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ST. MARY'S UNIVERSITY
SCHOOL OF GRADUATE STUDIES
GENERAL MBA PROGRAM

**THE EFFECT OF DECISION MAKING FOR ORGANIZATIONAL
EFFECTIVENESS. THE CASE OF INFORMATION NETWORK
SECURITY ADMINISTRATION**

December, 2022
ADDIS ABABA, ETHIOPIA

**THE EFFECT OF DECISION-MAKING FOR ORGANIZATIONAL
EFFECTIVENESS, THE CASE OF INFORMATION NETWORK
SECURITY ADMINISTRATION**

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**A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF THE
REQUIREMENT FOR THE AWARD OF THE DEGREE IN MASTER OF
BUSINESS ADMINISTRATION**

**December, 2022
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Approval of Board of Examiners

As a member of the Board of Examiners of the Master Thesis open defense examination, we testify that we have read and evaluated the thesis prepared by **Saron Tesfaye** in titled with “**Effect of decision making on the organization development, the Information Network Security Agency**” and examine the candidate. We recommended that this thesis be accepted as fulfilling the thesis requirements for degree of Master of Business Administration.

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Declaration

I declare that this research report “**THE EFFECT OF DECISION MAKING FOR ORGANIZATIONAL EFFECTIVENESS, THE CASE OF INFORMATION NETWORK SECURITY ADMINISTRATION**” is my own original work with assistances and guidance from my advisor and not submitted before for any institution and any purpose. I further declare that all the sources used in this research report have been properly recognized and acknowledged as in-text citation and reference list.

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Endorsement

This Thesis has been submitted to St Mary's University Graduate Studies for Examination with my approval as a university master's student's advisor.

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Abstract

This study is about the effects of decision making on organizational effectiveness, in the case of Information network Security Agency. It is an explanatory research in which the researcher tried to check the relation between the dependent and the independent variables. In line with this, the study has a general objective and specific objectives so as achieve the purpose of the study. The target population of the study was from employees of the organization in a position of expert, team leader, division head and directors. Accordingly, the study applied systematic and scientific way of selecting a representative sample method due to the population of the study was large and hard to incorporate all the study population. Accordingly three hundred forty questionnaires were distributed and only 93% of them were returned and used for analysis which is enough, take inference from it. The study used a primary data source in which self-administered questionnaire employed during survey and after collecting adequate and enough data tabulation methods used for analysis propose and in order to generate these categorized data statistical package for social science (SPSS) IBM version 23 used. The finding from the correlation analysis indicates that the independent variables (decision making process and decision making style) are found to have positive relationship with the dependent variables that revealed from the Pearson's Correlation Coefficient. However the positive relation of the variables was weak since the cumulative effect is .414. The study also tried to analyze the regression analysis after the confirmation of the correlation result. The regression result reveals that, managers decision making process has standardized beat value of ($\beta=0.169$), and Managers decision making style ($\beta=0.288$), have insignificant and positive effect on organizational effectiveness. The study showed that in both descriptive and inferential statistics, the factors that identified in this study based on the theoretical and empirical literature becomes supported and confirmed.

Key words: Decision making process, Decision making Style, Organization, Effectiveness
Organizational effectiveness

CHAPTER ONE

1. INTRODUCTION

1.1 Background of the study

Decision making process is a basic activity in organizations. Managers in all organizational levels take decisions to achieve firm's objectives and to survive an organization. Decision making is a systematic approach, and consists of seven steps, namely: appreciating of problem, gathering of information and data, analyzing of data and information, developing of alternatives, evaluating of these alternatives, and finally choosing of appropriate alternative. In addition decision making is as a fundamental function in management (Grant, 2011) that reflects the success and failure of managers and the organization mainly hinges upon the quality of decisions (Leonard et al, 1999). However, this systematic approach is dissimilar depending on three tips: decision making styles, importance of decision, and managerial level (Ellstrom, 2001; Parker et al., 2007).

The most critical one is the styles of decision making because it reflects the mentality or the way of thinking of managers in organizations. Moreover, it explains how the managers use information and how they conceptualize and envision the future of their organizations. Decision making styles affect knowledge' acquisition, sharing and utilization. Rowe and Boulgarides (1992: 28) revealed that "Knowing an individual's decision style pattern, we can predict how he or she will react to various situations". Organizational learning and knowledge building come from decision making processes throughout organizations (Ellstrom, 2001; Parker et al., 2007).

Stephen (1996) argues that success in the organization depend on the styles of decision making processes. Most of scholars in management emphasize that decision making is a process. This process includes a group of procedures or steps; begins with a definition of problem or opportunity and ends with the achievement of objectives. Dumler and Skinner (2007) define decision making as "a choice among competing alternatives and the implementation of the chosen alternative; all decisions have a time horizon or scope. This is a cognitive process that rationally leads to the selection of a course of action among several available alternatives.

Rational decision making means ‘making consistent, value-maximizing choices within specified organizational constraints’ (Dumler and Skinner 2007: 39). Decision making is a process of making a choice from a number of alternatives to achieve a desired result (Eisenfuhr, 2011). “It is important to note that decision-making is primarily a cognitive process that combines the mental process of perception, action, and coming to closure on stimuli. Cognitive style, on the other hand, is the patterning or linking of these thinking processes and coming to closure in the presence of ambiguity and uncertainty” (Goodyear, 1987: 9).

The decision making process depends on the differences amongst managers’ values, attitudes, education, organization, managerial level. This difference in DM amongst managers is also made because of the difference in experience, analytical ability, in forming perception and processing of information, scope of consultation, degree of freedom of choice, availability of resources and trust and rapport between the managers and the managed (Ehrgott, 2011).

On the other hand managerial skills that are considered vital to efficient and effective decision making were based on normative model of decision making, which prescribes how decisions should be made. These skills consist of (a) identifying the possible options, (b) identifying the possible consequences that follow from each option, (c) evaluating the desirability of each consequence, (d) assessing the likelihood of each consequence and (e) making a choice using a decision rule (Gilboa, 2011).

Organizational effectiveness is one of the most complex and least tackled problems in the study. Many difficulties arise with attempts to define the concept of effectiveness adequately. Some stem from the closeness with which the concept becomes associated with the question of values (e.g., "management" versus "labor" orientations). Other problems arise when researchers choose a priori criteria of effectiveness that seem intuitively right, without trying systematically to place them within a consistent and broader framework. In effect, specific criteria that might be proper in one case may be entirely inappropriate to other organizations. The question arises whether it is possible to develop a definition of effectiveness and to derive criteria that are applicable across organizations and can be meaningfully placed within a general conceptual framework.

The concept of organizational effectiveness (sometimes called organizational "success" or organizational "worth") is ordinarily used to refer to goal attainment. In this sense, it is a

functional rather than structural concept. Furthermore, it is probably most useful in comparative organizational research, i.e., in relational rather than absolute terms, but the concept could also be used developmentally to study the effectiveness of the same organization over time. Traditionally, in the study of organizations, effectiveness has been viewed and operationalized mainly in terms of productivity.

Dwibedi (2017), Emeka et al. (2015), Manzoor (2012), and Singh (2015) laid the foundation of organizational effectiveness through the definition of organization and effectiveness. According to them, an organization is “a composition of people which formulate independent business identity for some specific purpose.” Meanwhile, effectiveness is “getting the desired outcome within a defined resource.” Hence, organizational effectiveness is “the extent to which an organization, by the use of certain resources, fulfills its objectives without depleting its resources and without placing under strain on its members and society.” It is a measure of how effective an organization is in terms of achieving its goals. It is a summation of stakeholder satisfaction in terms of converting an organization’s input into the desired output. Furthermore, it plays a significant role in organizational development.

Dwibedi (2017) and Manzoor (2012) discussed that organizational effectiveness could be determined using four (4) models – the constituency model, the goal model, the legitimacy level, and the systems resource model. The constituency model measures effectiveness in terms of a set of goals used by constituents or members of an organization in evaluating performance. The goal model determines effectiveness through the extent to which an organization accomplishes its objectives. The legitimacy model defines effectiveness in terms of preference and limitation from an organization’s external environment. The systems resource model regards effectiveness through an organization’s capability to utilize its environment in search of valuable resources.

Meanwhile, according to Geelmaale (2019), organizational effectiveness can be determined in terms of objective and subjective measures. Objective measures use an organization’s financial information, such as profit, revenue, and return on investment, in determining effectiveness. In contrast, subjective measures, such as customer satisfaction, employee retention, and product development, are non-financial indicators of effectiveness. Geelmaale (2019) also stressed that organizational effectiveness is not only based on the result but also on the means used to achieve

that result. This study mainly focuses on the effect of decision making on the organizational effectiveness in case of Information Network Security Administration.

1.2 Background Information about the Study Organization

Information Network Security Agency (INSA) is a governmental agency in Ethiopia. It was established in 2005 G.C and re-established under the re-establishment regulation number 250/2011 by the council of ministers. According to the regulation the agency has two main objectives; the first one is ‘to defend and take counter measures against information attacks targeted at the national interest’ and the second is ‘to ensure the security of information and information infrastructures to facilitate their use for the implementation of the country’s peace, democracy, good governance and development programs’. (INSA re-establishment regulation number 250/2011)

Information Network Security Agency has more than two thousand and eight hundred (2300) employees with an expertise of different educational background, like engineering, computer science, social science fields, and technical personals; and from different lifestyle and cultural background. Information Network security Agency is established as an autonomous federal government agency having its own legal personality under the re-establishment regulation No. 808/2013 with the major objectives of ensuring that information and computer based key infrastructures are secured, so as to be enablers of national peace, democratization and development programs. The Agency has a General Director and Deputy Director Generals appointed by the prime Minister.

1.3 Statement of the problem

Decision-making is the selection of alternative course of action from available alternatives in order to achieve a given objective. Decision-making is a matter of huge responsibility for the management since the performance of the organization heavily depends on the quality of the decisions made. Management of an organization is saddled with the responsibility of leading the organization to achieve the objectives and the stated goals. This does not only require versatility and expertise, but also needs capability to make those decisions, which provide effective outcome.

There is a profound misunderstanding about the link between decision-making and the organizational effectiveness. Contrary to popular belief, organizational effectiveness is not determined solely by the nature, scale, and disposition of resources, though they are important. The organizational success depends as much on the quality of the decisions its management and employees make and execute on the ground as it does on the operational facilities. For an organization to have a good effectiveness, the challenge is to structure the organization in such a way so that its decision makers can make decisions, which are better and more innovative. It is seen in some organizations that how a lack of attention to the decision-making process can undermine the performance of the organization. Ultimately, the value of the organization is no more (and no less) than the sum of the decisions, it makes and executes. Its assets, capabilities, and structure are useless unless its people throughout the organization make the essential decisions and get those decisions right more often than not. Effective at decision-making and execution generate effectiveness in the organization. Literature supported that there is a direct and positive relation between decision making and organizational effectiveness. Which specify that the effectiveness of an organization is the outcome of the management functions such as planning, organizing, and control that are determined by decision. The quality of a decision made by managers is influenced by the decision making approach utilized and the personal behavior of the decision-maker.

An organization like INSA Decision placement is more of a challenge, which typically involves complex trade-offs. In many organizations, both the critical decisions themselves and where they are to be made can vary widely across the organization. Organizational effectiveness in its simplistic state consists of the realization of organizational objectives. It is important that organization have measurable objectives since the organizational effectiveness is assessed from the level of fulfillment of its objectives.

Despite, the attention devoted to identifying and solving the problems and challenges of the Information network Security Administration made by both the government bodies and the organization itself, no significant studies have been conducted in the organization in relation to the decision making and organizational effectiveness. In order to give a new contribution, the study was conduct on some of the decision-making factors that contribute for the effectiveness of INSA.

1.4. Research questions

To analyze the effect of decision-making that on the organization effectiveness for Information Network Security Agency, the study find the answers to the following research questions.

1. What are the most frequent decision making style is applicable in the organization?
2. How does decision making style affects the organization effectiveness?
3. Which type of decision-making style do effective organization managers mostly uses for organizational effectiveness?
4. What type of decision-making process do effective organization managers followed to achieve organizational effectiveness?

1.5. Objectives of the Study

The main and specific objectives of this research work mentioned as follows.

1.5.1. Main Objective of the study

The main objective of this study is to analyze the effect of decision-making on organizational effectiveness.

1.5.2. Specific Objective of the study

The four specific objectives considered for this research work are

1. To identify the most frequently applicable decision making style is in the organization.
2. To describe the effect of decision making style on the organization effectiveness.
3. To identify the decision-making style of effective organization managers mostly uses for organizational effectiveness
4. To analyze the process of effective decision making managers used for organizational effectiveness.

1.6. Significance of the Study

The significance of the findings and conclusion of this research work is expected to have the following significance. Those managers who are leading stacked or underperforming the organization due to failure in quality decision-making or inability to make decisions will benefit from the research finding. New managers who have a plan to set up and manage an organization

will also benefit from this research. The reason both existing and new entrant managers benefit from this research includes all managerial functions such as planning, organizing, staffing` and etc are made by decision and the quality of the decision depends on the decision-making process and the decision-making style manager follows. Moreover, the research will have relevance for those government bodies who are working with decision-makers development. They will benefit from this research because the research gives a tool to show the personal decision-making preference inventory questionnaire. By making pilot research using the instrument used in this research, they can easily understand the decision-making style of each trainee or practitioner. Once they find the style they can work on the weak points so that the trainee/ practitioner becomes a better decision-maker

1.7. Scope of the Study

The scope of the study was limited to on the analysis of the effect of decision making on organizational effectiveness, the role of line managers. The study delimited on the Information network Security Agency. Even though scholars recommended longitudinal research, design to make universal cause- effect relationship between these variable, the study used cross sectional data due to research time and resource during survey. Although a number of other relevant factors could possible moderators between decision-making and organizational effectiveness, this study conceptually delimited on, decision-making process, and leader's decision-making style. In addition the study also delimited the result would be better if the general decision-making inventory questioner were prepared for specific organizational effectiveness measuring parameters considering a specific model instead of using it as it is. Moreover; instead of using the secondary data obtained from the government office, it would be better if the researcher to assure the effectiveness of the organization considering some performance indicator parameters conducted research.

1.8. Limitation of the Study

The study conducted in one of the core security institutions of the country, as a result due to confidentiality respondents were hesitate to respond about the case. Furthermore scholars recommends longitudinal research in such area, this study used a cross-sectional research method. The study were used a quantitative analysis only.

1.9. Organization of the Study

This research work is organized into five chapters. The first chapter covers the introduction part of the research that includes the background of the study, the problem statement, the research questions, objective, significance, scope, and limitation of the research. The second chapter covers the literature review part both the theoretical concepts and empirical studies relevant to the research topic. The third chapter presents the research design and methodology part. The fourth chapter covers data presentation, discussion, and interpretation. The fifth chapter covers a summary of the research findings, conclusion, and recommendation of the study.

CHAPTER TWO

2. REVIEW OF RELATED LITERATURE

This chapter deals with the theoretical concepts and empirical studies related to leadership decision-making and organizational effectiveness covered by previous works. Moreover, the conceptual framework of the study is also presented in this chapter.

2.1. Theoretical Concepts

The theoretical concepts that are relevant to the research topic including decision-making and organizational effectiveness presented by different authors and researchers in relation to organizations.

2.1.1. Concept of Decision-making

Decisions are made by individuals and organizations on a daily basis that range in importance from routine to life-changing despite the difference among humans lifestyles and the type and size of organizations. Merriam Webster dictionary defines decision as to the act or process of deciding: and a determination arrived at after consideration.

Decision-making is a basic activity in any organization and managers at all organizational levels make decisions to achieve the firm's goals and to survive the organization. In any organization, decision-making is made under the influence of internal and external factors that directly or indirectly influence the decision. Brunetto, Y. et al. (2007) claimed that the decision-making process was found to be culturally dependent and every decision-maker follows his own decision making process.

Decision-making may be described as the process of selecting a course of action from several alternatives so that desired result may be accomplished. Ata et al (2015) define decision making as a systematic approach that consists of some steps including appreciating of problem, gathering information and data, analyzing data and information, developing alternatives, evaluating these alternatives, and finally choosing an appropriate alternative.

Ata et al (2015) further explain this systematic approach is dissimilar depending on three tips: managerial level, the importance of the decision, and decision making styles. The decision-

making style explains how the managers use the information and how they conceptualize and envision the future of their organizations. Standard theories of choice view decision making as an intentional, consequential action based on four things

- I. Knowledge of alternatives: - Decision-makers have a set of alternatives for actions
- II. Knowledge of consequences. : - Decision-makers know the consequences of the alternatives actions at least up to a probability distribution,
- III. A consistent preference ordering. Decision-makers have consistent values by which the alternative consequences of actions can be compared in terms of their subjective Value
- IV. A decision rule. Decision-makers have rules by which they select a single alternative of action on the basis of its consequences for the preferences

Decision-making is basic activity in organizations. The success of any organization largely depends on the quality of the decisions made by its leaders (Eberlin, R.J. et al, 2008), (Robbins et al., and 2009). Stephen (1996) states that success in the innovative programs and learning competencies of an organization depends on the styles of decision-making processes. Though decision making is a systematic approach and consists of seven steps, namely: appreciating of problem, gathering of information and data, analyzing of data and information, developing of alternatives, evaluating of these alternatives, and finally choosing of appropriate alternative, Ata, E. et al. (2015) stated that this systematic approach is dissimilar depending on the three tips: managerial level, the importance of the decision, and decision making styles.

2.1.2. Concept of Organizational Decision making process

In business, whether the enterprise is big or small, changes in condition occur, shifts in personnel take place, and unforeseen contingencies arise. To attain the objectives of the business by overcoming the effects of the above mentioned and other problems decisions are always made in organizations. Decisions made in organization can be categorized as programmed /non programmed, major/ minor, routine and strategic decision, policy /operating decision, long term departmental or non-economic decisions, individual and group decisions considering the different parameters including the cause and effect. Daft (2013) defines organizational decision making as the process of identifying and solving problems by looking at the two stages of decision making: problem identification and problem solution. In the problem identification stage, information about the external and internal environmental conditions are monitored to

determine if the organizational performance is satisfactory and to diagnose the cause of any shortcomings. The problem solution stage occurs when alternative courses of action are considered, and the best alternative is selected and implemented. Decision making process is a basic activity in organizations; every aspect of management functions, such as planning, organizing, and control is determined by decisions, the result of which is the performance in the organization. Managerial activities involves a series of decision such as what should be done, when shall be done, how shall be done, who shall be doing it by properly understanding the why aspect of an event or situation. Decision-making process involves the existence of a decision problem which have be understood by the decision-maker and accurately defined to find opportunities to solve it. Making great decisions is a key leadership responsibility; managers in all organizational levels make decisions to achieve firm's objectives and to survive an organization.

Companies outshine or decline based on a variety of decisions that have been made by their managers and employees over time, such as: which strategies to pursue, which employees to hire/fire/promote, and how to solve the daily barrage of problems managers and employees alike must deal with. In any organization, decision making is made under the influence of internal and external factors that directly or indirectly influence the decision. For this reason the decisions made within an organization is taken as a reflection of the way it operates (Mark et al, 2014). Autocratic, participatory, democratic, and a consensus-based decision-making style are recognized as the four managerial decision making style by many authors.

Erik V. (2021) stated that choice of a single style among those four styles is driven by two dimensions. The First, the urgency of making the decision which ranges from low urgency where you've got plenty of time to make the call, to high urgency where you need a decision right now. The second dimension is considerations of the size or impact of the decision, from small decisions that won't have a large impact, to big decisions that are going to have a huge impact. Autocratic Decision-Making For situations where you have low impact and they're reasonably small decisions, but they get larger as urgency goes up, an Autocratic decision-making style is the most appropriate. In Autocratic decision-making, decisions are made at the top. Buy-in is not seen as an important aspect of making this decision. And actually, it may be counterproductive to involve a lot of people in making the call. Typically, in an environment where you're making

Autocratic decisions, work activities and roles are very tightly structured, they're monitored and well controlled.

Command and control is very important in these situations Participatory Decision-Making For larger decisions where there's higher urgency and you need to make a call soon, but the impact is going to be big, you're looking at a situation where you need to use a Participatory decision-making style. This is where you're going to make a decision with input from the people who are going to be impacted in that final call. Remember, Participatory decisions are made when the decision is much bigger and there's a lot more risk involved. Getting additional information from more people is going to reduce that decision making risk. Also by getting that buy-in, you're reducing execution risk because people have had an opportunity to give their input and have a say in the final call that's made.

Consensus-Based Decision-Making For situations where it's a large decision but there's no urgency around it and you've got plenty of time, you can be using a Consensus-based decision-making style. This happens when decisions are reached with a cross-functional team. People from different departments have input, and buy-in is essential. You should reserve this style of decision-making for the biggest decisions you're trying to make. However, recognize this can take a lot of time. You have to get everybody saying "yes" before that decision is made. You're going to have individuals from multiple groups, multiple functions, all working together, coming up with that final perspective for the final decision. Democratic Decision-Making styles for mid-sized decisions. Where there is not a lot of urgency but you do need to make a decision and move on, a Democratic style is the most appropriate. This is where a decision is reached by a majority vote. Buy-in is desirable but it's not essential. These are the decisions we just have to make and move on with life. Individuals are going to interact in this style. You may have a committee where people are going to come together, form an opinion, but ultimately we set a deadline, we vote and we move on.

2.1.3. Organizational Decision making approaches

There are several approaches to decision-making which offer insight into the process by which managers arrive at their decisions. Deepti V. (2021) mentioned four decision making approaches as follows. The Rational Approach Rational decision-making approach is a systematic, step-by-step process for making decisions. It assumes that the organization is economically based and

managed by decision-makers who are absolutely objective and have complete information. The steps incorporated in the rational decision making approach includes state the situational goal: identify the problem, determining decision type, generate alternatives, evaluate alternatives, choose alternative, and implement the plan and control. Each step requires unique attention.

Seven steps in rational decision making approach The rational decision making approach forces the decision-maker to consider a decision in a logical, sequential manner and an in-depth analysis of alternatives helps him to choose on the basis of information rather than personal prejudices, emotions or social pressure. Inability of the manager getting always perfect information and constraint of time and finance by the manager will limit the ability to process information and may not be able to predict future accurately. Also, all the alternatives cannot be quantified making comparisons difficult. The Behavioral Approach This approach assumes that decision-makers operate with bounded rationality rather than with the perfect rationality assumed by the rational approach. Bounded rationality is the idea that decision makers cannot deal with information about all the aspects and alternatives pertaining to a problem and therefore choose to tackle some meaningful subset of it. This process is neither exhaustive nor completely rational and therefore, solutions arrived at are not entirely ideal. Decision-makers operating with bounded rationality limit the inputs to the decision-making process, focus their attention on two or three most favorable alternatives (especially if there is a time constraint), process these in great detail and base their decisions on judgment and personal biases as well as logic.

The Practical Approach: This approach combines the steps of the rational approach with the worthwhile features and conditions in the behavioral approach to create a more realistic process for making decisions in institutions. According to this approach, rather than generating all alternatives, the decision-maker should try to go beyond rules of thumb and satisfying limitations and generate as many alternatives as possible within the given time, money and other Practicalities of the situation.

Here, the rational approach provides an analytical framework for making decisions while the behavioral approach provides a moderating influence. Those managers who have a tendency of jumping from one decision to another, making decisions hastily and impulsively and barking out orders to subordinates usually do not use much information or a rational approach to decision-making.

The Personal Approach the preceding three approaches explicitly explain the processes involved into decision making. However, they do not throw light on how people take decisions when they are nervous, anxious, worried or agitated-whether in organizations or in personal matters. The personal approach to decision-making deals with the personal conflicts that people experience in particularly difficult decision situations.

2.1.4. The Manager Decision making styles

The importance of making wise decisions consistently throughout the entire organization has become a critical task for organizational leaders. Yet despite the significance of this issue for leaders, there are relatively few comprehensive decision-making models that can be utilized at all levels of an organization to aid in the quality of decisions being made.

The decision-making style followed by a manager depends on the differences amongst managers' values, attitudes, education, organization, managerial level. The difference in decision-making style amongst managers is also arisen because of the difference in experience, analytical ability, informing perception and processing of information, the scope of consultation, degree of freedom of choice, availability of resources, and trust and rapport between the managers and the managed (Ehrgott, 2011). Identifying the possible options, identifying the possible consequences that follow from each option, evaluating the desirability of each consequence, assessing the likelihood of each consequence, and making a choice using a decision rule are considered vital skills to make efficient and effective decisions making (Gilboa, 2011).

Focusing on the individual differences in decision-making behavior Scott, G. et al (1995) identified five decisions making styles that includes rational, intuitive, dependent, avoidant, and spontaneous. Concisely each style can be understood as follows

- ✓ Rational: logical and structured approaches to decision making;
- ✓ Intuitive: reliance upon hunches, feelings and impressions;
- ✓ Dependent: reliance upon the direction and support of others;
- ✓ Avoidant: postponing or avoiding making decisions;
- ✓ Spontaneous: impulsive and prone to making “snap” or “spur of the moment” decisions

2.1.5. Concept of Organizational Effectiveness

According to Merriam-Webster, effectiveness is ‘the power to produce the desired result’. Organizational effectiveness is defined as the extent to which an organization achieves its predetermined objectives with the given amount of resources and means without placing undue strain on its members. The effectiveness of an organization depends on its mission and goals, internal efficiency, strategic positioning, and many more factors. Literature survey on organizational effectiveness reveals that there are many approaches to measure organizational effectiveness. [Efficacious Definition & Meaning - Merriam-Webster](#)

2.1.6. Organizational Effectiveness (OE) Models

Nwanzu et al. (2018) stated goal attainment, system resource model, internal process model, and stakeholder models as the four renowned models. However; models including the competing values model, strategic constituency model, and abundance model are also mentioned as the organizational effectiveness measurement models. These models have different essences. Summary of the OE models and essence of the models is presented in the table below Table

Table 1: Essence of Organizational Effectiveness Models

No.	Model	What the model Means
1	Goal	Accomplishing organization
2	Internal process	Accomplishing high-quality internal processes
3	Resource based	Obtaining resources needed for high performance
4	Stakeholder	Satisfying stakeholders of the organization
5	Competing values	The presence of simultaneous opposites
6	Abundance	Flourishing and virtuousness
7	Strategic constituency	Satisfying strategic constituencies that hold sway over the organization

(Source: A Practitioner’s Guide to Organizational Effectiveness | AIHR Digital
(digitalhrtech.com))

Organizations use models to measure their effectiveness. However; measuring organizational effectiveness is not a matter of either/or rather, it is about taking multiple perspectives and seeing if the organization is reaching the goals it set out to make, as well as its full potential. Every

organization utilizing one or more of the models has to set a performance measuring variable (commonly known as performance indicators). Some of the common performance parameters considered by many organizations and addressed by different researchers are compiled by Erik V. (2021) are shown the table below.

Table 2: Commonly used Performance measuring parameters of OE models

No.	Organizational Effectiveness Model	Performance measuring parameter	Source
1	Goal model	Profit , product or service quality and quantity, financial goals, shareholder value, societal impact, innovation	Schmerhorn, Hunt, R. N. Osborn, & R. Osborn, 2004) and self-study http://stakeholdertheory.org/ accessed on date 8/21/2021
2	Internal process model	Healthiest and efficient of the internal processes and procedures	
3	Resource based Model	the ability to obtain necessary resources from the environments outside the organization	
4	Stakeholder model	create value for all stakeholders, not just shareholders: satisfying stakeholders of the organization	
5	Competing values model	Achievement of a competitive advantage by exploiting resources those are valuable, rare, and hard to imitate or copy.	
6	Abundance model	flourishing and virtuousness	
7	Strategic constituency model	Minimal satisfaction of all of the strategic constituencies (people) of the organization	

2.2. Empirical study

According to Hamza Ismaile 2015 the study conducted on the impact of decision making on organizational effectiveness, a study of First City Monument Bank, Zaria Branch, and the study focused on how organizational effectiveness achieved through effective decision making by organizational managers. The study includes stated that organizational effectiveness is depends up on the organization decision made throughout the process of the organization tasks. However decision making problem in the organization may arises from environmental factors, religious factors and political influence were presented. Accordingly the study found that organizational effectiveness is directly related with the organization decision made by the organization managers. He also specified that decision making, such as managerial decision making style and organization decision making process takes the first place in determining the organizational Effectiveness.

Hamid Tohidi, Mohammad Mehdi & Jabbari (2011), studies on Decision role in management to increase effectiveness of an organization. Accordingly the study focused on how decision affects the overall effectiveness on an organization. The study specified that because appropriate combination of existing factors and making adoption between those factors and finally making true decision for reaching to the demanded goal in an effective manner in refer to lack of sources and variety of limitations is a great force to increase effectiveness of an organization. The study investigates the importance of decision making in various fields of current modern life and also the importance of rational theory. They also mention to differences between decision making in modern and traditional methods and introduce the six stages of decision making

Factors influencing organizational effectiveness in the educational sector by Shefali Pandyai,R. K. Srivastava (2017) Organizations in the educational sector are being influenced by several aspects such as political environment, deteriorating financial aid from the government, rising aspirations of first generation learners in higher education and so on. Along with this, it is also noteworthy to mention that the society is investing huge amount of human, financial and material resources in establishing and running institutions of higher learning. This makes it imperative to study the effectiveness of educational institutions which are non-profit organizations. The study therefore attempts to ascertain the factors influencing organizational effectiveness in the educational sector. The researcher has identified four variables that are expected to influence

organizational effectiveness measured in terms of perceived gains from post-graduate education. The factors identified include organizational health, psychological wellbeing of students, and satisfaction with quality of campus life and student engagement. The findings of the study suggest that any effort to enhance organizational effectiveness should focus on improving organizational health and student engagement.

As mentioned in the literature review, the success of organization depends on the quality of the decision made by its manager and employees under the influence of internal and external environmental factors. Though Decision making is one of the most primary responsibilities of the management in all organizations it varies on the bases of individual's differences since every person has different thinking and information processing style that makes a difference among their decision making styles (Hafizam S. I. et al., 2020) for this reason decision making style is considered as one of the factors that determines the decision quality in this study.

James W. D. et al. (2017) stated that decision-making processes are related to decision success. Quite often, the decision making process is fairly specific to the decision being made. Some choices are simple and seem straight forward, while others are complex and require a multi-step approach to making the decisions (Dietrich M, 2010) as stated by Dietrich for a sound and comprehensive decision making, leaders should understand that all rational decision making processes requires a great deal of time and a valid sharing or knowledge of information.

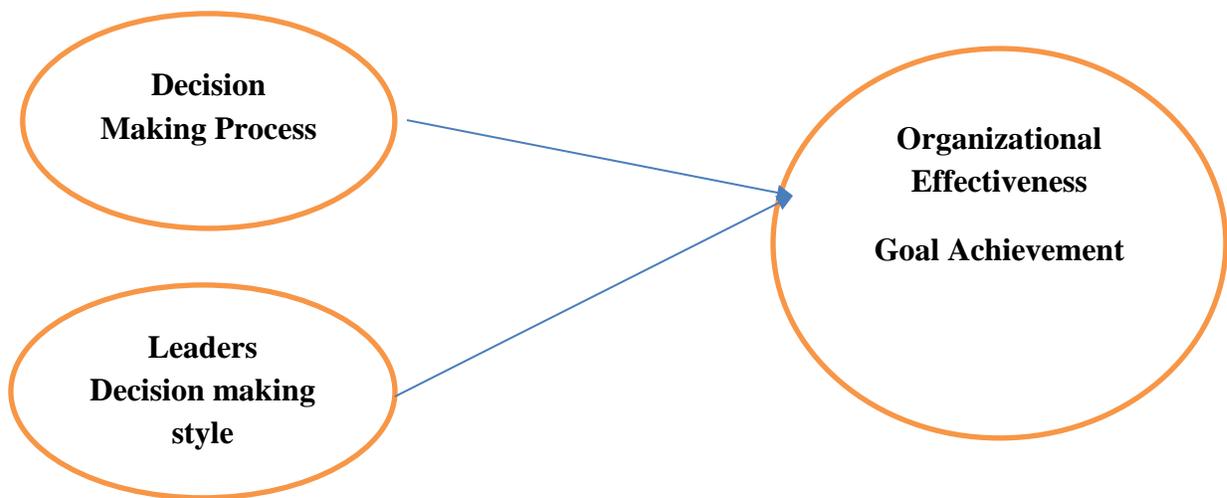
For this reason decision, making process is considered as the second factor that determines the quality and effectiveness of the decision made by the organization managers. The relevancy of the conceptual framework for answering the research question can be expressed with the following manner. By taking the two performance measuring parameters of goal achievement and number of workers in the organization as the means for checking the effectiveness and taking the result obtained, we can explore the decision-making styles and processes followed by the effective managers. Hence, finding answer for the research questions become easy.

2.3. Conceptual Frame Work

A conceptual framework is a structure, which the researcher believes can best explain the natural progression of the phenomenon to be studied (Camp, 2001). It is linked with the concepts, empirical research and important theories used in promoting and systemizing the knowledge

espoused by the researcher (Peshkin, 1993). To achieve the research objective, factors that enable the researcher answer the research questions were selected and organized from the literature reviews. These factors are categorized as the dependent and independent variables of the study. The independent variable is the decision making styles. The dependent variable is organizational effectiveness. The effectiveness of any organization is measured by the performance measuring parameter incorporated on the organizational effectiveness model it utilizes (Erik, V.V. (2021).

Figure 1 Conceptual Framework Decision making (DM)



Source: - Literature Review/2022

CHAPTER THREE

3. RESEARCH METHODOLOGY

3.1. Introduction

In order to analyze the effect of decision making on the organization effectiveness, the case of Information Network Security Administration this study used a research methodology to address the case. The chapter discusses procedures and activities that were undertaken, focusing on the research design, questionnaire design, and data collection, sampling strategy, data processing and analysis and instrument development. Besides, the section deals with a discussion on the validity, reliability and the ethical issues and the research model that is used in the study.

3.2. The Research Approach

The study employed both quantitative and qualitative research approaches to capture data for the purpose of deep analysis and understanding of decision making on organizational effectiveness in the study area from different directorates and departments. The quantitative approach was used to collect data on the personal decision-making styles of the managers using the five points Likert scale questionnaire.

3.3. Research Design

The study used an explanatory research design that showed the underlying relation between independent and dependent variables that pertains to the research problem. Since, the intention of this study is to analyze the effect of independent variables over the dependent variable; the method is suitable and helpful in examining the relationship and concludes from the findings.

3.4. Data Type and Data Source

3.4.1 Data type

In order to find the necessary data, the study will consider the quantitative and qualitative types of data. Qualitative data collection methods are mainly focused on gaining insights, reasoning, and motivations; hence, they go deeper in terms of research. Since the qualitative data cannot be measured, researchers prefer methods or data collection tools that are structured to a limited extent. Quantitative data makes measuring various parameters controllable due to the ease of

mathematical derivations they come with. Whereas, the quantitative data is usually collected for statistical analysis using surveys, polls or questionnaires sent across to a specific section of a population. The retrieved results can be established across a population. Therefore, the study applied the quantitative data type in order to get reliable information from the respondents.

3.4.2 Data Source

In this research work, both primary and secondary data were used. The primary data was collected from top to line level managers, and experts in the organization using the help of three sets of questionnaires; general decision-making style inventory questionnaires developed by Scott and Bruce (Scott, G et al. 1995), a literature-based self-prepared questionnaire, and demographic data collection questionnaire. The secondary data were collected from the document source of the organization, such as annual reports, performance reports.

3.5. Sampling Technique and Sample Size Determination

3.5.1. Population

The target population was identified based on the survey of existing organization, which is intended to investigate with this study. Accordingly, the target populations of the study were employee of Information network Security Administration. The Agency has four core directorates, and a total of 2300 employees (INSA Annual HR Report, 2022). Therefore, the study population was represented 2300 populations.

3.5.2. Sample

As INSA is the primary target of this study, the Sampling frame was from the list of employees of Information Network Security Agency. However, study all the employees of the Agency are hard to manage due to time and resource. Therefore, through scientific and systematic approach the study took a sample of as per the following sample size determination formula.

$$n = \frac{N}{1 + N (e)^2}$$
$$340 = \frac{2300}{1 + 2300 (0.05)^2}$$

Where N= Total Population

n = sample size

e= error term

Thus, at 95% confidence Interval, and 5% of Margin of error

Thus, from the total of employees of the agency (2300) in the study area as a study population; the study was select 340 respondents as a sample by using simple random sampling technique. The sample size for this study is, therefore, 340, which is considered as representative sample based on the above formula so that the sample is becomes large enough to allow for precision, confidence and generalizability of the research findings.

3.6. Data Collection Tools

Primary data sources were used for the research data collection as a main source of data collection. A questionnaire was prepared and disseminated to all sample respondents. The questionnaire was filled by the agency employees and managers of the organization. The questionnaires were involving close-ended items.

3.7. Validity & Reliability of the data collection instrument

In this study, the validity of the instrument for understanding the decision making styles of the organization managers will test contextually and will obtain valid from different research work that includes health science (Sophia et al, 2015), education management (David et al, 2005), and other areas including adult decision making. Having this information in mind, the researcher builds confidence on the applicability and validity of the instrument for measuring the personal decision making style the enterprises managers. After the data collection will complete, a calculation of Cronbach's alpha made and the result confirms the reliability (internal consistency) of the instrument used.

3.8. Data Analysis Methods

In this research, the data was analyzed using the quantitative descriptive statistical method using SPSS Version 23 data analysis tool. The descriptive statistical method tools, such as percentage, frequencies, mean, and standard deviation to analysis and interpretation of the collected data by

the questionnaires. Furthermore, inferential statistics were used to confirm the effect of the dependent and independent variables.

3.9. Ethical Consideration

In this study, the data sources and respondents were informed about the purpose of the study and the confidentiality of the information they gave both orally and in written formats. Conscious consideration of ethical issues is during data collection that includes seeking consent, avoiding deception, respecting privacy, and protecting the anonymity of all respondents. After the secondary raw data was obtained, each respondent was given a code name for intentionally hiding the identity of the respondent

3.10 Research Model Specification

To examine the direct effect of decision making on organizational effectiveness, particularly the effect of decision making style, and decision making process over organizational goal achievement, and multiple regressions used with the following model.

$$Y_i = \beta_0 + \beta_1 X_{1i} + \beta_2 X_{2i} + \dots + \beta_n X_{ni} + \epsilon_i$$

Where: Y_i is dependent variable for its observation X_i is independent variable for its observation β_0 is the intercept; β_s are regression coefficients, ϵ_i is the error term for its observation

3.11 Operational Definition

Decision: - choices whereby an individual forms a conclusion about a certain situation

Decision Making: - a course of action chooses from two or more alternatives in response to a certain situation in order to achieve the intended objectives.

Decision making Process:-is a series of steps taken by an individual to determine the best option or course of action to meet their needs.

Decision Making Style: - Decision making styles the way to determine a person goes about solving a problem in a formulaic, strategic manner.

Organizational effectiveness: - It refers to the extent to which information network security administration achieves the goals of the organization intended to accomplish as per the organization mission.

Organizational goals: - are those overarching targets established by organizational leaders. These specific objectives are typically used to guide desirable organizational outcomes and create outlines for employee workflow.

CHAPTER FOUR

4. DATA PRESENTATION AND ANYLYSIS

4.1 INTRODUCTION

This chapter deals with presentation, analysis, and interpretation of the data by categorizing into two parts. The first part presents the characteristics and background of the sample population involved in the study in terms of gender, age, marital status educational level, service years, and position in the organization. The second part deals with the analysis and interpretation of the data obtained from the respondents response in relation to the decision making process, decision making style and their respective effects on organizational effectiveness. The data analysis was undertaken with the help of computer statistics package (IBM SPSS version 23). The data presented was statistically treated in order to discover the relationship of the variables involved in the study. Out of the 340 questionnaires sent out, 317 of them were returned. Therefore the data represented a response rate of 93% are used for analysis.

4.2 Demographic Data Analysis

Before starting the analysis of the data some background information such as demographic data, is useful in order to make the analysis more meaningful for the readers. This part tries to elaborate the characteristics of the respondents in terms of gender, age, marital status, educational level, service years, and position in the organization. All are summarized in table form; analyzed and interpreted each frequency description of demographic variables is presented in the table below. As we can see from the below table 4.1 out of the total respondents, 181 which is (57.1%) are male while the rest 136 of them (42.9%) are female respondents which shows majority of the respondents were male. This indicates that majority of the organization employees are male.

Regarding the age of respondent's majority of the respondents 140 of them which is (44.2%) are between the ages of 26-35, followed by the group of 18-25, 115 (36.3%), followed by the age category 36-45, 60 (18.9%), and the remaining 2 of them are which is (0.6%) were in the age category 46-55. These implies that majority of the respondents of the organization were under the age category between 26-35, followed by 18-25, and 36-45 respectively. This indicates that

the overall employees of the organizations are adults and in the working age of the country. This will take as advantages for the organization since the adult and young generations are exposed for new technology, tried to work hard to test a new technology and innovate something new for the organization and the country too.

Accordingly, the respondents were asked to indicate their marital status and educational level, their responsibility and how long they serve the organization. The survey result showed that majority of 191 (60.3%) were unmarried, and 126 (39.7%) of them were married. This indicates that most of the employees of the organization are unmarried.

Regarding the educational status of the respondents the survey result showed that majority of the respondents 193 (60.9%) were first degree holder, followed by 120 (37.9%) were master's degree holder and 4 respondents which is 1.3% of the respondents are PhD holders respectively. This indicates that majority of the employees of the organization are minimally first degree holder, and master's degree holders. The educational status of the organization implies that the organization overall activities and works are done by educated and professional employees.

Regarding the respondents how many years of service in the organization they have, the survey result showed that majority of the respondents 119 (37.5%) had above five years of services in the organization, followed by 90 of the respondents which is (28.4%) of them were between 2-4 years of service, 26.8 % which is 85 of them were 4-5 years of services in the organization. The remaining 23 of the respondents (7.3%) have 1-2 years of service. This indicates that the organization have more experienced experts in the area, and well experienced professionals in the respective services years of the organization employees.

The respondents were also showed their position during the survey. Accordingly the survey result showed that majority of the respondents 200 (63.1%) of them were experts, followed by 109 respondents which is 34.4% were team leaders, and the remaining 2.5 % are division heads and directors.

Table 3: Demographic data of the Respondents

		Frequency	Percent
Sex	Male	181	57.1
	Female	136	42.9
	Total	317	100.0
Age	18-25	115	36.3
	26-35	140	44.2
	36-45	60	18.9
	46-55	2	.6
	56+	0	0
	Total	317	100.0
Educational Level	First Degree	193	60.9
	Master's Degree	120	37.9
	PhD	4	1.3
	Total	317	100.0
Marital Status	Married	126	39.7
	Unmarried	191	60.3
	Total	317	100.0
Current Position	Expert	200	63.1
	Team Leader	109	34.4
	Division Head	6	1.9
	Director	2	.6
	Total	317	100.0
Work Experiences	1-2	23	7.3
	2-4	90	28.4
	4-5	85	26.8
	+5	119	37.5
	Total	317	100.0

The overall demographic data of the respondents indicates that majority of the employees of the organization are male, and first degree holders those who serves the organization more than five years. In relation to the organizational position the respondents were experts, team leaders, division heads and directors.

4.3 Descriptive Statistics

In this study, descriptive statistics was used as a way to analyze the mean and standard deviation regarding the main variables included in the study. The researcher used descriptive statistics to examine the perception of respondents on the effect of decision making for organizational effectiveness. The summary of the descriptive statistics result shown below includes all the study variables which is evaluated based on a 5-point scale (where 1 = strongly disagree, 2 = disagree, 3 = moderately agree, 4 = agree, and 5 = strongly agree).

Concerning the perceptions of the respondents were asked on the effect of decision making for organizational effectiveness in case of Information Network Security Administration. There were twenty one statements formulated grouped in a way that Decision making process related, decision making style related and organizational effectiveness categorized on effect of decision making for organizational effectiveness in for experts and organizational managers were distributed, and the results are a summarized as follows of a five-point Likert scale containing mean, standard deviation (SD) and Skewness.

4.2.1 Decision Making Process

The respondents were asked to indicate the managerial decision making process related issues followed by the managers during their work process in relation to organizational effectiveness.

Accordingly majority of the respondents (156) which is 49.21 % were agreed that the organization decision making process depends on the situational understandings, and 134 disagree that the organization decision making is based on situational, and the remaining 5% or 16 respondents were neutral about the case. This indicates that the organization decision making process depends on the situational analysis and consideration.

Table 4, summarizes the overall decision making process of the organization tends to affect the organization effectiveness. Since the mean value under table for is

Table 4: Decision Making Process

	N	Mean	Std. Deviation
Decision Making in our organization is based on the situation understanding	317	3.5079	1.14077
Organization Decision Making based on the problem of the existing situation	317	3.2618	1.21341
Organization Decisions rely on two alternative analysis	317	3.2681	1.29777
The Organization Decisions are made up of evaluating two alternative	317	3.3028	1.30351
The Organization Decisions made up on the best solution for the existing problem	317	3.4479	1.36918
The organization has a clear information flow for organization decision making	317	3.3754	1.40785
The organization has reliable information sources for organization decision making	317	3.3596	1.33004
The organization has a clear confirmation process for every decision	317	3.3123	1.38947
Valid N (listwise)	317		

Accordingly 115 which are 36.27% of respondents strongly agreed that the organization decision making process is based on the problem faced in the existing situations. This is followed by 106 which is 33.43% of the respondents were agree that the organization decision making based on the problem of the existing situation. The remaining 22.73 of the respondents were disagree about the organization decision making is based on the problem of the existing situation. This indicates that 69.7% of the respondents tends to agree that the overall organizational decision making process consider the organization problem analysis and situational considerations.

The respondents were asked to indicate the organization decision relay on the two alternatives related issues followed by the managers during their work process in relation to organizational effectiveness. Accordingly majority of the respondents (111) which is 35.01 % were agreed that the organization decision making process rely on the alternative analysis, and 98 which is 30.91

% agree that the organization decision making is based on alternative analysis, and the remaining 26.8 % respondents were tends to disagree and 7.25% were neutral about the case. This indicates that the organization decision making process depends on the alternative analysis.

The respondents were asked to indicate the organization decision made on the best solution for the existing problem related issues that the managers make the decision for organizational effectiveness. Accordingly majority of the respondents (129) which is 40.69 % were tends to agree that the organization decision made up on the best solution for the existing problems that the organization work unit faces. The survey also indicates that the respondents which are 27.44% strongly agreed that the case for the organization decision making process. This indicates that the organization decision made up on the best solution for the existing problems faced by the organization work units.

The respondents were asked to indicate the organization decision has clear information flow for managers to decide effective decision their work process in relation to organizational effectiveness. Accordingly majority of the respondents (105) which is 33.12% and 26.18% of the respondents tends to strongly disagree and disagree for the case. This indicates that more than fifty percent of the respondents indicate that the organization decision making process has no linear flow of information for each decision maker in each work units. The remaining 40.7 % of the respondents tends to agree that the organization decision making process based on clearly specified information flow for organizational effectiveness. This indicates that the existence of clear information flow will help the organization make effective decision for organizational effectiveness. Since every decision make relays on information required for effective decision the existence of clear information flow increase the effectiveness of the organization decision and overall organizational effectiveness.

The survey tried to address whether the organization decision has reliable information source or not during the decision making process. The result showed that majority of the respondents tends to agree that the decision making process based on reliable information sources. As the table below indicates that the organization decision making process relays on the reliable information sources. This indicates that the organization decision is supposed to be effective since it is based

on the reliable information sources. Therefore, the organization effectiveness would be the result of the decision making process information source reliability.

Organizational decision making process summarized with the following table that indicates the mean value represents that the respondents tends to agree that the organization decision making process depends on the situational analysis, problem analysis, best solution for the problem, use an alternative analysis, and decision maker use reliable information sources. However, the respondents also agreed that decision makers has no clearly defined and specified information flow during the decision making process.

4.2.2 Decision Making Style

As discussed on the literature review section, the decision making styles of manager among the five styles proposed by Scott and Bruce (1995) is identified seven items. Each decision-making style is constituted in the survey. The data obtained represents the data obtained for rational decision-making style, intuitive decision-making style, dependent decision making style, avoidant decision-making style and spontaneous decision making.

As the table below showed that overall effect of decision making style of the organization which includes, managers rarely make important decisions without consulting other people, the decision making process requires careful thought of the managers, the decision making procrastinate when it comes to making important decisions, when managers making a decision consider various options in terms of a specific goal, decision makers make a decision to feel the decision is right than to have a rational reason for it, and decision makers steer by someone in the right direction during important decisions. Based on these the survey result provides that majority of the respondents tends to agree with the list of identified decision making style components are highly dependent for the organization effectiveness. The survey data mean score for this question is the highest mean value which is 3.68 often procrastinates when it comes to making important decisions. This indicates that the decision maker tends to agree that the decision making style of the managers procrastinate during important decisions. In general in relation to the decision making style of the managers the respondents tends to agree that managers apply reliable decision making style that supports the organization effectiveness.

Table 5: Decision Making Style

Descriptive Statistics							
	N	Mean	Std. Deviation	Skewness	Std. Error	Kurtosis	Std. Error
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic
1. When making a decision, I consider various options in terms of a specific goal	317	3.4472	1.38578	-.352	.122	-1.352	.244
2.If I have the support of others, it is easier for me to make important decisions	317	3.4698	1.37734	-.370	.122	-1.316	.244
3.My decision making requires careful thought	317	3.4925	1.36295	-.407	.122	-1.263	.244
4.When I make a decision, it is more important for me to feel the decision is right than to have a rational reason for it	317	3.5603	1.36163	-.431	.122	-1.306	.244
5.I like to have someone to steer me in the right direction when I am faced with important decisions	317	3.6206	1.32189	-.539	.122	-1.135	.244
6.I rarely make important decisions without consulting other people	317	3.6608	1.26093	-.552	.122	-1.053	.244
7.often procrastinate when it comes to making important decisions	317	3.6859	1.32001	-.642	.122	-.976	.244
Valid N (listwise)	317						

4.2.3 Organizational Effectiveness

As indicated in table below the computed mean value represents the organizational effectiveness in such a way that the organization delivers appropriate services for government organizations, deliver mission critical tasks effectively, have a clear set of objectives for each tasks, achieves the organization objectives as per the organization mission, the organization satisfying strategic constituencies that holds way over the organization, the organization creates value for all stakeholders and satisfying them, and the organization supports the private institution used in the analysis part of the organization effectiveness. As the table below indicates that the respondents tends to agree that overall the organization effective.

This is indicated by the organization effectiveness evaluated based on mission critical tasks, objectives, stakeholder satisfaction, and value delivery for each specified service deliveries for government and private institutions. Accordingly the highest mean value 3.84 indicates that the organization deliver mission critical tasks effectively. Since the overall mean value tends to agree that the organization is effective in the overall measures.

In relation to value creation the organization tends to deliver value for each respective stakeholder in order to satisfying of their needs. Accordingly the mean value represents that the respondents agree that the organization deliver value for its customers represented by 3.645 mean values and 1.300. This also indicates that the organization is effective in value delivery for customers. The lowest mean value which is 3.429 represents that the organization delivers appropriate services for government offices as per the defined mission. Furthermore the mean value which is specified in the table below ranges from 3.42- 3.84 indicates that the respondents tends to agree that the organization effectiveness relays on the decision making process and styles of the organization managers.

Table 6: Organizational effectiveness

	Descriptive Statistics						
	N	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
The organization delivers an appropriate service for governmental organization.	317	3.4296	1.47484	-.314	.122	-1.478	.244
The organization deliver mission critical tasks effectively	317	3.8447	1.40733	-.344	.122	-1.386	.244
The organization have a clear set of objectives for each tasks	317	3.4799	1.36467	-.346	.122	-1.369	.244
The organization achieve the objectives as per the organization mission	317	3.5176	1.33673	-.397	.122	-1.300	.244
The organization Satisfying strategic constituencies that holds way over the organization	317	3.5578	1.34686	-.487	.122	-1.200	.244
The organization create value for all stakeholders and satisfying stakeholders of the organization	317	3.6457	1.30011	-.461	.122	-1.313	.244
The Organization support private institution as much as it can	317	3.6809	1.27806	-.579	.122	-1.053	.244
Valid N (listwise)	317						

4.4 Correlation Analysis

This study employs the correlation analysis, which investigates the strength of relationships between the studied variables. A correlation Coefficient expresses quantitatively the magnitude and direction of the liner relationship between two variables (either positive or negative) and the intensity of the relationship (-1 to 1. General guidelines for correlations, correlation level of .10

to .30 are considered small, correlations of .30 to .70 are considered moderate correlations of .70 to .90 are considered large, and correlations of .90 to 1.00 are considered very large.

The researcher used one of the most commonly used types of correlation Coefficient, which is Pearson correlation Coefficient methods because of the statistical accuracy that usually results from this method, and the result is presented in the table above. In order to determine the most underlying effects of decision making for organizational effectiveness, relationship between all variables was determined through correlation analysis. 4.10 Table Depicts the r value for the relationship between independent variables [i.e. Decision making process, and decision making styles) and organizational effectiveness.

The table below shows that decision making process, decision making style, with organizational effectiveness. Accordingly decision making process and decision making style has positive correlation with organizational effectiveness with correlation value ranging from $r=.356$ up to $r=.416$ with the significant level of $P=0.01$. Below we will look in to the correlation of each variable with organizational effectiveness by describing the r value and significant level. Of the variables under investigation, the researcher found that managers decision making process has positive correlation with organizational effectiveness followed by manager's decision making style.

The correlation Coefficients are all positive indicating the significant relationship between managerial decision making process and style with organizational effectiveness in the study. The cumulative effects of decision making on the organizational effectiveness along with the correlation value for $r=.416$ at the significant level 0.01 which is positive weak to influence organizational effectiveness. Specifically the decision making style has .398 correlation value which indicates that the organization effectiveness and managerial decision making style has positive relation. However both decision making style and decision making process of the organization has positive relation, this indicates the organization managers' decision has a positive effect on the organization effectiveness.

Table 7: Correlation Analysis

		Correlations			
		Organizational Effectiveness	Decision Making Process	Decision Making Style	Decision Making
Organizational Effectiveness	Pearson Correlation	1			
	Sig. (2-tailed)				
	N	317			
Decision Making Process	Pearson Correlation	.356**			
	Sig. (2-tailed)	.000			
	N	317	317		
Decision Making Style	Pearson Correlation	.398**	.647**	1	
	Sig. (2-tailed)	.000	.000		
	N	317	317	317	
Decision Making	Pearson Correlation	.416**	.900**	.915**	1
	Sig. (2-tailed)	.000	.000	.000	
	N	317	317	317	317

** . Correlation is significant at the 0.01 level (2-tailed).

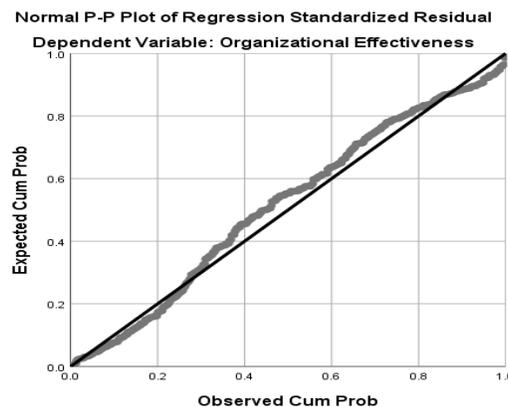
4.5 Regression Analysis Test

In order to draw correct estimation, using regression model to analyze the data requires certain assumptions to be fulfilled. Fulfillment of basic the assumptions are tested before the regressions were run (Chris Brooks, 2008). The five assumptions of multiple regressions are presented. Normality assumption, linearity and homoscedasticity, independence of residual tests for multi co-linearity, and tests for, are presented on the study under this subsection.

4.5.1 Normality

Test for normality, its determining whether the data is well modeled by normal distribution or not. Test for normal distribution could be checked by graphical (Histogram or dot plot) method of tests. The normality assumption assumes a critical role when the study is dealing with a small sample size, data less than 100 observations. (Gujarati, 2004) Even though the normality assumption not a treat since the observation or sample size of the study is larger enough, more than 100 observations, the researcher test is using normal probability plot (NPP). The decision rule is, if the fitted line in the NPP is approximately a straight line, one can conclude that the variables of interest are normally distributed (Gujarati, 2004)

Figure 2 Normality P- Plot Standardized Residuals



Source: research's survey data, 2022

4.5.2 Independence of Residuals

The value of Durbin-Watson statistic ranges from 0 to 4. As a rule, the residuals are independent (not correlated) if the Durbin-Watson statistic is approximately 2, and an acceptable range is 1.50 to 2.50 (Babatunde, Oguntunde, A.O, & Balogun, 2014). In this case, Durbin-Watson is **1.562** which is between the acceptable ranges.

Table 8: Durbin- Watson

Model Summary ^b					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.418 ^a	.175	.169	.73196	1.562

a. Predictors: (Constant), Decision Making Style, Decision Making Process

b. Dependent Variable: Organizational Effectiveness

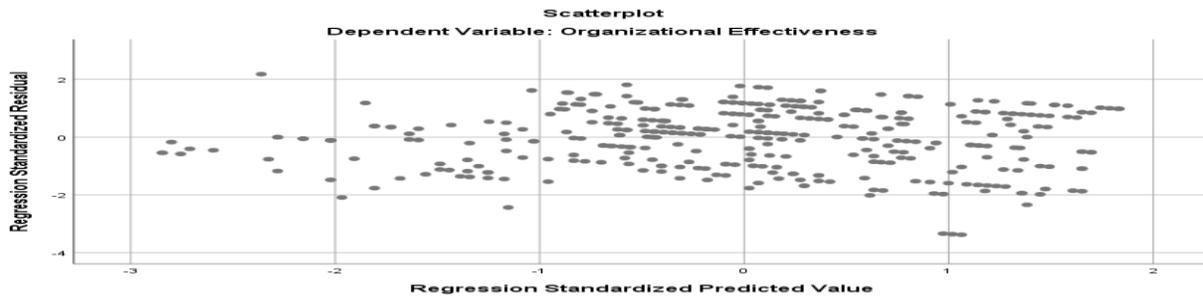
4.5.3 Linearity and Homoscedasticity

4.5.3.1 Linearity

The model that relates the response Y to the predictors X1, X2, X3....Xn, is assumed to be linear in the regression parameters (Chatterjee & Hadi, 2012). This means that the response variable is assumed to be a linear function of parameters ($\beta_1, \beta_2, \beta_3, \dots, \beta_n$) but not necessarily a linear function of the predictor variables X1, X2, X3....Xn, as cited by (Kassahun, 2014).

The result of this study also showed that, there is a linear relationship between the independent variables of relationship effects decision making and organizational Effectiveness. This means that for every bitterly handling of decision making in the independent variable through decision making process and decision making style organizational effectiveness will increase.

Figure 3 Scatter Plot



4.5.4 Multicollinearity Assumptions

Multicollinearity refers to the situation in which the independent/predictor variables are highly correlated. When independent variables are multicollinearity, there is overlap or sharing of predictive power (Dillon, 1993). This may lead to the paradoxical effect, whereby the regression model fits the data well, but none of the predictor variables has a significant impact in predicting the dependent variable (Robert, 2006). This is because when the predictor variables are highly correlated, they share essentially the same information. Thus, together, they may explain a great deal of the dependent variable but may not individually contribute significantly to the model (Robert, 2006). Thus, the impact of multicollinearity is to reduce any individual independent variable’s predictive power by the extent to which it is associated with the other independent variables. That is, none of the predictor variables may contribute uniquely and significantly to the prediction model after the others is included. The multicollinearity in this study was checked using the Tolerance and VIF value. As it is showed in the table all independent variables have a Tolerance value greater than 0.1 and a VIF value less than 10. The VIF, which stands for variance inflation factor, is computed as “ $1/\text{tolerance}$ ” and it is suggested that predictor variables whose VIF values are greater than 10 may merit further investigation (Robert, 2006).

Table 9: Collinearity Statistics

Model	Collinearity Statistics	
	Tolerance	VIF
1		
(Constant)		
Decision Making Process	.581	1.720
Decision Making Style	.581	1.720

Source: research’s survey data, 2022

4.6. Regression Analysis

To investigate whether the independent variables have any influence on the dependent variable decision making on organizational effectiveness and to estimate the level or magnitude of their contribution, a multiple linear regression analysis was employed. The Model Summary, the ANOVA test and the Beta coefficient were conducted.

The results of multiple regression analysis where enter entry method used a dependent variable and any number of predictor (independent) variables are designated are presented in the table.

Table 10: Direct effect statistics

Model Summary ^b					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.418 ^a	.175	.169	.73196	1.562

a. Predictors: (Constant), Decision Making Style, Decision Making Process

b. Dependent Variable: Organizational Effectiveness

Source: research's survey data, 2022

The model in the above Table 4.11 shows how much of the variance in the measurement of organizational effectiveness is explained by the model. Based on this, model coefficient of determination or R² obtained indicates that 41.8 % of the variation in the measure function (Organizational Effectiveness) can be explained by manager's decision making process, and manager's decision making style. The remaining 58.2% of variations are explained by other variables out of this model or variables which are not incorporated in this study.

ANOVA (Analysis of Variance), used to compare whether the mean of one dependent variable differ significantly across the categories of another independent variables. ANOVA provides, the result of test of significance for R and R² using an F-statistic.

Table 11: Anova Analysis Results

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	35.613	2	17.807	33.236	.000 ^b
	Residual	168.229	314	.536		
	Total	203.842	316			

a. Dependent Variable: Organizational Effectiveness

b. Predictors: (Constant), Decision Making Style, Decision Making Process

Source: research's survey data, 2022

The ANOVA tells us whether the overall model is statistically significant and is good in predicting the outcome variable. (F) Value is (33.236) at 0.000 p- value which indicates that the regression model is fit and significant. This implies if we take the two predictor variables together as a group, they predict the organization effectiveness very well.

Table 12: Standardized Coefficients

		Coefficients^a				
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.333	.223		5.966	.000
	Decision Making Process	.910	.076	.169	2.518	.001
	Decision Making Style	.300	.070	.288	4.283	.000

a. Dependent Variable: Organizational Effectiveness

Source: research’s survey data, 2022

As indicated in the above table the beta coefficients indicated how much the dependent variable varies with an independent variable, when other variables are held constant. The beta coefficient indicated that how much and to what extent the independent variables influence the dependent variables. Accordingly the result of the coefficient value of regression analysis indicated that the highest determination factor which affects the organization effectiveness is managers’ decision making style at beta value of .300, followed by managers’ decision making process with beta value of .910. Thus, from the findings one can infer that decision making style are the most positive significant factors of organizational effectiveness. The intercept β_0 (the constant) is expected mean value of the dependent variable when all the independent variables become zero. It is constant value where the liner regression line intercepts the y – axis representing the amount of the dependent variable, when all the independent variables are zero. In this study the value of β_0 (the constant) is 1.333. On the other hand the P- Value for each explanatory variable is less than the alpha 0.05 which implied that t-value for each explanatory variable is statistically significant and this again attested that the variation in dependent variable due to each predictor variable is significant.

4.6.1 Discussion

The finding of the study shows that the decision making process and decision making style used in the organizational effectiveness indicated by the correlation analysis is positive and supported by the regression analysis test. Based on this, the coefficient of determination model or R^2 obtained indicates that 41.8 % of the variation in the measure function (Organizational Effectiveness) can be explained by manager’s decision making process, and manger’s decision making style.

This supported by Hamid Tohidi, Mohammad Mehdi & Jabbari (2011), studies on Decision role in management to increase effectiveness of an organization. Accordingly the study focused on how decision affects the overall effectiveness on an organization.

The finding is also related with the previous studies made by Shefali Pandyai, R. K. Srivastav which the findings of the study suggest that any effort to enhance organizational effectiveness should focus on improving organizational health and student engagement.

Though Decision making is one of the most primary responsibilities of the management in all organizations it varies on the bases of individual's differences since every person has different thinking and information processing style that makes a difference among their decision making styles (Hafizam S. I. et al., 2020) for this reason decision making style is considered as one of the factors that determines the decision quality in this study. Therefore, the study confirms that organizational effectiveness determined by manager's decision making process and style.

CHAPTER FIVE

CONCLUSION AND RECOMMENDATION

5.1 Introduction

The study aimed examines the decision making on organizational effectiveness in the case of Information network Security Administration. This chapter commences with the summary of findings that emanated from the study that sought to establish the association between decision making and organizational effectiveness on the selected organization. The chapter then continues to provide conclusion and proceeds to recommendation. Finally suggestions for further research are presented.

5.2 Conclusion

The very purpose of this study was to establish the relationship between decision making and organizational effectiveness of Information Network Security Administration. The specific objectives were sought to identify the most frequently applicable decision making style, effect of decision making style on the organization effectiveness, and analyze the process of effective decision making managers used for organizational effectiveness.

The demography data of the respondents in which, 217 which is (54.5%) are male while the rest 181 of them (33.61%) are female respondents which shows majority of the respondents were male. Regarding the age of respondent's majority of the respondents 167 of them which is (42.0%) are between the ages of 26-35, followed by the group of 18-25, 128 (32.2%), followed by the age category 26-45, 101 (25.4%), and the remaining 2 of them are which is (0.5%) were in the age category 46-55.

Regarding the educational status of the respondents the survey result showed that majority of the respondents 239 (60.1%) were first degree holder, followed by 155 (38.938%) were master's degree holder and 4 respondents which is 1% of the respondents are PhD holders respectively.

Regarding the respondents how many years of service in the organization they have, the survey result showed that majority of the respondents 159 (39.9%) had above five years of services in the organization, followed by 109 of the respondents which is (27.4%) of them were between 2-4

years of service, 25.9 % which is 103 of them were 4-5 years of services in the organization. The remaining 27 of the respondents (6.8 %) have 1-2 years of service.

The respondents were also showed their position during the survey. Accordingly the survey result showed that majority of the respondents 277 (69.6%) of them were experts, followed by 113 respondents which is 28.4% were team leaders, and the remaining 2% are division heads and directors.

The managerial decision making process related issues followed by the managers during their work process in relation to organizational effectiveness. Majority of the respondents were agreed that the organization decision making process depends on the situational understandings, and the organization decision making process rely on the alternative analysis, The respondents were asked to indicate the organization decision made on the best solution for the existing problem related issues that the managers make the decision for organizational effectiveness.

The organization decision made up on the best solution for the existing problems that the organization work unit faces. The survey also indicates that the respondents strongly agreed that the case for the organization decision making process. The respondents were asked to indicate the organization decision has clear information flow for managers to decide effective decision their work process in relation to organizational effectiveness. The respondents tend to strongly disagree and disagree for the case. This indicates that more than fifty percent of the respondents indicate that the organization decision making process has no linear flow of information for each decision maker in each work units. Since every decision make relays on information required for effective decision the existence of clear information flow increase the effectiveness of the organization decision and overall organizational effectiveness.

The correlation relation shows the magnitude and directions of decision making process and style with organizational effectiveness. Accordingly decision making process and decision making style has positive correlation with organizational effectiveness with correlation value ranging from $r=.356$ up to $r=.416$ with the significant level of $P=0.01$. The correlation Coefficients are all positive indicating the significant relationship between managerial decision making process and style with organizational effectiveness in the study. The cumulative effects

of decision making on the organizational effectiveness along with the correlation value for $r=0.416$ at the significant level 0.01 which is positive weak to influence organizational effectiveness.

The model summary or the linear combination of the independent variable was significantly related to the dependent variable, Based on this, model coefficient of determination or R^2 obtained indicates that 41.8% of the variation in the measure function (organizational effectiveness) can be explained by managerial decision making. The remaining 58.27% of variations are explained by other variables out of this model or variables which are not incorporated in this study.

The ANOVA result indicates the statistical significance of the regression model that was run. Here, p is less than 0.05, and indicates that, overall, the regression model statistically significantly predicts the outcome variable (i.e., it is a good fit for the data).

Generally managerial decision making plays a vital role in organization effectiveness. Since the managers decision making in the organization affects positively the organization effectiveness in such a way that the managers' decision making process and style asserts that organization effectiveness will improve when the managerial decision making changes.

Based on the above finding managerial decision making process and style will have an important contribution in the organization effectiveness.

5.3 Recommendation

Based on the findings and conclusions of the research the following recommendations were forwarded:-

Recalling the conclusion drawn about the decision-making styles and the decision-making process of the effective the organization managers follow based on the data analysis; managers use the different decision-making styles with intuitive and rational styles and rational decision-making process. Having this information the following two recommendations are proposed by the researcher.

- ✓ First, managers must adapt themselves to use the different decision making styles to the situations they face over time.
- ✓ Since managers are not “all-knowing” persons, following a single type of decision-making style any time is not beneficial to handle all the situations. So managers must make themselves ready to use the decision-making styles based on the situation they faced.
- ✓ To minimize the risk of failure due to uninformed decisions every manager must make himself/herself equipped with sufficient information regarding the business environment he /she is acting.
- ✓ Managers should follow a rational decision-making process; which has seven-step process that runs from goal setting for the decision and decision implementation and control as soon as possible in making decisions. This also requires a manager to make him well informed.

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Annex 1



St. Mary's
University ቅዱስት ግርጌን
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Committed to Excellence

POST GRADUATES DEPARTMENT OF MANAGEMNT

Questionnaire to be filled by Respondents

This questionnaire designed to the final year Graduate Student in Masters of Business Administration in St. Mary's University for research project entitled “**THE EFFECT OF DECISION MAKING FOR ORGANIZATIONAL EFFECTIVENESS. THE CASE OF INFORMATION NETWORK SECURITY ADMINISTRATION**” on that you offer me with this questionnaire will be used as a primary data in which I am conducting as a partial requirement of Masters of Business Administration. Hence, this research believe to evaluate in terms of its contribution towards investigating the case of Information Network Security Administration. The information supplied by you is strictly held confidential and used for academic purpose only.

For additional information and comment, please do not hesitate to contact me,

✚ **Name** :- Saron Tesfaye

✚ **Cellphone** :- 09 13104988

✚ **E-mail** :-

General Instructions

✚ *There is no need of writing your name.*

✚ *In all cases, where answers to options are available, please tick “√” in the appropriate box.*

✚ *For questions that demand your opinion, please try to honestly describe your responses on the space provided.*

✚ *There is no right and wrong answer*

Thank you in Advance for your kind cooperation in filling up this questionnaire.

Section I: Personal Data

Please, indicate your response by placing “v” in the box

- 1. Gender:- Male Female
- 2. Age:- 18 -25 26 -35 36 – 45 46 – 55 Above 56
- 3. Marital Status:- Married Unmarried Divorced
- 4. Education
 TVET /Diploma First Degree Master’s Degree PhD
- 5. How many years you worked at the Organization) ?
 1 -2 2 -4 4 – 5 Above 5
- 6. What is your Current status/ position in the enterprises?
Expert Team Leader Divesion Head Director

Section II: Five Point Likers Scale

Please complete the following questionnaire on scale of 1 to 5. Please, indicate your response by placing “v” in the box

- 1- Strongly disagree, 2- Disagree, 3- Neutral, 4- Agree, and 5- Strongly agree

A. Decision Making Process

No.	Decision Making	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
DM-1	I double-check my information sources to be sure I have the right facts before making a decision					
DM-2	When making a decision, I rely upon my instincts.					
DM-3	I often need the assistance of other people when making important decisions					
DM-4	Avoid making important decisions until the pressure is on.					
DM-5	I make decisions in a logical and systematic way					

DM-6	When I make decisions, I tend to rely on my intuition					
DM-7	I often make decisions on the spur of the moment					

B. Decision making Style

No	Decision Making Style	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
S-1	I rarely make important decisions without consulting other people					
S-2	My decision making requires careful thought					
S-3	If I have the support of others, it is easier for me to make important decisions					
S-4	often procrastinate when it comes to making important decisions					
S-5	When making a decision, I consider various options in terms of a specific goal					
S-6	When I make a decision, it is more important for me to feel the decision is right than to have a rational reason for it					
S-7	I like to have someone to steer me in the right direction when I am faced with important decisions					

C. Organizational Effectiveness

No	Organizational Effectiveness	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
OR -E1	The organization achieve the objectives as per the organization mission					
OR-E 2	The organization deliver mission critical tasks effectively					

OR-E 3	The organization have a clear set of objectives for each tasks					
OR-E 4	The organization deliver an appropriate service for governmental organization.					
OR-E 5	The organization create value for all stakeholders and satisfying stakeholders of the organization					
OR-E 6	The Organization support private institution as much as it can					
OR-E 7	The organization Satisfying strategic constituencies that holds way over the organization					

Thank you Very Much!

Annex 2

Frequency Table

Decision Making in our organization is based on the situation understanding

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00	1	.3	.3	.3
	Strongly Agree	11	3.4	3.5	3.8
	Agree	79	24.5	24.9	28.7
	Neutral	9	2.8	2.8	31.5
	Disagree	169	52.5	53.3	84.9
	Stoongly Disagree	48	14.9	15.1	100.0
	Total	317	98.4	100.0	
Missing	System	5	1.6		
Total		322	100.0		

Organization Decision Making based on the problem of the existing situation

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00	1	.3	.3	.3
	Strongly Agree	27	8.4	8.5	8.8
	Agree	82	25.5	25.9	34.7
	Neutral	18	5.6	5.7	40.4
	Disagree	156	48.4	49.2	89.6
	Stoongly Disagree	33	10.2	10.4	100.0
	Total	317	98.4	100.0	
Missing	System	5	1.6		
Total		322	100.0		

Organization Decisions rely on two alternative analysis

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00	1	.3	.3	.3
	Strongly Agree	26	8.1	8.2	8.5
	Agree	94	29.2	29.7	38.2
	Neutral	19	5.9	6.0	44.2
	Disagree	120	37.3	37.9	82.0
	Stoongly Disagree	57	17.7	18.0	100.0
	Total	317	98.4	100.0	
Missing	System	5	1.6		
Total		322	100.0		

The Organization Decisions are made up of evaluating two alternative

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00	1	.3	.3	.3
	Strongly Agree	20	6.2	6.3	6.6
	Agree	104	32.3	32.8	39.4
	Neutral	14	4.3	4.4	43.8
	Disagree	113	35.1	35.6	79.5
	Stoongly Disagree	65	20.2	20.5	100.0
	Total	317	98.4	100.0	
Missing	System	5	1.6		
Total		322	100.0		

The Organization Decisions made up on the best solution for the existing problem

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00	1	.3	.3	.3
	Strongly Agree	26	8.1	8.2	8.5
	Agree	82	25.5	25.9	34.4
	Neutral	20	6.2	6.3	40.7
	Disagree	97	30.1	30.6	71.3
	Stoongly Disagree	91	28.3	28.7	100.0
	Total	317	98.4	100.0	
Missing	System	5	1.6		
Total		322	100.0		

The organization has a clear information flow for organization decision making

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00	1	.3	.3	.3
	Strongly Agree	34	10.6	10.7	11.0
	Agree	79	24.5	24.9	36.0
	Neutral	23	7.1	7.3	43.2
	Disagree	91	28.3	28.7	71.9
	Stoongly Disagree	89	27.6	28.1	100.0
	Total	317	98.4	100.0	
Missing	System	5	1.6		
Total		322	100.0		

The organization has reliable information sources for organization decision making

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00	1	.3	.3	.3
	Strongly Agree	23	7.1	7.3	7.6
	Agree	93	28.9	29.3	36.9
	Neutral	19	5.9	6.0	42.9
	Disagree	106	32.9	33.4	76.3
	Stoongly Disagree	75	23.3	23.7	100.0
	Total	317	98.4	100.0	
Missing	System	5	1.6		
Total		322	100.0		

The organization has a clear confirmation process for every decision

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00	1	.3	.3	.3
	Strongly Agree	31	9.6	9.8	10.1
	Agree	91	28.3	28.7	38.8
	Neutral	20	6.2	6.3	45.1
	Disagree	93	28.9	29.3	74.4
	Stoongly Disagree	81	25.2	25.6	100.0
	Total	317	98.4	100.0	
Missing	System	5	1.6		
Total		322	100.0		