Decision characteristics and strategic decision process for strategic decision output: A conceptual model

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ABSTRACT

Making good decisions is an important action to each manager. This is because the decision will affect on their business performance. Although many studies involving many factors that influence decision-making, but it still has not been able to guide managers to make the right strategic decisions making. There is still a strong need to test the relationship between the strategic decision making process output with contextual factors such as internal, external organization characteristics and decision specific characteristics. Relevant study on moderating effect of strategic decision process that enhances the relationship between decision process characteristics and decision output is still scanty. Therefore, the aim of this study is to propose a model based on the effect and impact of contextual factors on the strategic decision making process and at the same time to test the extent to which the nature of decision-making process (a moderating effect) enhance the quality of the decision-making process output. The variables proposed are decision specific characteristic, organizational (internal characteristics), and environmental (external characteristics) effect on quality and satisfaction of the decision output while having strategic decision process (rationality or comprehensiveness, decentralization and politicization) as a moderating factor. Hence, the end of this study will highlighted the several outcomes, which are; (1) if the situations where they make strategic decisions are highly dynamic, (2) if the organization is large, and (3) if the decision exerts a high level of impact on different areas of the organization.

Keywords:
Decision process, Decision quality, Organization slack, Environmental dynamism

1. Introduction

Managers are faced with a multitude of decisions every day. This is more so in the presents of complex and fast changing business environment. The worst thing is, they will have to make decisions even if they are not willing to do so. According to Nooraie [1], decision-making is inevitable because to explicitly avoid making a decision is in itself to make a decision. Mark [2] on the other hand

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concluded that for many reasons, the hardest part of managing an organization today is making the appropriate decision. Decisions may be programmed or non-programmed, generic or unique [3], routine or non-routine [4] and certain or uncertain [5]. Once a manager chooses an alternative and knows how to implement it, he can allocate the resources necessary to achieve the defined goal; but getting to that point can often be a long, complex and challenging process.

Since strategic decision not only affects the organization in which they are taken but also the society [6], it is not surprising that strategic decision-making process has been heavily researched [1,6]. One stream of these researches has focused on the strategic decision-making process and factors influencing the process [7-14]. However, past research on strategic decision process has been anecdotal and case analyses with little generalizable conclusions. Empirical studies in terms of factors that influence the strategic decision process is either limited or have produced contradictory results. As studied by [1], “although an important role in strategic decision process research strategy does not depart significantly from the levels that are based on, but it also is based on the paradigm of mature and incomplete assumptions” [15]. Thus, the study of strategic decision-making process remains very important [16] and much more empirical research is required before any definitive conclusion can be reached.

Although there has been a lot of literature about the content of strategies, there is still a lot to investigate about the strategic decision making process and factors influencing the process. Therefore, there is a strong need to develop and test the hypothesis relating to the strategic decision-making process to contextual factors

This study explores strategic decision-making and its process. The choice to focus on strategic decisions is due to its nature and significance. Strategic decisions are long term, highly unstructured, complex, and inherently risky and have great impact on the future of the organization. Strategic decisions are those important decisions that typically require a large amount of organizational resources, and firm’s environment consideration. In strategic decisions, top management usually plays a central role, in making the decisions [17]. These decisions influence organizational direction, administration, and structure [15].

Research in strategic management can be classified into two broad categories: research which deals with the “content” of strategies and research on the “process” which investigates the strategic decision process and factors that affect it [18]. Content research has been the primary focus while process issues and factors influencing the process have received relatively less attention [19] and those available have produced contradictory results. Nooraie [1] concluded that despite the literature, our knowledge of strategic decision-making process and factors’ affecting the process is really limited.

These arguments indicate that the literature still lacks a single acceptable theory to describe how the decision process flows through the organizational structure [20] and also shows a lack of conceptual consensus, which makes it difficult for managers to recognize an appropriate decision-making process [1] or to define the key factors influencing strategic decision-making process [3].

The questions for this research would be; what are the factors influencing strategic decision-making process, in particular the characteristics of the process used, and its impact on the quality of the decisions?

This study thus focuses on the effects of four different factors that influence strategic decision making process. They are (1) decision specific characteristics, (2) internal organizational characteristics, (3) external environmental characteristics, (4) top management team characteristics on Strategic decision making output and (5) the moderating effect of the decision process to strategic decision making output.
2. Literature Review

Most of the researchers have focused on the effects of a limited number of factors involving one dimension of contextual factors on strategic decision-making process [11,21,22] rather than in an integrative manner. It is evident from our literature review that:

- Most of the research in this area has been in the form of case study of large resource allocation and policy decision [1] or has looked at prototypical (assessed by response to a scenario) rather than actual decision-making process [9,21,23].
- This study is of benefits to both executives and top management team for a better understanding of the nature of the gap between studies that have produced contradictory results [1,10,23,24].
- Most of the researches on strategic decision-making process and factors affecting the process have produced contradictory results, while most of them have focused on a limited number of dimensions. Thus, the findings of this study will enrich the discussion on the relationship between strategic decision process and contextual factors.
- The findings of this study could serve as feedback mechanisms about the influence of the contextual factors on quality of the decision-making process output while a strategic decision-making process surfaces as an intervening effect.

Managers have to make decisions every single day. Apart from being one of the most important functions of managers, strategic decision-making is also the function that gives the greatest impact to an organization. The extreme complexity and ambiguity of this process have attracted many studies and researches into this particular area. Models have been constructed to aid managers in making more efficient and effective decisions. Despite the extensive research relating to strategic decision-making, we still know little about the process and factors affecting the process.

2.1. Evolution of management and decision-making

During its evolution, practitioners and scientists have described management as both an art and a science. As an art, management is seen to be driven by sensibilities, perceptions, and intuitions. As a science, an understanding of structures, schedules, systems and power operates management. As an artist, the manager tries to create new realities and to influence others as he or she enacts the surrounding environment. As a scientist, a manager collects and analyzes information, assesses relationship, infers causality, and generates and test hypotheses [25,26]. As said by Birnbaum [27], “Trying to lead without art is usually sterile; trying to lead without science is usually ineffective. Good managers are probably both artists and scientists, and are able to integrate the two ways of thinking and of processing data.”

According to Nooraie [1], the study of management is relatively new. Many of the early individuals who studied and wrote about management were actually practicing managers and they used their own experiences to generalize principles that they believed could be applied in other similar situations.

2.1.1. The classical approach to decision-making

Classical (or traditional) viewpoint, also called administrative management theory, started with scientific analysis of work and efficiency [28,29] and later dealt with concepts and principles of bureaucratic theory, such as hierarchical structure, authority, procedures, and rationality [30]. These
concepts were integrated into the administrative functions of planning, organizing, leading and controlling [31], and describing what managers do and how they act today [32].

The paper by Nooraie [1] concluded that, similarities among traditional management regarding decision-making consisted of:

- Conscious rationality,
- Efficiency, and
- Optimization.

2.1.2. The behavioral approach to decision-making

Throughout the years, managers observed that employees did not always behave as indicated by the classical approach. Thus, those who were interested in helping managers for more effective management of people gained recognition of the behavioral viewpoint that uses the concepts of psychology, sociology, economics and other behavioral sciences to assist managers in understanding human behavior and needs in the work [33]. The behavioral approach focuses on helping managers deal more effectively with the human element of organization [1].

2.1.3. The management science approach to decision-making

The research by Turban and Meredith [34] defined management science as: “The application of the scientific method to the analysis and solution of managerial decision-making problems.” According to them, the management science primarily focuses on managerial decision-making and also the examination of the decision-making situation from a broad perspective [1,34].

The approach of management science was developed during the Second World War. It emphasizes the use of mathematical model in decision-making and planning. Since the war was over many researchers have attempted in applying this broad interdisciplinary approach to industry studies [1].

2.1.4. The systems approach to decision-making

According to Donnelly et. al [33] “The system approach views an organization as a group of interrelated parts with a single purpose because the action of one part influences others; managers cannot deal separately with individual parts, in decision-making and problem-solving” [1]. The systems view of management represents an approach to solving problems by considering a system’s input transformation process, and output interrelationship [35,36]. It also represents an approach to solving problems within the framework of systematic output followed by feedback [29].

2.1.5. The contingency approach to decision-making

The contingency approach is the foremost approach to management today [37-39]. It emphasizes the fact that no one way of managing is best for all situations. It recognizes the possibility of using the other four approaches in managing an organization independently or in combination as the organizational situation requires. The contingency approach encourages managers to use those managerial theories and concepts that are most appropriate for a specific situation and have the best contribution to environmental variables [1,40].
We can conclude that the four perspectives of managements can be applied in suitable environments and situations. Despite having different viewpoints, the four approaches share a number of similarities.

- All four approaches emphasize on managerial decision-making effectiveness, but in different applications and perspectives.
- The classical approach focuses on the task of managing work and organization.
- The behavioral approach focuses on the task of managing people.
- The management science approach focuses on the task of managing production and operations.
- The system approach attempts to focus on the tasks of managing work and organization, managing people, and managing production and operation simultaneously [33]. Managing work and organization may be considered as structured decision-making, managing production and operation can be considered to be behavioral decision-making, managing production and operation can be considered as technical decision-making and finally system approach may be considered as analytical decision-making.

3. Proposed framework and hypotheses

Based on the seminal work of Nooraie [1], other related literature and research problems, Authors had developed an integrated framework and introduced new proposition for Strategic Decision Process as moderating factors that enhance the relationships between Decision characteristics and Strategic Decision Output as presented in Fig. 3.1.

![Conceptual Framework: An Integrative Model](Fig. 3.1. Conceptual Framework: An Integrative Model)

The model is exploratory in nature and focuses on the influence of three different concepts which are; (1) decision specific characteristics, (2) internal organizational characteristics, and (3) external environmental characteristics Strategic decision output while having strategic decision process (Rationality/comprehensiveness, Decentralization and Politicization) as a moderating factor. At the same time, decision output is a dependent variable for this study.

Based on review and previous studies that have been conducted on factors influencing strategic decision-making processes, the author will develop the hypotheses for this study based on theory of classical, behavioral, management science, systems and contingency approach to decision-making [1]. The combination of the theories will use to test the relationship between the independent variables (decision specific characteristics, internal and external characteristics) and moderating
variable (decision process characteristics) with dependent variable (decision output). The explanations of the framework and the development of the hypotheses are shown below:

3.1. Decision-making output (dependent variable)

- Decision outputs refer to the outcome of the decision-making made, particularly the quality and satisfaction from the decision made. According to previous researchers [1,6,15,41], the decision quality refers to how well the decision were carried out. While, the decision satisfaction refers to provision for implementation, contingency plan, speed of decision and achieving a goal. The measurements of decision quality and decision satisfaction was adapted from Nooraie [1] and Duhaime et. al [42].

3.1. Decision Specific characteristics

- **Decision’s Familiarity** defined as the degree that the decision problem is clear to the decision-maker. Nooraie [41] proved that familiarity is positively and significantly related to decision output. Thus, the hypothesis is shown below:
  \[ \text{H1a: Decision’s Familiarity will have a positive effect on quality and satisfaction of the decision output.} \]

- **Decision’s Magnitude of Impact** refers to the extent that the decision will impact various parts of the organization [15]. The magnitude of impact cannot be considered high if a major adverse impact can be mitigated. Previous studied by [10] who suggest that the perceived magnitude of impact of a decision is among the strongest explanatory variables of decision-making behaviour [14]. So that, the hypothesis is:
  \[ \text{H1b: Decision’s Magnitude of Impact will have a positive effect on quality and satisfaction of the decision output.} \]

3.2. Internal characteristics

- **Organizational Size** is another factor that influences strategic decision-making process. Duhaime [42] found that smaller business units usually have greater involvement in the decision process than managers of large units. In previous studied by Nooraie [15] suggested that organizational size is positively associated with strategic decision output. Based on that, the hypothesis is:
  \[ \text{H2a: Organisational Size will have a positive effect on quality and satisfaction of the decision output.} \]

- **Organizational Slack** refers to a cushion of resources, helps organizations cope with environmental changes and unexpected events [15]. In the literature review, the author could not find any empirical study relating organizational slack to strategic decision-making process except the work of Sharfman and James [43] that concluded a positive relationship between slack and flexibility in decision-making output [15]. Thus, the hypothesis is shown below:
  \[ \text{H2b: Organisational slack will have a positive effect on quality and satisfaction of the decision output.} \]

3.3. External characteristics

- **Environmental Dynamism (velocity)** refers to the rate of change, absence of pattern and unpredictability of the environment [15]. Based on these characteristics, environmental dynamism as an important factor influencing decision-making output has been considered by several
literatures. Few researchers [24,44] suggested that an increase in environmental dynamism is accompanied by an increase in the extent of rationality in the decision-making process. According to Grant [45] strategic decisions are made outside the strategic plan in response to environmental opportunities and threats. Hence, the hypothesis is shown below:

**H3a: Environmental Dynamism will have a positive effect on quality and satisfaction of the decision output.**

- **Environmental Hostility** defined as the extent that the situations in which firms are faced with price, production and distribution competition, severe regulatory restrictions, shortage of resources, and unfavourable market demand [24]. According to Miller et. al [24] environmental hostility is positively related to the extent of analysis in strategic decision-making while Papadakis et. al [14] did not find such a relationship. Hence, the hypothesis is:

**H3b: Environmental hostility will have a positive effect on quality and satisfaction of the decision output.**

### 3.4 Decision process characteristics

Strategic Decision-making Process moderates the contextual factors of decision characteristics and decision output [6]. There are existing empirical studies of strategic decision-making that focuses on the relationship between familiarity, slack, dynamism and need for achievement and quality of the decision output while the characteristics of strategic decision-making process function as a moderator that enhance the relationship between decision characteristics and Decision output [6,15]. According to interactional psychology, contextual variables are the major direct influence on manager’s adjustment to choose a particular decision-making process [3]. Previous study has indicated that decision making process directly influences the quality of the decision process output and thus, contextual factors will have indirect effect, through a decision-making process on quality of the decision process output [6,15].

However, the current study proposed that, characteristics of decision making process namely rationality/comprehensiveness, decentralization and politicization are moderating factors to decision characteristic and strategic decision making output as decision making process is contingent factor to enhance the two relationships. This is due to the fact that with rational, decentralized and politicization strategic decision making process, decision quality and satisfaction will be enhanced.

- **The degree of rationality/comprehensiveness** has occupied a central role in the literature of Strategic Decision Making Process [46]. The concept has its roots back in classic economic theory [10]. Various constructs have appeared in the literature measuring the rationality of strategic decision making process [47]. All of them are considered as identical and used interchangeably by researchers [48]. Miller [49] also contends that rational processes help decision makers deal effectively with the complexity associated with strategic decisions, reduce some of the elements of cognitive biases and enhance implementation motivation among decision makers. Thus, their use is associated with improved performance. Thus, the hypothesis is shown below:

**H4a: Rationality will enhance the relationship between decision characteristics and the decision output.**

- **Decentralization** refers to the degree of involvement of various hierarchical levels in the decision making process [14]. Forbes [50] notes that decentralization in small firms reflects the extent to which decision making is dispersed among the individuals in the firm as opposed to being concentrated in the hands of an individual. According to Nooraie [6], the extent of decentralization in strategic decision-making process will generate more ideas, more discussions, more evaluations, and more information; more focus will be given to possible choices, which may lead to better
In discussing decision making, it is expected to focus on a decision itself. Based on previous study by Al-Tarawneh [3], he has stated that a decision is a conscious choice to behave or to think in a particular way in a given set of circumstances. Decision-making had been defined as the thinking process involved in choosing the most logical choice from among the options available [6]. Decision maker has several alternatives in making a decision where the choice involves a comparison between these alternatives and an evaluation of their respective outcomes.

For purposes of this article, a decision is defined as a moment, in an ongoing process of evaluating alternatives for meeting an objective, at which expectations about a particular course of action impel a decision maker to select that course of action most likely to result in attaining the objective. Strategic decision making process is the most significant activity engaged in by managers in all types of organizations. This activity clearly distinguishes managers from other occupations in the society [6].

Naturally, there are three different ways in conducting decision making process used by managers which is based on judgment, or using a more detailed problem-solving process. Making decision through a judgment is primarily an art learned through experience. While, using problem-solving methods to arrive at decisions is an analytic process that is scientific in nature and requires considerable skill and knowledge [57]. The primary focus in this article is on strategic decision making process made by managers that will enhance the decision making output of an organization. These decisions trigger dozens or even hundreds of other decisions of lesser magnitude at descending levels of management [6].

Strategic decisions will set the tone and tempo of managerial decision making for every individual and unit throughout the entire organization. It is highly complex and involves a host of dynamic variables where the strategic decisions are the means by which perennially scarce resources are rationally committed to fulfill managerial expectations for success [6]. Therefore, the ability to take the right strategic decision in a complex situation is what sets an average individual apart from the rest, though the ability of arriving at the correct decision within a short span of time is a highly valued and important trait [6].
4. Conclusion

Despite the literature, our knowledge of decision-making process is limited. The impact of contextual factors on decision-making outputs and enhanced by strategic decision-making process is quite unclear. Considerable work has been carried out in the past two decades focusing on factors affecting decision output. Research in this area has shown progress; however much more empirical research is required before any definitive conclusions can be reached. In the past decades, especially in the late 90’s several researches have investigated and written about managerial decision-making process and output from a variety of dimensions and perspectives [6,58,59].

In spite of this on-going attention, the subject of decision-making is still in a contradictory and controversial phase with theoretical dilemmas. Harrison [60] believed that part of the problem is derived from the multidisciplinary nature of the decision-making. The problem can be more complicated by differentiating decision maker into individual, group, and multi-group [61]. Strategic decisions are shaped by environmental, organisational, decision-maker and decision-specific characteristics [18].

Among different type of managers’ decisions, strategic decisions are the most important ones. Strategic decisions are long-term, highly unstructured, complex, and inherently risky. Since the decisions not only affect the organization in which they are taken but also the society [62], it is not surprising that the strategic decision-making process has been heavily researched [63]. However, Empirical studies in terms of factors that influence the strategic decision process is either limited or have produced contradictory results. According to Papadakis et. al [14], in spite of the crucial role of strategic decisions, the strategy process research has not departed significantly from a stage of being based on. Mature paradigms and incomplete assumptions [64]. Thus, research on the strategic decision and factors affecting the process remains of paramount importance in the field of organizational theories and management [16], and much more empirical research is required before any definitive conclusion can be reached [19].

References


