reducing the risks. Those management styles are important for analyzing the misbalance of the communication style with significant strategies.

Moreover, it is critically identified that due to the improper assessment of the risk management in the governmental authorities in the UAE. It was significantly identified that due the improper assessment of risk management, in this current condition the spread of COVID-19, has significantly reduced the operative style of such governmental agencies. Additionally, the impact due to this pandemic situation has greatly affected the operative style of many governmental authorities including the Department of Digital Ajman government. With improper management style and misbalance in communication the possible factors of the risk management failed with significant actions. It can also be highlighted that it has created a great toll on the economy of the UAE. In this regard, the government authorities have panned to effectively analyze the present situation and incorporate various other strategies that can reduce the degrading factors of such governmental operations.

Review the literature on Enterprise Risk Management and different strategies toll, and processes

By utilizing different sources, the researchers have collected essential data to attain the objectives of this particular research. The above-mentioned objective is relevant to the chapter of literature review, i.e. chapter 2. Besides, the primary research about the study has assisted the researchers in gathering enough data about the risk management and different strategies toll and processes. The literature review of this research involves describing the required framework to identify the risks, plans to prioritize and mitigate the risks. As per the views of government officials rapid spread of globalization and the introduction of latest technology by a various business organization are connected with the rise in internal and external risks of governmental operations. Although, it has created many opportunities and enhanced the nation economy, however, it poses strong challenges for the government to control the risks factors associated with each element. The information that management receives, in respect to support their risk management, a procedure is not incorporated along with the financial information and performance. Therefore, it becomes complicated for the government to make the link between risk management and its influence over the effective and effectual delivery of the services.

Identify and explore key risks that impact governments at both the operational and strategic level

In order to attain this particular objective, information and data of this research have been collected by conducting survey and interview among the government officials and employees. Moreover, various secondary data and information about the risk management have been gathered from various websites and past actions of the government. This objective of the research has been linked with the methodology and analysis chapter. According to government officials, the major challenges comprised of large sets of data generated from the different organizational process, breaching of the policies conducted by the government from both domestic and international organizations. Both the factors of globalization and advanced technology has created a major impact on the in the both strategic and operational management of the government.

Develop prioritization of risks and standard mitigation plans

Developing the risk-prioritization and standard plans of mitigation are extremely important for government officials and employees to manage risks in various governmental activities. As per the collected primary data from surveying and interviewing the employees and officials of government, various risks and issues, including globalization, the global economic crisis are continuously creating obstacles in governmental activities. The methodology and analysis chapter of this research has shown the fact regarding the development of risk-prioritization and mitigation plans of the risks. The workforce of government organization comprised both enthusiastic youth and experienced staffs. Majority of the employees think that widespread globalization and advancement of technology made their duty more complicated and posed numerous difficulties. It has affected both the strategic and operational management functioning of the organization in dealing with the internal and external risks factors. Therefore, developing risk-prioritization and proper mitigation plans is very important to improve risk management.

To explore the requirements to set up a risk framework for a major government department

This research involves identifying the risk and issues faced by the government and also the requirements for managing the identified risks. Therefore, the researchers have explored the requirements of setting up a risk framework for a major government department, and they have done this by interviewing the employees and officials of government. The methodology and analysis chapter have clearly described the fact and proved that this particular objective is linked with the analysis chapter. In addition, precise evaluation and costing of risks minimize the effects of risks. According to the employees, the establishment of a risk governance framework will help the officials to improve their capabilities and control the risks of internal and external environmental effects. In the end, the government staffs have suggested some recommendations, which can improve the process of risk management.

To develop a benefit matrix derived from the better implementation of risk management in the government

In order to identify and explore the benefits of risk management in the government offices, it is essential to develop a benefit matrix from the better implementation of risk management. The primary data collected from the interview and survey and also the secondary data from the news articles and previous governmental activities shows that developing a proper and

effective benefit matrix is extremely important to manage the risk in government departments. Hence, the researchers have set up the objective and have linked it with the chapter of methodology and analysis. Create more transparency to the tax compliance and financial performance for effective control of risks factors. Government council need to consider the risks of outsources services along with transforming the infrastructure of legal and regulatory policies.

Implication for future research

In this research, basically, the researchers have focused on identifying the risks and issues faced by the government in operating their activities. Besides, the research has also demonstrated the requirements of managing the risks. Although the research has addressed a basic idea of risk managing methods and strategies, it has not discussed enough details about the way of managing the risks. Therefore, the information and data collected in this research can be useful to conduct future research about the procedures and strategies to manage the risks in government sectors. Moreover, this research can be beneficial for government officials to identify future risks and to find out more advanced ways of overcoming the risks. In terms of the future aspects, the governmental authorities of the Department of Digital Ajman are planning to effectively organize their problems and solve it with significant approach. With the use of proper technology and enhancements of traditional culture of the management. The authorities are planning to effectively follow the principles and guidelines of the risk management so that they can improve the functions of the management. Moreover, it is also imperative in solving the present situation of the Coronavirus situation.

V. Chapter 5: Recommendation and Conclusion

Recommendation

The effective organizing of risk management and countering the functions of the risk management is something that incurs a lot of stress on the operations of an organization. This states the proper implementation of the risk management strategies and policies helps individuals to successfully implement new practices. These practices functions together to improve the productive role of government based organization. The risks including globalization, financial crisis, technological risks and more are the obstacles for the government around the world. In order to overcome or reduce the risks, the government officials are giving their continuous efforts to find out the best ways of managing the risks. As the risks in government activities are extremely detrimental to the development of a country, it is crucial to implement an innovative and effective risk management process. Moreover, every government needs to improve the risk management process, so that the government can increase its working efficiency. However, as risk management is extremely significant for every government across the world, some effective recommendations can be given to the governments for improving the risk management process. The government officials can be benefited from the recommendations given below:

Focus more on the risks associated with the practice and applications of IT (Information Technology): Technology risks are one of the major risks that increase the headache of government officials. Information Technology is greatly useful for the government to operate its activities and to gather useful information and relevant to its operation. The risks in the IT department of the government can create major problems in government activities. Therefore, the government needs to focus more on the risks related to the IT departments.

More transparency related to tax compliance and financial performance: The government of every nation needs to be more transparent regarding its tax compliance and financial performance. As the financial risks are the most significant, these should be managed with more sincerity. The government should focus on tax compliance and implement strict rules and regulations for the purpose related to tax compilation.

Consider the risks of outsourced services: It has been discovered that many private organizations along with the government offices have a misconception about the outsourced

services. Most of the organizations think that as the services are outsourced, they do not need internal controls; this fact increases the risk of outsourced services leading the government to face major issues in its activities. Therefore, government officials must consider the risk of outsourced services with great attention and sincerity.

Transformation in legal and regulatory policies of government: As the governmental policies of managing the risks decide the effectiveness of the risk management activity, the government officials must review the legal and regulatory policies with a certain period of time. They need to identify the less active and useful policy so that they can modify or replace the policy and implement a better one. With the help of experts and professionals, the government officials need to transform or modify the legal policies to achieve maximum efficiency in managing the risks.

Increase the Risk Intelligence of an organization: The government officials need to increase the risk intelligence within the organization. They need to train their employees to make them more efficient in assisting their organization in identifying the risks and also to overcome the risks. They also need to make the employees aware of their duties and responsibilities. Moreover, they must engage all the employees of risk management in making important decisions for the betterment of the government.

Conclusion

After studying the above research work in the paper, it is confirmed that risks in the government departments are the obstacles and reasons of headache while conducting the governmental activities. Ajman Digital Government is one of the major parts of the UAE governmental activities and it is very important to make sure that they have advanced, improved technology to support the new governmental activities. The impacts of globalization, fast-growing technological risks, financial crisis, criminal activities and more are some major risks preventing the governments in operating their activities. Ajman Digital Government also needs to train and educate their employees with the advanced technology to ensure they can protect the organizational innovation and working procedure from any kind of external risks. The risks not only increase the issues for the government but also adversely influence the common people to lead a peaceful life.

As it stood recognized that Ajman Digital Administration plays a vital part in refining the technical and business-related features of country's management, thus, it very significant to ensure the governmental agencies consider the existing risks recognized in this study for further growth. All these above debates not only profit the researchers to comprehend the theme more suitably but also assist the administration officials in attractive insights and references for enlightening the risk management progression.

Risk management is one of the most important activities implemented by every organization; the government offices are no different. In order to avoid the risks, the government must implement an effective and errorless risk management system so that it can operate its activities without any headache. The study paper has labeled a proper outline for categorizing and also justifying the risks in administrative activities. However, from the study, it is understandable that risk leads the administrations or any other officialdoms to review its exterior and internal sources which can generate risks for the governments. Similarly, this review also assistances the administration officials in classifying its feebleness and assets, which contribution them to rise the competence of the management. Without risk management, the government cannot examine its activities and modify its defects. Therefore, in order to be successful in the desired goals, the governments from all over the world need to make risk management as their core activities.

In order to critically functions with the approach of the risk management, this study highlights various framework and research methods that represents the case of the Department of Digital Ajman government. A proper assessment regarding the functions of the risk management has been presented that highlights the actions of the Digital Ajman government in improving the functions of their governmental operations. In the discussion and findings section of the research, a short yet information situation regarding the spread of Coronavirus has been presented. The situation has been presented as an example, to highlights that due to improper assessments of the risk management how the spread of an infectious disease has caused such havoc in the country of the UAE.

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VII. Appendices

Appendix– 1

Interview questionnaire (qualitative data)

Q1. Do you think the internal and external risks associated with the government have increased with rapid spread of globalization?

Q2. What are the major challenges, the government is facing in handling risks?

Q3. Do you think the advancement in technology has made it difficult for the government to handle risk management efficiently?

Q4. How are the increasing risks creating impacting at both strategic and operation management of the government?

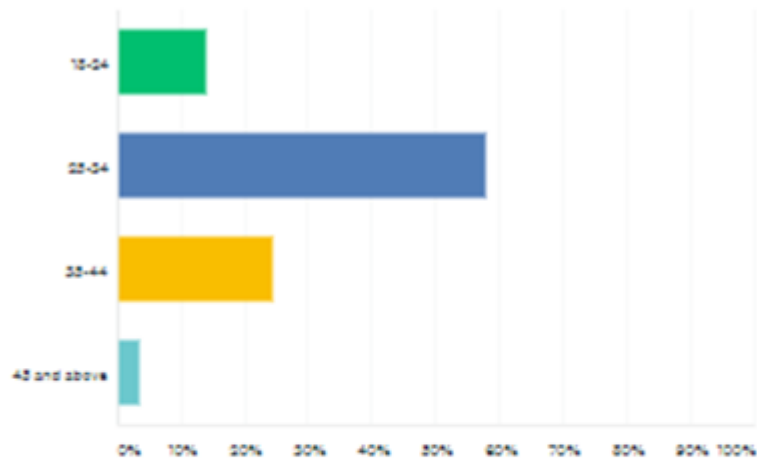
Q5. How the risk management process of the government can be improved?

Appendix – 2

Survey questionnaire (quantitative data)

Q1. What is your age?

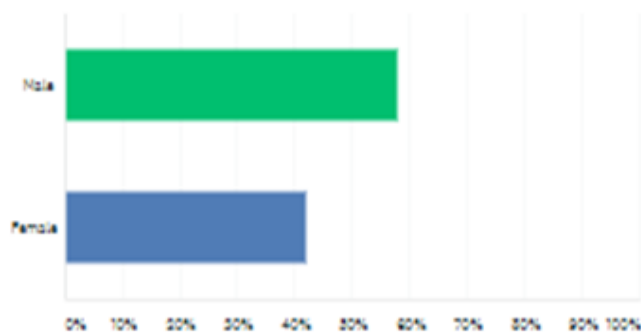
Answered: 57 Skipped: 0



ANSWER CHOICES	RESPONSES
18-24	14.04% 8
25-34	57.89% 33
35-44	24.56% 14
45 and above	3.51% 2
TOTAL	57

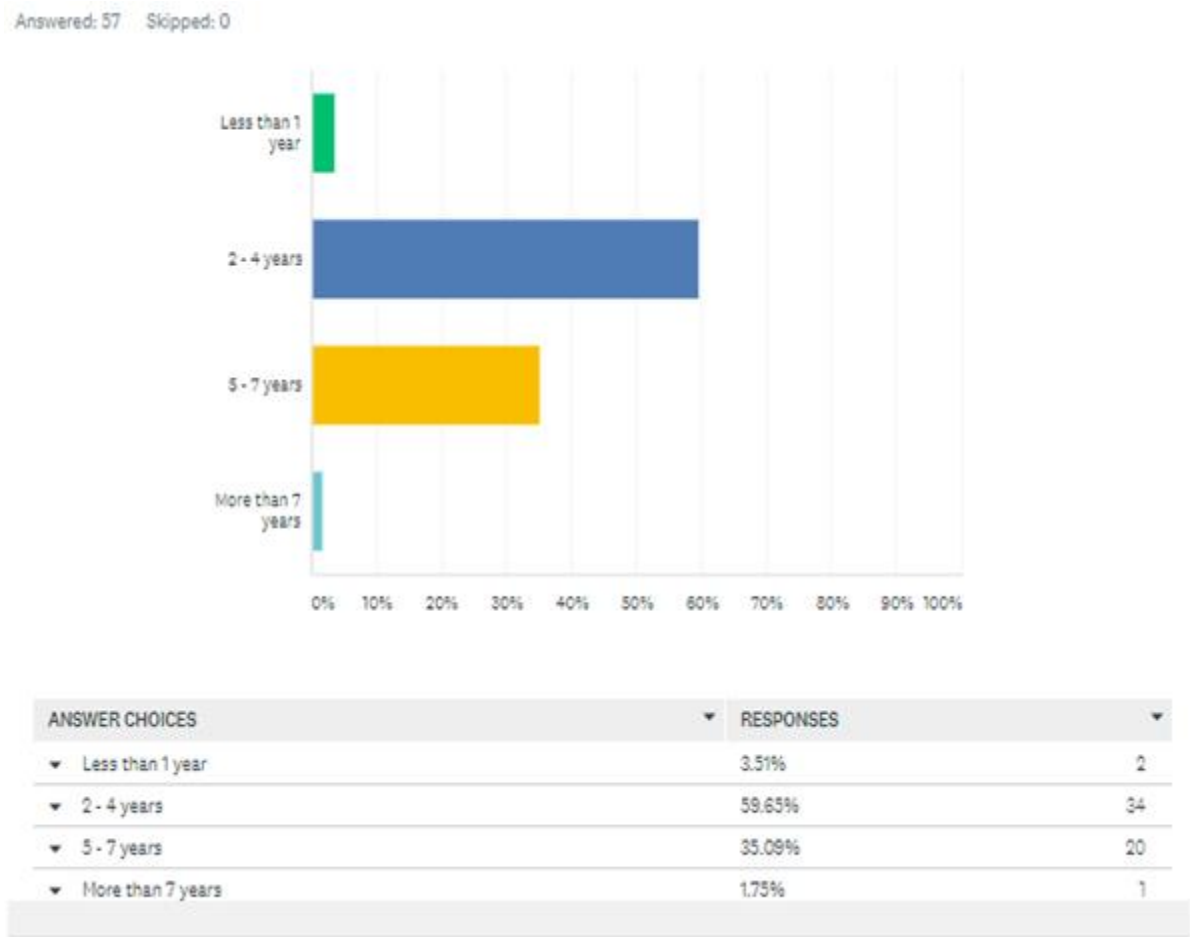
Q2. What is your gender?

Answered: 57 Skipped: 0



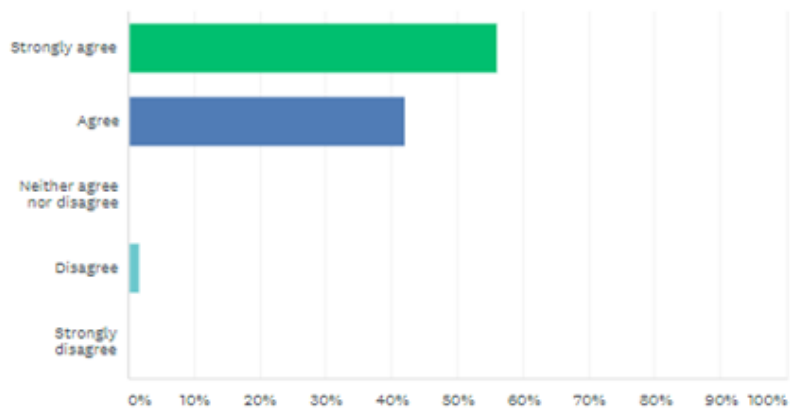
ANSWER CHOICES	RESPONSES
Male	57.89% 33
Female	42.11% 24
TOTAL	57

Q3. How many years you are associated with governmental risks management operations?



Q4. How far do you think widespread of globalization has increased the chances of internal and external risks of the government?

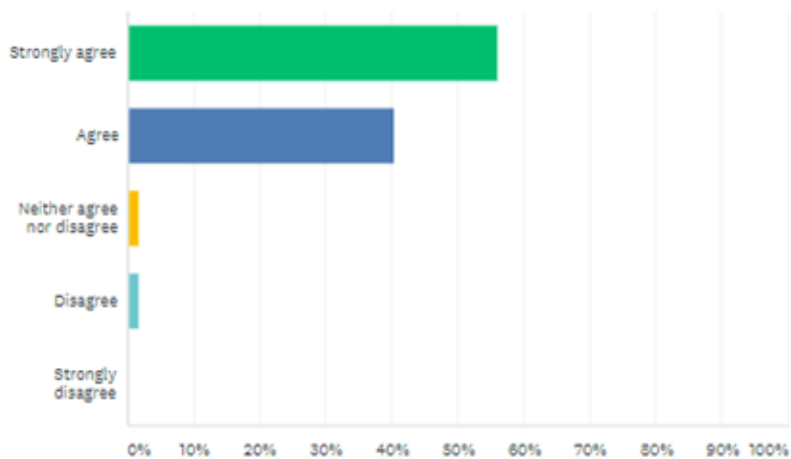
Answered: 57 Skipped: 0



ANSWER CHOICES	RESPONSES
Strongly agree	56.14% 32
Agree	42.11% 24
Neither agree nor disagree	0.00% 0
Disagree	1.75% 1
Strongly disagree	0.00% 0
TOTAL	57

Q5. How far do you think advancement of technology has posed strong challenges for government to handle the risks factors effectively?

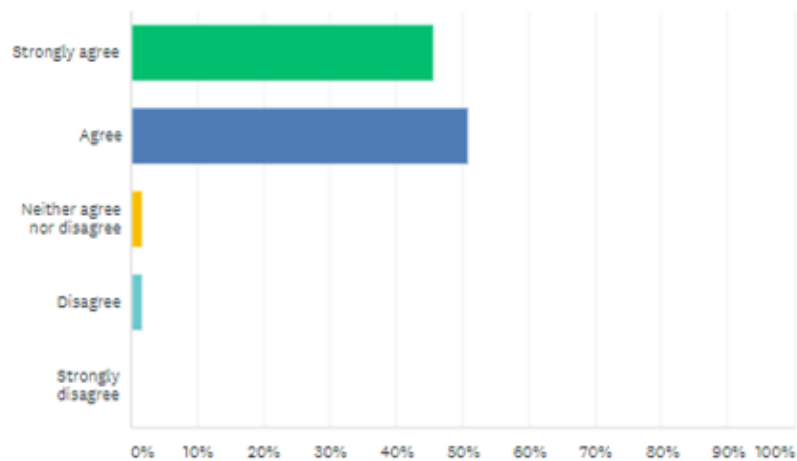
Answered: 57 Skipped: 0



ANSWER CHOICES	RESPONSES
Strongly agree	56.14% 32
Agree	40.35% 23
Neither agree nor disagree	1.75% 1
Disagree	1.75% 1
Strongly disagree	0.00% 0
TOTAL	57

Q6. How far do you think globalization has created major impact in the strategic and operation management for controlling internal and external risks?

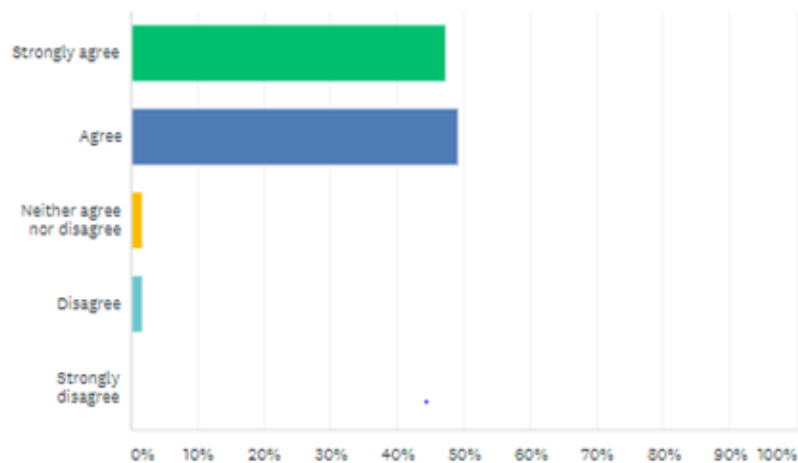
Answered: 57 Skipped: 0



ANSWER CHOICES	RESPONSES	
Strongly agree	45.61%	26
Agree	50.88%	29
Neither agree nor disagree	1.75%	1
Disagree	1.75%	1
Strongly disagree	0.00%	0
TOTAL		57

Q7. How far do you think adoption of the six principles will improve the sourcing of information for enhancing decision making process?

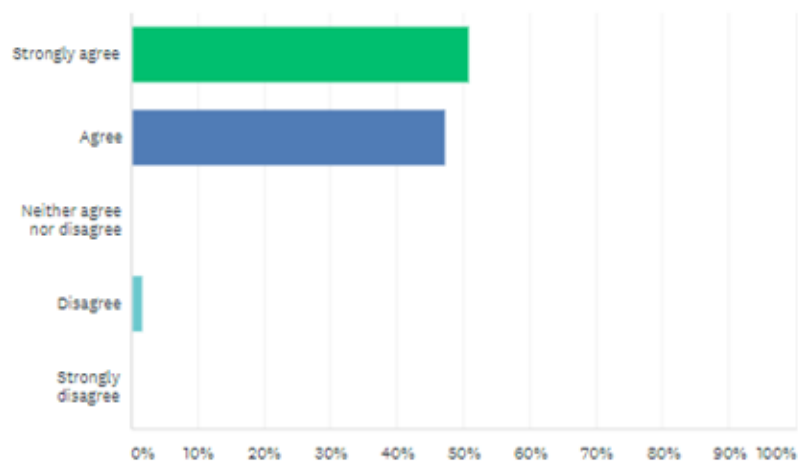
Answered: 57 Skipped: 0



ANSWER CHOICES	RESPONSES	
Strongly agree	47.37%	27
Agree	49.12%	28
Neither agree nor disagree	1.75%	1
Disagree	1.75%	1
Strongly disagree	0.00%	0
TOTAL		57

Q8. How far do you think increased engagement of government boards aids to develop an effective risk management plan?

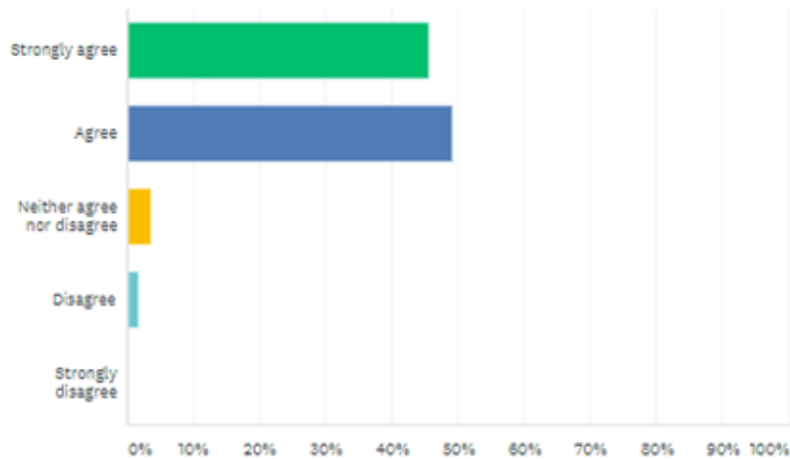
Answered: 57 Skipped: 0



ANSWER CHOICES	RESPONSES	
Strongly agree	50.88%	29
Agree	47.37%	27
Neither agree nor disagree	0.00%	0
Disagree	1.75%	1
Strongly disagree	0.00%	0
TOTAL		57

Q9. How far do you think identification of risk tolerance constitute a pivotal aspect in developing a strategic risk management plan?

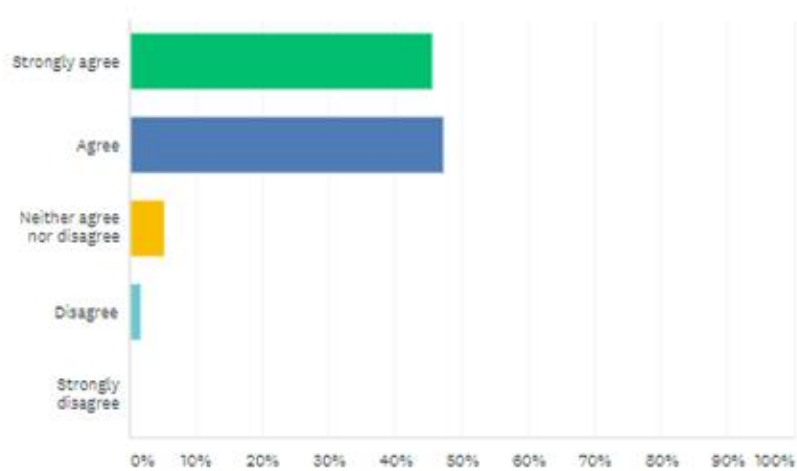
Answered: 57 Skipped: 0



ANSWER CHOICES	RESPONSES	
Strongly agree	45.61%	26
Agree	49.12%	28
Neither agree nor disagree	3.51%	2
Disagree	1.75%	1
Strongly disagree	0.00%	0
TOTAL		57

Q10. How far do you think good quality of information forms the base for effective decision-making process?

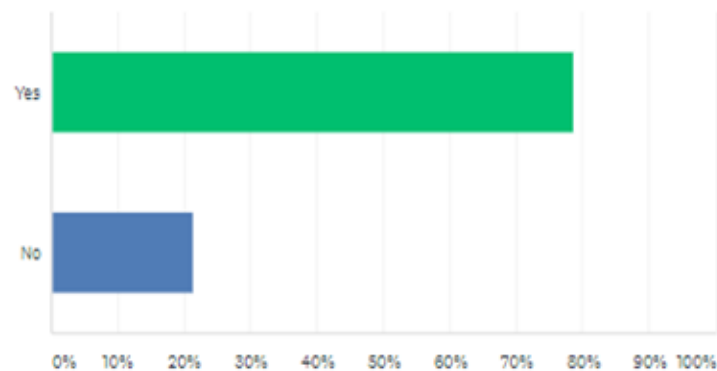
Answered: 57 Skipped: 0



ANSWER CHOICES	RESPONSES	
Strongly agree	45.61%	26
Agree	47.37%	27
Neither agree nor disagree	5.26%	3
Disagree	1.75%	1
Strongly disagree	0.00%	0
TOTAL		57

Q11. Do you think decision making is underpinned by precise evaluation and costing of risk?

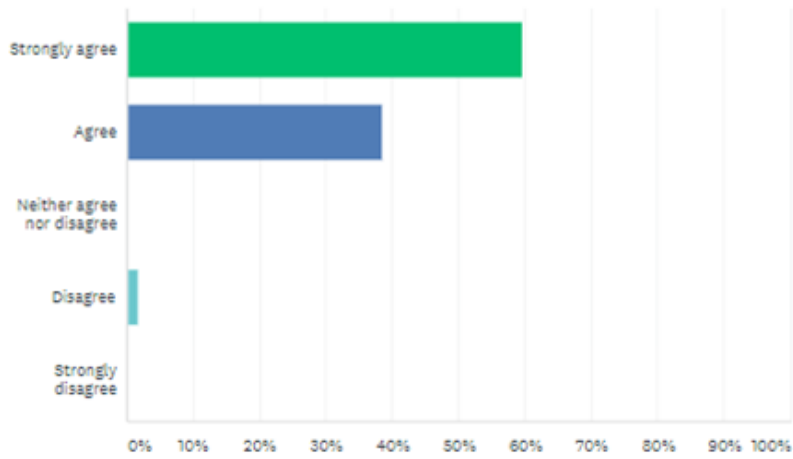
Answered: 56 Skipped: 1



ANSWER CHOICES	RESPONSES	
Yes	78.57%	44
No	21.43%	12
TOTAL		56

Q12. How far do you think establishment of risk governance framework will help the government officials to control the risks effectively?

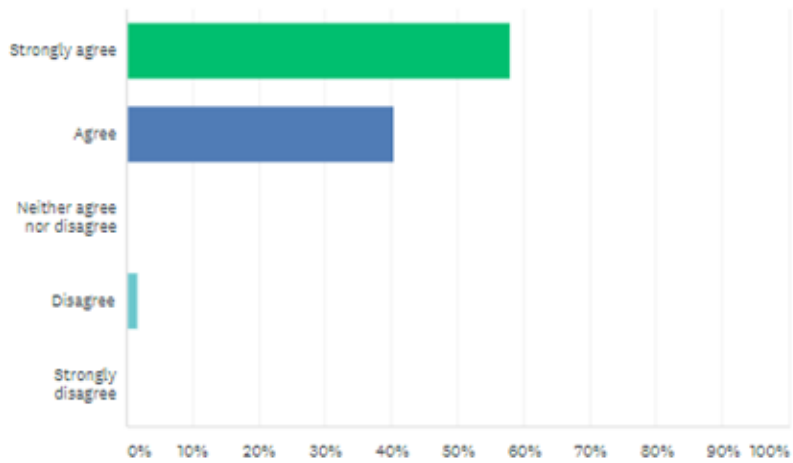
Answered: 57 Skipped: 0



ANSWER CHOICES	RESPONSES	
Strongly agree	59.65%	34
Agree	38.60%	22
Neither agree nor disagree	0.00%	0
Disagree	1.73%	1
Strongly disagree	0.00%	0
TOTAL		57

Q13. How far do you think developing risk awareness program within government council helps to overcome the effects of globalization?

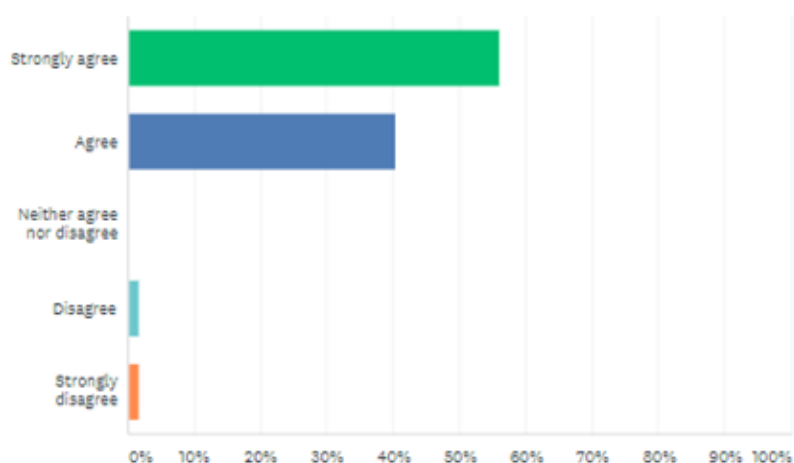
Answered: 57 Skipped: 0



ANSWER CHOICES	RESPONSES	
Strongly agree	57.89%	33
Agree	40.35%	23
Neither agree nor disagree	0.00%	0
Disagree	1.75%	1
Strongly disagree	0.00%	0
TOTAL		57

Q14. How far do you think improving risk management capability of government enhances the overall process of management of risk?

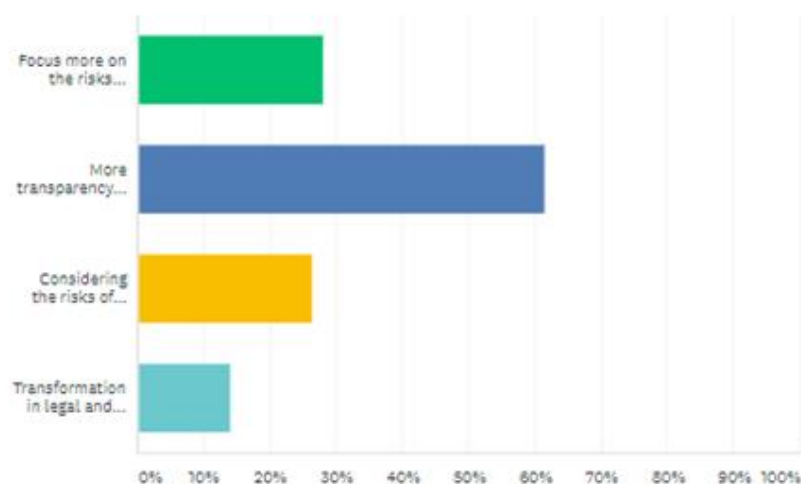
Answered: 57 Skipped: 0



ANSWER CHOICES	RESPONSES	
Strongly agree	56.14%	32
Agree	40.35%	23
Neither agree nor disagree	0.00%	0
Disagree	1.75%	1
Strongly disagree	1.75%	1
TOTAL		57

Q15. What would you recommend to improve and develop the risk management program of the government?

Answered: 57 Skipped: 0



ANSWER CHOICES	RESPONSES	
Focus more on the risks associated with the practise and application of IT (information technology)	28.07%	16
More transparency relative to the tax compliance and financial performance	61.40%	35
Considering the risks of outsource services	26.32%	15
Transformation in legal and regulatory policies of government	14.04%	8
Total Respondents: 57		

Appendices – 3

Tables

Correlations

		How far do you think increased engagement of government board aids to develop an effective risk management plan?	How far do you think widespread of globalization has increased the chances of internal and external risks of the government?	How far do you think advancement of technology has posed strong challenges for government to handle the risks factors effectively?	How far do you think globalization has created a major impact in the strategic and operation management for controlling internal and external risks?	How far do you think the adoption of the six principles will improve the sourcing of information for enhancing the decision-making process?	How far do you think identification of risk tolerance constitute a pivotal aspect in developing a strategic risk management plan?	How far do you think good quality of information forms the base for effective decision making process?
Pearson Correlation	How far do you think increased engagement of government board aids to develop an effective risk management plan?	1.000	1.000	1.000	1.000	1.000	1.000	1.000

How far do you think widespread of globalization has increased the chances of internal and external risks of the government?	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
How far do you think advancement of technology has posed strong challenges for government to handle the risks factors effectively?	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
How far do you think globalization has created a major impact in the strategic and operation management for controlling internal and external risks?	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

How far do you think the adoption of the six principles will improve the sourcing of information for enhancing the decision-making process?	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
How far do you think identification of risk tolerance constitute a pivotal aspect in developing a strategic risk management plan?	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
How far do you think good quality of information forms the base for effective decision making process?	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Do you think decision making is underpinned by precise evaluation and costing of risk?	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

How far do you think the establishment of risk governance framework will help the government to control the risks effectively?	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
How far do you think developing risk awareness program in a governmental board helps to overcome the effects of globalization?	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
How far do you think improving risk management capability of government enhances the overall process of management of risk?	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
What would you recommend to improve and develop the risk management program of the government?	.	.	.	.	.	.	.	.

	What would you recommend to improve and develop the risk management program of the government?	.	.	.	.	.	.	.
	What would you recommend to improve and develop the risk management program of the government?	.	.	.	.	.	.	.
	What would you recommend to improve and develop the risk management program of the government?	.	.	.	.	.	.	.
Sig. (1-tailed)	How far do you think increased engagement of government board aids to develop an effective risk management plan?	.	.000	.000	.000	.000	.000	.000

How far do you think widespread of globalization has increased the chances of internal and external risks of the government?	.000	.	.000	.000	.000	.000	.00
How far do you think advancement of technology has posed strong challenges for government to handle the risks factors effectively?	.000	.000	.	.000	.000	.000	.00
How far do you think globalization has created a major impact in the strategic and operation management for controlling internal and external risks?	.000	.000	.000	.	.000	.000	.00

How far do you think the adoption of the six principles will improve the sourcing of information for enhancing the decision-making process?	.000	.000	.000	.000	.	.000	.00
How far do you think identification of risk tolerance constitute a pivotal aspect in developing a strategic risk management plan?	.000	.000	.000	.000	.000	.	.00
How far do you think good quality of information forms the base for effective decision making process?	.000	.000	.000	.000	.000	.000	
Do you think decision making is underpinned by precise evaluation and costing of risk?	.000	.000	.000	.000	.000	.000	.00

How far do you think the establishment of risk governance framework will help the government to control the risks effectively?	.000	.000	.000	.000	.000	.000	.000	.00
How far do you think developing risk awareness program in a governmental board helps to overcome the effects of globalization?	.000	.000	.000	.000	.000	.000	.000	.00
How far do you think improving risk management capability of government enhances the overall process of management of risk?	.000	.000	.000	.000	.000	.000	.000	.00
What would you recommend to improve and develop the risk management program of the government?	.000	.000	.000	.000	.000	.000	.000	.00

	What would you recommend to improve and develop the risk management program of the government?	.000	.000	.000	.000	.000	.000	.00
	What would you recommend to improve and develop the risk management program of the government?	.000	.000	.000	.000	.000	.000	.00
	What would you recommend to improve and develop the risk management program of the government?	.000	.000	.000	.000	.000	.000	.00
N	How far do you think increased engagement of government board aids to develop an effective risk management plan?	2	2	2	2	2	2	

How far do you think widespread of globalization has increased the chances of internal and external risks of the government?	2	2	2	2	2	2	
How far do you think advancement of technology has posed strong challenges for government to handle the risks factors effectively?	2	2	2	2	2	2	
How far do you think globalization has created a major impact in the strategic and operation management for controlling internal and external risks?	2	2	2	2	2	2	

How far do you think the adoption of the six principles will improve the sourcing of information for enhancing the decision-making process?	2	2	2	2	2	2	
How far do you think identification of risk tolerance constitute a pivotal aspect in developing a strategic risk management plan?	2	2	2	2	2	2	
How far do you think good quality of information forms the base for effective decision making process?	2	2	2	2	2	2	
Do you think decision making is underpinned by precise evaluation and costing of risk?	2	2	2	2	2	2	

How far do you think the establishment of risk governance framework will help the government to control the risks effectively?	2	2	2	2	2	2	
How far do you think developing risk awareness program in a governmental board helps to overcome the effects of globalization?	2	2	2	2	2	2	
How far do you think improving risk management capability of government enhances the overall process of management of risk?	2	2	2	2	2	2	
What would you recommend to improve and develop the risk management program of the government?	2	2	2	2	2	2	

What would you recommend to improve and develop the risk management program of the government?	2	2	2	2	2	2	2
What would you recommend to improve and develop the risk management program of the government?	2	2	2	2	2	2	2
What would you recommend to improve and develop the risk management program of the government?	2	2	2	2	2	2	2

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	Change Statistics			Sig. F Change
						F Change	df1	df2	
1	1.000 ^a	1.000	.	.	1.000	.	1	0	.

ANOVA^a

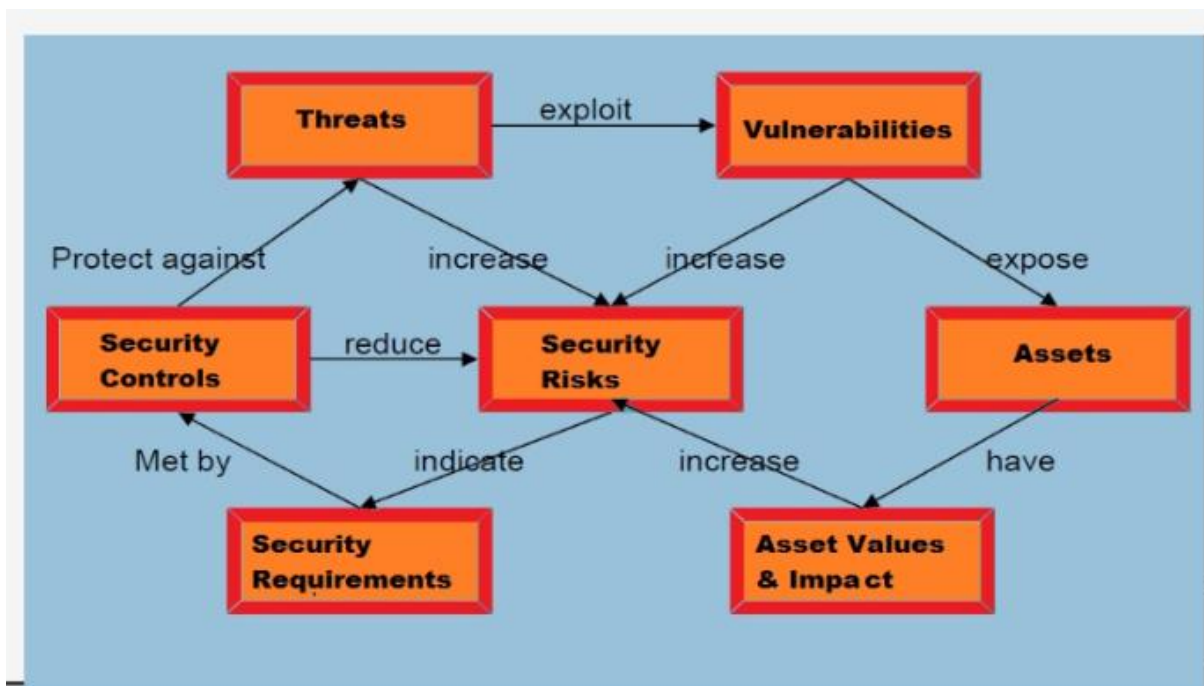
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.500	1	.500	.	. ^b
	Residual	.000	0	.		

Total	.500	1			
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Coefficients ^a											
		Unstandardized Coefficients		Standardized Coefficients			95.0% Confidence Interval for B		Correlations		
Model		B	Std. Error	Beta	t	Sig.	Lower Bound	Upper Bound	Zero-order	Partial	Part
1	(Constant)	.000	.000		.	.	.000	.000			
	How far do you think improving risk management capability of government enhances the overall process of management of risk?	1.000	.000	1.000	.	.	1.000	1.000	1.000	1.000	1.000

Appendix-4

Risk management framework (private and secure) used by the company



Appendix -5

Network operation management process of the particular company

Primary Asset						Information sensitivity value
S.No	Information	Form	Risk Owner	Location	Team/Department	
Network operations						
1	Network Management (Utilization of server, database) (Monthly) (weekly)	Soft Copy	name of the employee	office or site location	Network Operation Team	Confidential
2	Network Diagram	Soft and Hard copy	name of the employee	office or site location	Network Operation Team	Confidential
3	Documents , Images, Videos, Contacts Information related to the entities.	Soft Copy	name of the employee	office or site location	Application Team	Confidential
4	Contacts of Customers & employees	Hard & Soft copy	name of the employee	office or site location	Application Team	Internal
5	Dynamic reports of SMS gateway usage	Hard & Soft copy	name of the employee	office or site location	Application Team	Confidential
6	Mobile application related documents, Images, videos, etc..	Soft Copy	name of the employee	office or site location	Application Team	Confidential
7	Physical documents SLA's	Hard copy	name of the employee	office or site location	Application Team	Confidential
8	NDA's	Hard copy	name of the employee	office or site location	Application Team	Confidential
9	SRS documents	Hard & Soft copy	name of the employee	office or site location	Application Team	Confidential

Appendix-6

Risk assessment methodology recommended to the company to make sure they would be able to manage their risks in an efficient manner

RISK ASSESSMENT METHODOLOGY - based on ISO 27005	
Description	
As is Study of Organization	
Step 1: Conduct AS IS Study to evaluate the existing scenario and identify the gaps with respect to ISO 27001 requirements	
Step 2: Present AS IS Study findings, and provide recommendations for actions to close the gaps - This is the high level initial Risk Treatment Plan.	
Risk Assessment for Primary Assets	
Step 1: Identify and document the Primary Assets 1. Business Processes and associated sub-processes - Business Unit & Function Owners 2. Information - BU Owners	

Step 2: Classify the Primary information assets as per the Asset Classification Process and ensure their handling accordingly
Step 3: Consider the dependancy of primary assets while rating the C,I,A value of the associated supporting assets.
Risk Assessment for Supporting Assets
Step 1: Identify Supporting Assets as per the following categories: <ol style="list-style-type: none"> 1. Hardware - IT Team 2. Network - IT Team 3. Software (incl OS, System utilities, Application Systems) - IT, Business Units 4. Personnel - HR 5. Site (incl. Premises, Physical assets, Services) - Admin & IT Team 6. Organization (incl ISMS related Processes & SOPs) - ISMS Team & Process Owners
Step 2: Make a Master list of Threats and corresponding Vulnerabilities for each category of Supporting Assets
Step 3: Prepare Asset Register identifying all Supporting Assets in various categories with their location, owner, custodian and user.
Step 4: Give C, I, A values to assets based on certain guidelines <ol style="list-style-type: none"> 1. Take Asset value as the maximum of C, I, A values, 2. Dependencies of assets on business processes and other assets should be considered as well since this might influence the values of the assets.
Step 5: For each asset do the mapping of all applicable threats and vulnerabilities
Step 6: Give Probability value for a threat to occur considering all those factors that can cause the threat to occur. For example, questions like <ol style="list-style-type: none"> a. Gut feeling whether that vulnerability will cause the threat to materialize? b. Analysis of occurrences over the past 1-year or so of some incident recurring due to that vulnerability. E.g., if there is a server crash that occurred 4-5 times in the past one year, due to that vulnerability then the probability that it will recur is HIGH.
Step 7: Give Vulnerability value based on the existing level of control
Step 8: Calculate the Risk value on the basis of Asset value, Threat Probability value and Vulnerability value. Acceptable value of risk will be 6
Risk Treatment Plan
Step 1: Prepare Risk Treatment Plan to put in appropriate controls consisting of practices and processes for all assets having risk value greater than or equal to 7 and vulnerability value greater than or equal to 2
Step 2: Management should take a decision about mitigating or accepting risks.
Step 3: Implement appropriate controls as approved by Management.
STATEMENT OF APPLICABILITY
Description
Prepare Statement of Applicability (SOA) which will include the following: <ul style="list-style-type: none"> • Mapping of ISO 27001 Controls to the relevant organization Process(es) and documentation • Exclusion of any controls and the justification for their exclusion • Controls currently implemented

