

*Strategic Advice Seeking Behavior of Different Leadership Styles and its
Impact on Strategic Decision Outcomes: An Overview of Turkish
Companies*



AHMED FURKAN GÜL

YEDITEPE UNIVERSITY
GRADUATE SCHOOL OF SOCIAL SCIENCES

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AHMED FURKAN GÜL

SUPERVISOR

ASSOC. PROF. DR. ORÇUN TÜREGÜN

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PLAGIARISM

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Date:/03/2023

Name/Surname: Ahmed Furkan Gül

Signature :

Farklı Liderlik Tarzlarının Stratejik Tavsiye Arama Davranışı ve Stratejik Karar Sonuçları Üzerindeki Etkisi: Türk Şirketlerine Genel Bir Bakış

Özet: Karar verme ve stratejik karar verme, yönetim literatürünün odak noktası ve popüler bir alanı olmuştur. Çok sayıda akademisyen, her bir öncül, özellik veya değişken ile stratejik karar sürecinin sonuçları arasındaki ilişkileri açıklamak için kapsamlı araştırmalar yapmıştır. Buna ek olarak, son zamanlarda yapılan çalışmalar karar alma sürecine üst kademelerin bakış açısından bakmış ve kuruluşlardaki üst yönetim ekiplerinin, yönetim kurullarının ve CEO'ların bu tür stratejik kararları nasıl aldıklarını araştırmaya çalışmıştır. Araştırmacılar ayrıca bu yöneticilerin, tavsiye arama davranışı olarak adlandırılan, iç veya dış kaynaklar yoluyla elde edilebilecek önemli bilgileri nasıl aradıklarını ve kullandıklarını da incelemişlerdir. "Tavsiye arama davranışı" terimi son zamanlarda literatürde oldukça ilgi çekmektedir; ancak bu çalışmaların miktarı ve derinliği oldukça sınırlı ve çok spesifik. Dolayısıyla bu araştırma, başta CEO'lar olmak üzere kuruluşlardaki üst kademelerin stratejik kararları nasıl aldıklarını ve bu süreçte nasıl tavsiye aradıklarını açıklamaya yönelik bütüncül ve açıklayıcı bir yaklaşım sunmayı amaçlamaktadır. Buna ek olarak araştırma, her bir tarzın tavsiye arama davranışını nasıl etkilediğini anlamak için liderlik tarzı literatürünü entegre ederek stratejik karar alma ve üst kademeler hakkındaki literatürü birleştirmeyi de amaçlamaktadır. Son olarak, araştırma bu davranışların stratejik karar sonuçlarını hız ve kalite açısından nasıl etkilediğini incelemektedir.

Anahtar Kelimeler: stratejik karar verme, liderlik tarzları, liderlik teorileri, stratejik tavsiye arama, stratejik karar sonuçları, karar hızı, karar kalitesi, içeriden tavsiye arama, dışarıdan tavsiye arama, CEO tavsiye arama, üst kademe teorisi, laissez-faire liderlik, tam kapsamlı liderlik, işlemsel liderlik, dönüştürücü liderlik

Strategic Advice Seeking Behavior of Different Leadership Styles and its Impact on Strategic Decision Outcomes: An Overview of Turkish Companies

Abstract: Decision making, and strategic decision making have been a focal and popular area of management literature, and numerous scholars have conducted thorough research to explain the relationships between each antecedent, characteristic, or variable and the outcomes of the strategic decision process. In addition, recent studies have looked at decision making from an upper echelons" perspective and tried to investigate how the top management teams, boards of directors, and CEOs in organizations take such strategic decisions. Scholars have also looked at how these executives seek and utilize essential information that can be acquired either through internal or external resources, which is referred to as advice seeking behavior. The term "advice seeking behavior" has been recently attracting a lot of attention in the literature; however, the amount and depth of these studies have been rather limited and very specific. Therefore, this research aims to provide an integrated and explanatory approach to explain how the upper echelons in organizations, especially CEOs, take strategic decisions and how they seek advice during this process. In addition, the research also aims to combine the literature on strategic decision-making and the upper echelons by integrating leadership style literature to understand how each style affects advice seeking behavior. Finally, the research investigates how these behaviors affect strategic decision outcomes in terms of speed and quality.

Keywords: *strategic decision making, leadership styles, leadership theories, strategic advice seeking, strategic decision outcomes, decision speed, decision quality, internal advice seeking, external advice seeking, CEO advice seeking, upper echelon theory, laissez-faire leadership, full-range leadership, transactional leadership, transformational leadership*

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1 Chapter 1: Research Definition

1.1 Introduction

One of the most essential topics in organizational research is the question of how strategic decisions are made (Hambrick & Mason, 1984; Mintzberg, 1973). Previous studies concerning the perspective of the upper echelons have paid significant attention to the individual and group characteristics of senior executives (Carpenter, Geletkanycz, & Sanders, 2004). Recently, there has been an increase in attention to the behavioral aspect of how these executives interact with their surroundings (Bromiley et al., 2018).

Executives, most of the time CEOs, often look to other sources of information and advice when taking a strategic decision, whether the goal is to improve the overall performance of the organization, to invest in new markets or products, or to improve the internal processes and systems within the organization (McDonald & Westphal, 2003; McDonald, Khanna, & Westphal, 2008). Advice seeking can be considered a valuable behavior for executives looking to receive strategic input regarding a strategic goal (Arendt, Priem, & Ndofor, 2005; Alexiev, Jansen, & Van den Bosch, 2010; Cumming & Fischer, 2012). The upcoming field of research focusing on CEO advice seeking states that the fact that CEOs and top management teams (TMT) in organizations believe that strategic advice from other individuals or groups in and outside the organization can turn out to have an organization-wide impact (McDonald & Westphal, 2003). McDonalds and Westphal (2003) realized that CEOs who ask for strategic advice from other executives are more prone to execute a change in the organization's strategy so as to improve a poorly performing organization. On the other hand, Alexiev et al. (2010) state

that top management teams that display an advice-seeking behavior from outside sources are more likely to be innovative. In addition, McDonald et al. (2008) discovered that formal advice seeking relationship rather than informal advice-seeking relationships have a stronger relationship with organizational performance.

As a general phenomenon, advice seeking can be witnessed and observed in many aspects of life when individuals are faced with vital and complex decisions, as individuals usually tend not to take the decision by themselves alone. (Bonaccio & Dalal, 2006; MacGeorge, Guntzviller, Hanasano, & Feng, 2016). Yet, the advice seeking behavior of the CEO and/or top management teams is a unique topic that has a direct impact on the future of the organization. Given the nature of the decisions taken by CEOs and TMTs, these decisions often tend to have a strategic impact on the future of the organization and can affect an immense variety of individuals and groups within the organization. Prior research shows that strategic advice can be sought through a wide range of advisors that can be either inside or outside of the organization, such as TMT, the board of directors, lower-level managers, and formal and informal external consultants (Arendt, Priem, & Ndofor, 2005; Garg & Eisenhardt, 2017; Kor & Mesko, 2013; Ma & Seidl, 2018; McDonald, Khanna, & Westphal, 2008).

Previous studies have revealed that seeking strategic advice has a great influence on the strategic decision-making process of the CEO and TMT and other topics such as the selection of strategy, CEO and board effectiveness, entrepreneurial and innovative behavior of the organization, and the overall performance of the organization (Aacquah, 2007; Garg & Eisenhardt, 2017; Geletkanycz & Hambrick, 1997; Sundaramurthy, et al., 2014; McDonald & Westphal, 2003).

Scholars in the field have also shown that advice-seeking behavior plays an active role in delivering material results in solving complex organizational problems such as weak organizational performance, reputational problems, or issues regarding exploratory innovation (Alexiev, Jansen, & Van den Bosch, 2010; Collins & Clark, 2003; Mehra, Dickson, Brass, & Robertson, 2006; McDonald & Westphal, 2003). However, there is limited empirical research about the antecedents of strategic advice-seeking behavior, specifically regarding leadership (CEO) and key roles (TMT) in the strategic decision-making process and its outcomes inside an organization.

Given the nature of their role, CEOs and TMTs have a comprehensive influence and impact on many aspects of the organization, and the leadership styles of this executive suite can also have a different effect on the strategic decision process and hence the outcomes of these decisions. As a result, each leadership style can result in different advice-seeking behaviors or strategic delegation when it comes to making strategic decisions. There is an extensive body of previous academic work regarding the relationship between different leadership styles and strategic decision making; however, when it comes to selecting or seeking strategic advice from others, there is a limited number of works that study the relationship between different leadership styles, advice seeking behavior, and decision outcome.

This research aims to expand on the limited work around the strategic advice-seeking behavior of various levels of leadership in organizations by studying the relationship between the antecedents of this behavior and decision-level outcomes. The research hypothesizes about how different types of leadership styles affect the strategic decision-making process that involves

either advice-seeking behavior or strategic delegation, and finally, how these behaviors can affect the outcomes of these decisions.

Focusing on this gap in the field, the research aims to bring an additional perspective and foster the growing interest in the field from various perspectives. First of all, the research sheds light on the previous work done regarding the antecedents of advice-seeking behavior that has a central role in the strategic decision-making process and its outcomes (Alexiev, Jansen, & Van den Bosch, 2010; McDonald, Khanna, & Westphal, 2008; Vissa & Chacar, 2009). Advice-seeking scholars have an ambitious goal in revealing the black box of CEOs and TMTs strategic decision-making processes, and this research tries to contribute to the field in a consequential manner by studying the relationship between the personal attributes of leaders in organizations and their decision-making process and approach when it comes to acquiring information and advice from other parties or when it comes to delegating certain types of strategic decisions to lower-level managers. When studying this field, the research aims to build on the existing literature that focuses on the factors or variables that affect the upper echelons' decision-making process (Finkelstein, Hambrick, & Cannella, 2009; Papadakis & Barwise, 2002; Simons, Pelled, & Smith, 1999).

The research also adds to the field by looking at how internal and/or external teams or agents can affect a CEO's or TMT's decision-making process. Finkelstein and colleagues (2009) state that the upper echelons' view of the organization is not infinite as they have limited time and dedication to observe everything happening inside and outside the organization. So, advisors play an important and complementary role in helping the CEO and TMT make strategic decisions by analyzing and summarizing the best options for the organization that are most likely

to work. The research tries to dig deeper into this aspect of advice-seeking behavior by studying the patterns of CEOs and TMTs advice-seeking processes.

Scholars who have studied advice seeking before (McDonald, Khanna, and Westphal, 2008; McDonald and Westphal, 2003; Alexiev, Jansen, and Van den Bosch, 2010; Vissa and Chacar, 2009) have often focused on just one source of advice. This research seeks to uncover if that is really the case or if CEOs and TMTs often look for multiple sources of advice when making a strategic decision. By hypothesizing and assessing these variables, the research aims to enrich the existing conceptual studies (Arendt, Priem, & Ndofor, 2005; Jones & Cannella, 2011) and previous empirical and experimental studies conducted in the past (Bonaccio & Dalal, 2006; Snizek, Schrah, & Dalal, 2004; Snizek & Van Swol, 2001; Yaniv & Kleinberger, 2000) by delivering a more confined and insightful perspective on the types of factors and variables that affect advice seeking behavior and strategic delegation, which is an important part of the strategic decision making process by the upper echelons in most organizations.

1.2 Problem Statement

Organizational researchers have been looking at how asking for and giving advice helps explain the main factors that go into making judgments and decisions. They do this by looking at this new field from different angles that expand and build on it. Organizational behavior scholars, for instance, have studied the fundamental motivations behind why people follow advice in great detail using cognitive and sociological perspectives. The results of these studies (Gino, Brooks, and Schweitzer, 2012; Yaniv, 2004; and Gino and Moore, 2007) show that as these decisions get more complicated and the possible outcomes are less clear, people often look for advice from other sources.

As the volume, accuracy, and speed of data have increased dramatically, so has the amount of information that people and organizations produce and process. Now, there is so much information that it is almost impossible to pay attention to and analyze all the business-related data. Therefore, organizations and the upper echelons started turning to advisors that could help them process and analyze all the relevant data and information to help them make better strategic decisions. For this reason, recent studies around strategic decision making have started paying significant attention to the effect of advice and advisors (Arendt, Priem, & Ndofor, 2005; Jones & Cannella, 2011; Heavey, Mowday, Kelly, & Roche, 2009; Mintzberg, 1973), as they have become a key channel for gathering and processing knowledge that can be used for strategic decision making.

As advice-seeking behavior has attracted attention, scholars in the field have seen that organizations can look for different sources of advice when making strategic decisions at the upper echelon level (Alexiev, Jansen, & Van den Bosch, 2010). Because of this, the management consulting industry has grown to be one of the biggest and most stable in the last 40 years. This is because companies often turn to management consulting firms for different strategic reasons, such as to get advice from outsiders and gain access to people with experience and knowledge in different industries. In light of this, many organizations have started using internal teams to get advice on how to take certain strategic actions. Several current trends in the management consulting industry, such as the improvement of technology, especially big data technologies, the opening up of market data to more people, and the rise of turnover in consulting firms, have made it possible for organizations to set up internal consulting teams or use internal resources to work on strategic projects. (Christensen, Wang, & Van Bever, 2013)

According to relevant research in the field (Heavey et al., 2009; Keagan, 1974; Menon & Pfeffer, 2003), the upper echelons prefer to get advice from outside sources rather than from inside sources. Also, Menon and Pfeffer (2003) found that leaders in organizations tend to prefer informal ties over formal relationships in which they ask for advice. Alexiev et al. (2010) added to these earlier studies by saying that both internal and external advisory teams or individuals can be a reliable, efficient, and effective source for strategic decision making at the upper echelon level.

The above studies make it clear that asking for advice is now an important part of making strategic decisions at the top levels of organizations. All these studies, however, have seen advice-seeking as a behavior that is driven by things outside of the person. They have also thought that asking for advice will always be a good way to solve difficult strategic decision-making problems and that managers will use this advice in the end (Gino & Moore, 2007; Yaniv, 2004). Based on this assumption, this research tries to add to and build on previous studies by looking at how different leadership styles at the top affect how people seek advice and how they use advice from different sources. It also tries to find out if these decisions have a real effect on how strategic decisions turn out.

1.3 Purpose of the Study and Research Questions

There is a vast amount of prior research regarding the topics "management consulting", "strategic decision making", "advice seeking" and "leadership theory and leadership types". Additionally, there is a growing number of opinions that management consultancy or external strategic advice have become a less preferred method of consulting than they used to be and that organizations have started to utilize their own internal resources or get external consultancy in specific areas when they are involved in a strategic decision-making process. However, as mentioned in the previous sections, it was observed that there are no concrete studies on the antecedents of delegation of strategic decision-making or advice-seeking processes, especially regarding different leadership styles at the CEO level. In addition, there is limited and mostly conceptual work on why and how different sources of advice are selected and utilized and how these sources impact the outcomes of the strategic decision-making process.

Building and expanding on this gap, this study can contribute to the determination of the most ideal decision-making process and consulting method to be used according to the structure of the organization while also understanding how organizations manage and decide the use of advice in strategic decision-making processes according to several types of leadership. Lastly, this study can help Turkish companies figure out how to choose and use advice based on their leadership styles and how these styles can affect the outcomes of decisions based on things like quality and speed.

Stemming from these insights, the research tries to answer some of the following questions:

1. How do strategic decision-making processes and strategic advice-seeking behavior change according to the different types of leadership at the CEO or TMT level?
2. What kinds of advice sources do CEOs and their top management teams choose and use to help them make strategic decisions?
3. What kind of sources of advice do CEOs and top management teams select and utilize based on their leadership style?
4. What is the effect of using internal resources on strategic decision outputs?
5. What is the effect of using external advisory sources on strategic decision outcomes?
6. What is the effect of using hybrid or mixed teams of advisors on strategic decision outcomes?

1.4 Research Scope

Searches were done on the Web of Knowledge and Google Scholar platforms to find and analyze relevant and past studies in the field of how people in the upper echelons seek advice. Advice-seeking behavior covers a wide range of topics, so the relevant literature search was done by including related keywords in the area of interest. This helped to narrow down the search and find all of the specific and insightful work that had been done before.

The keyword list that was used in the literature search was as follows:

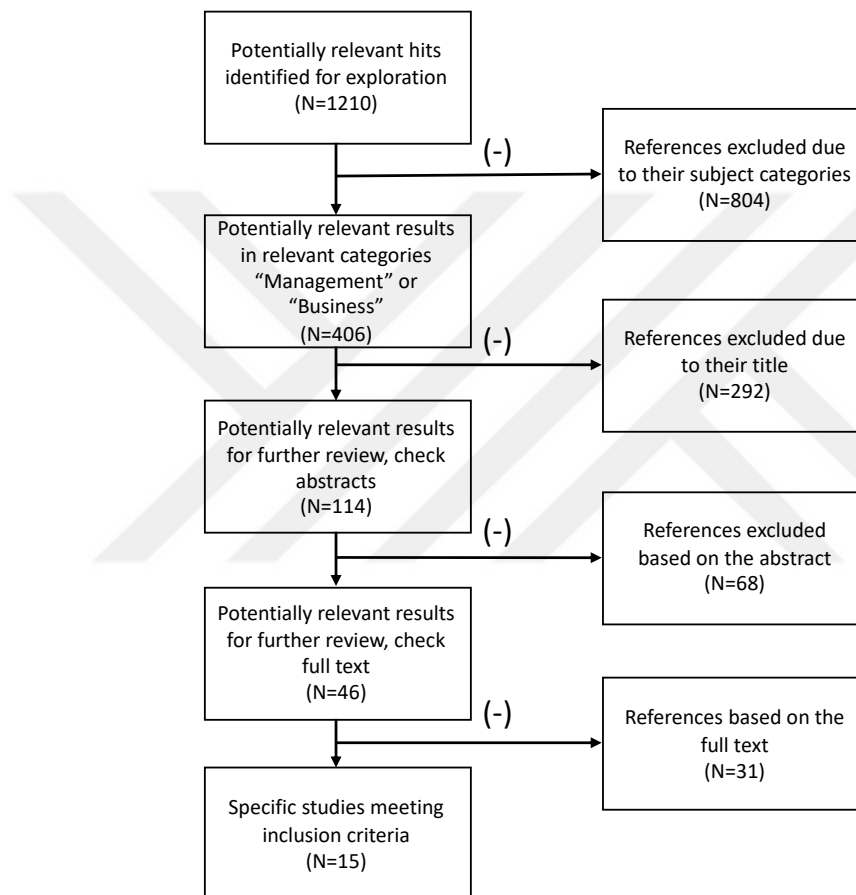
1. (a) one of three search terms— “CEO*” “executive*,” or “top manage*,” “upper echelon” or “leadership styles”—in combination with one of the following search terms:
2. (b) “advi*,” “advice seeking,” “counsel*,” “CEO* network*,” “social network*,” “strategic advice,” “informal tie*,” “internal tie*,” “external tie*,” “social capital,” “access to information,” “source* of advice,” “CEO-board relation*,” “CEO-board interface*,” “CEO-TMT relation*,” “CEO-TMT interface*,” “decision outcome”, “decision speed” or “decision quality”

By combining the keywords from sections, a and b, the goal was to find all relevant studies that mention or use the ideas that will be used in the research. In order to narrow down and gather all relevant work that will be part of the citations mentioned in the study, several steps were followed. The first step in the search was to look for a wide range of topics and keywords, which led to a long list of possible articles and chapters. Then, a further filter was applied to capture all relevant work that was conducted around the subjects of "management" and "Business". This helped narrow down the list to a few hundred pieces of relevant work. This list was then narrowed down by looking at the titles of search results and omitting the ones that had

no relationship with the research subject. After this step, the narrowed-down list was again analyzed based on their abstracts, and the final list of all the relevant studies was formed by going through the full texts of all the articles and chapters in this list.

The overall process is also displayed in the flow-diagram below:

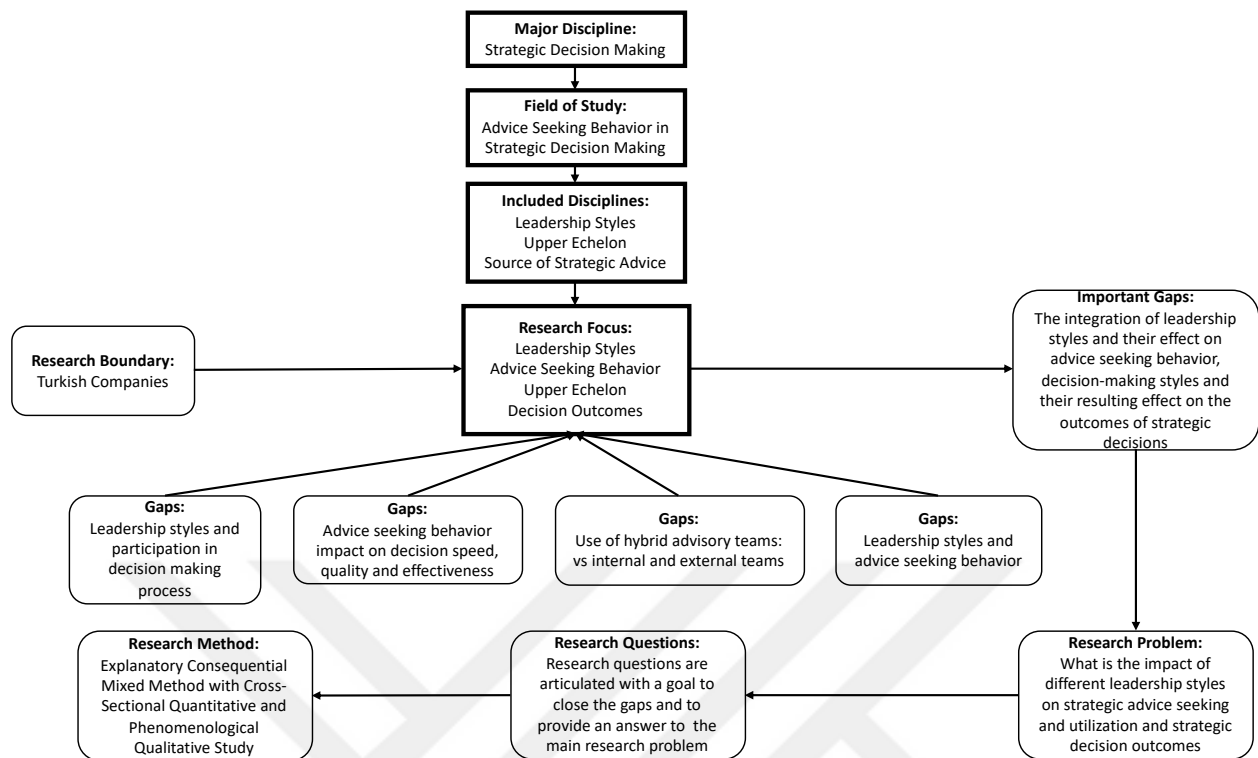
Figure 1 - Flow diagram of the literature selection process.



The above search method turned up 15 relevant articles, most of which were written after 2010.

This also shows that the research has considerable relevance and importance in the emerging field of research on strategic advice-seeking behavior.

Figure 2 - Overall Framework of the Research



1.5 Research Structure

This research is articulated in six chapters.

In the first chapter, the research gives a conceptual summary of the whole study and outlines the importance of the topics that are discussed.

The second chapter reviews all of the pertinent prior work by other academics in the field and analyzes the literature. The chapter starts by looking at the strategic decision process as a whole and tries to draw the boundaries of the study by relating to a framework that summarizes the whole strategic decision process. The chapter then talks about how the upper-echelon theory of CEOs and TMTs relates to the process of making strategic decisions. The chapter then looks at the literature on leadership and goes into more detail about different styles of leadership, such as transactional, transformational, and "let it go" leadership. After that, the chapter looks at past research on how people seek advice and how it applies to CEO-TMT interaction. The chapter then talks about different sources of advice, such as internal and external sources, which have been talked about in other work. Lastly, the chapter goes into more detail about the study's dependent variables, which are things like speed and quality that depend on the results of strategic decisions.

The third chapter discusses how the research is designed based on the research questions and the purpose of the study. It gives more background information to support the model that was proposed to try to explain the relationship between the things that were talked about in Chapter 2. Based on the model and the theoretical background information, the chapter then finally lists all the hypotheses that will be tested during the study.

In the fourth chapter, more information is given about the methods that will be used to test the hypotheses that were introduced in the third chapter. These methods are highlighted and linked to the research question and the goal of the study. The chapter talks about which method(s) will be used, how the data will be collected and analyzed, and what measures will be used for the variables mentioned in the model.

Chapter 5 reflects on the results that are collected through the study and gives details about the models and methods used for analyzing the results. The results of the experiment will then be discussed in detail to show if each of the hypotheses is true or not.

Finally, the last chapter of the study gives an overall discussion based on the findings of the study. The chapter then addresses what kinds of implications can be drawn from these findings. The limitations of the study are also discussed in this chapter, and based on these implications and limitations, a list of recommendations for future research studies is also articulated in the final section of the chapter.

2 Chapter 2: Theory and Literature Review

Today's business world is changing quickly because of a number of things, such as disruptive new business models, the improvement and wider availability of technology, the rise of high-tech use, and the creation of more business-relevant data. Every business, whether it's a large company or a new one, needs to align and improve its internal operations and processes to stay relevant in a business world that is always changing. So, the efficiency and effectiveness of CEOs and top management teams in making strategic decisions are key to making a business sustainable. CEOs and top management teams must make tough and complicated decisions all the time in today's fast-paced world. They often don't have enough time or money to look at all the information and come up with a good strategic decision. Because of this challenge, the upper echelons have often turned to external consultants, advisors, and management consulting firms to help them through this process. Management consulting has been around for more than 100 years and has been one of the largest industries, especially for the past 40 years. But because of things like a highly changing business environment, more competition, and easier access to subject matter experts and market data, many companies have been hiring these consultants to set up internal consulting teams or training their existing management teams to build and strengthen their internal advisory capabilities.

This research tries to find out what causes the CEO and top management team to ask for advice by looking at different styles of leadership and trying to figure out how the way they choose and use advice can lead to better and faster decisions. This chapter will focus on the literature that is related to the study's hypotheses and give information about them. The chapter will start by looking at strategic decision-making in general and figuring out where it comes

from and what it means. After that, a literature review will be done on different theories of leadership and styles of leadership. The chapter will then focus on advice-seeking and upper-echelon (CEO and TMT) advice-seeking literature. Finally, the chapter will look at different variables of decision-making outcomes, such as speed and quality, which will serve as the dependent variables of the study.

2.1 Strategic Decision Making

Strategic decisions are often at the top of an organization's list of priorities because they tend to have a long-term, direct, and significant effect on the future of the organization. So that these decisions can be carried out in an effective and efficient way, there needs to be a clear structure at the top of the organization that ties them together and makes sure they are in sync with each other. This process of linking structures together can be called "strategy," which is a continuous process that tries to match and make the best use of the organization's internal resources and skills with external constraints and conditions. According to Miles, Snow, and Pfeffer (1974), there are three different types of strategic decisions, which are: "(1) the selection of a specific product or market domain within the wider ecosystem; (2) the development of a technology for penetrating that domain; and (3) the formation of an organization structure that synchronizes and manages the technology." To remain competitive, every organization, like any other, must constantly update and reinvent itself. Therefore, the top management of the organization plays a critical role in achieving this goal as they decide how these three factors will be aligned and updated as part of the strategic decision-making process.

Organizations with different sizes and top management structures can have different responsibilities and effects when it comes to putting strategic decisions into action. For example,

in large organizations or enterprises, the top management team has access to more information and advice from both inside and outside the company. This helps them figure out and decide on a wide range of strategic options. In smaller organizations, like startups, the founder is usually the one who makes all the strategic decisions and plans for the organization's future.

By examining high-impact decisions made by CEOs and/or top management teams (TMT), this research attempts to concentrate and narrow its focus on the field of strategic decision making (Hambrick & Mason, 1984). Top management must be involved in the strategic decision-making process because these decisions often have a big impact and are out of the ordinary. They change the organization's direction so that it can respond to changes in the outside world by making the most of its own resources and processes (Thompson, 1967). Because of this, the results of these decisions almost always have long-lasting and important effects on the organization, and it's important to know how top management is involved in this process.

Vroom and Jago's (1988) research on the upper echelon's role in strategic decision-making shows that the upper echelon's role can vary based on the size and degree of the impact. Adding more people to this decision-making process can be beneficial or detrimental, depending on your perspective. Hollenback et al. (1995) say that adding more people to the decision-making process can give the organization access to more useful information and wisdom. Once these insights can be used effectively, the organization can make better decisions. From an empowerment point of view, letting other members of the organization be a part of the decision-making process and creating a sense of a common and shared goal for the future of the organization can improve the whole process and lead to better strategic decisions (Jackson, 1999; Cannella, Park, & Lee,

2008). When more people are involved in a process, there may be more room for disagreements because each person may have different goals for how the process turns out. So, it is very important that the people making decisions feel like they are working toward the same goal and have the same expectations.

2.2 The Strategic Decision-Making Process at the Upper Echelon Level

According to Schneider and De Meyer (1991), there are three main factors that together affect the strategic decision-making process at TMT level: (i) the decision makers' viewpoints; (ii) the organizational setting; and (iii) the organizational environment. Based on the knowledge gathered through the search regarding the literature on the strategic decision-making process, it can be claimed that the literature still has room to grow. According to Papadakis et al. (1998) and Elbanna et al. (2020), there are still parts of the literature that need further explanation, and the existing research seems to state "mixed, contradictory, and inconclusive" discussion findings, especially around contextual factors regarding strategic decision-making processes. Potential outcomes and antecedents of the strategic decision-making process have been studied by other scholars in the past; however, there still seems to be no consensus around which context has the greatest influence on the process. This research tries to tackle this issue by focusing on the context around the top management characteristics.

Administrative decisions have an important impact on numerous dimensions of the strategic decision-making process. An example of this could be the perception of the CEO and the TMT regarding a potential strategic matter. Based on one perception, the situation might be perceived as an opportunity, and based on another perspective, the same situation might be treated as a threat. Therefore, this difference in perception could have a significant impact on the

whole decision-making process. (Mintzberg, 1973; Billings, Milburn, & Schaalman, 1980; Dutton & Ashford, 1993) impacts numerous parts of the essential choice interaction. (Cyert & March, 1963; Child, 1972) state that, from a behavioral perspective, the CEO's character has a controlling effect on the decision-making process. On the other hand, TMT's recognition of strategic issues and their involvement in the process contradict this statement. As more research has focused on the upper echelon literature, specifically regarding TMT, TMTs' role and impact in the decision-making process have become more observable. (Hambrick & Mason, 1984; Miller & Toulouse, 1986).

2.2.1 Upper Echelons Participation in Strategic Decision Making

Hambrick and Mason (1984) were the first to use the term "Upper Echelons Theory," which asserts that the backgrounds of top management teams are a significant predictor of organizational outcomes. Scholars have done a lot of insightful and helpful work on the upper echelon's theory, but there doesn't seem to be a single definition of who is a TMT member that everyone agrees on. Scholars have used a variety of definitions to explain what a TMT is and who makes up a TMT in an organization when they talk about the members of the top management team or the executive teams. One of the first times this theory was mentioned was in 1963 by Cyert and March. They called this group a "dominant coalition" and said it was important for the organization's strategic decision-making. Other researchers have given a more detailed explanation of who is on these top management teams. For example, the chairman, the chief executive officer (CEO), and other top executive positions like chief financial officer (CFO) and chief operating officer (COO) are all on these teams (Ferrier, 2001). Other attempts in drawing the boundaries of the top management team have included a variety of different roles in the organization, such as all executives at C-Level positions (Wagner, Pfeffer, & O'Reilly, 1982),

a closed circle of executives (Finkelstein, Hambrick, & Cannella, 2009), and mid-level managers (Chaganti & Sambharya, 1987; Murray, 1989; Michel & Hambrick, 1992; Hambrick, Cho, & Chen, 1996).

When it comes to the limits of the TMT, the variety and differences in observational decisions raise important questions that can help researchers understand how strategic decisions are made. From a certain point of view, the TMT concept is seen as the most important unit in organizations that needs to be studied to understand how strategic decisions are made. Many scholars concur that contemplating the whole group of key individuals will expand the capacity to both comprehend and foresee strategic choices compared with zeroing in exclusively on the CEO (Hambrick & Mason, 1984).

Notwithstanding, without clearly setting up the limits of the TMT, it is hard to perceive how further advancement can be made. In the meantime, a small number of scholars have been able to connect executives with certain strategic choices. For example, in a rare study (Amason, 1996), some key professionals were linked to certain strategic results. TMT was only used by Amason for the executives who took part in making strategic decisions. This investigation was made possible by focusing on a small business, which made it easier to talk to executives in charge of making strategic decisions. Most scholars in the field of strategy, especially those who use written information, say that it's hard to make a direct link between TMT attributes and business results when it's not clear who makes which strategic decisions. In the next part of the study, a flexible method is used to tell TMT members apart. This method explains the inclusion mechanism so that, depending on the decision environment, at least a half-way change can be

made. In this method, each choice is looked at by a "group" whose members are carefully chosen based on the choice to be made.

Because the effects of hardening have to be taken into account when making strategic decisions, academics depend even more on the role of the CEO. In an experimental setting, it is easier to get information and test the effects of one individual than a diverse group of executives. Furthermore, there is an obvious interest in the CEO position, hence the need for significant attention to that position alone (Sanders, 2001; Crossland & Hambrick, 2007; Sanders & Hambrick, 2007). In this way, while most more extensive theoretical work proposes that there is a significant advantage in thinking about the entirety of the essential gatherings for a strategic choice, a significant share of present empirical studies have zeroed in on the CEO position alone. As discussed in the later sections of the research, the CEO position intensely affects what choices are taken into consideration, who aids the process, and how this strategic decision is outlined.

2.2.2 CEO Influence on Strategic Decision Making

In every organization, the CEO position is normally the most influential role in the organization (Rajagopalan & Datta, 1996). The CEO's exclusive role, organizational power, and experience include both immediate and aberrant impacts on the whole strategic decision-making process. The immediate impact is displayed in the CEO's individual preferences and tendencies about the actual choice—which choices ascend to a degree of significance that causes them to be evaluated, the strategic urgencies that set the setting wherein choices are assessed, and which options are favored or disfavored, all else being equal. The ancillary effect is displayed in the determination process of the individuals who will be engaged in the strategic decision-making process, as well as in the systematizing of their engagement and the determining of the boundaries of the process in which the choice is to be made (Cannella & Holcomb, 2005). In

summary, the CEO's view of the subject impacts the decision-making process through their clout in the selection of matters to be settled, in outlining the issues, in figuring out which members of TMT will be engaged with the strategic option development process, and in determining how the whole decision process will result (Pitcher & Smith, 2001).

In an organizational setting, two possible essential roads emerge where problems roam in the organization as they arrive at the TMT. The primary road includes the executive management team (EMT), where non-CEO individuals from the TMT are presented with various improvements. These individuals, restricted by bounded rationality, are probably going to see certain upgrades and disregard others, and this cycle is triggered by their individual experiences, qualities, and characters (Dearborn & Simon, 1958; Hambrick & Mason, 1984; Walsh & Seward, 1990). For instance, members of TMT are bound to experience stimuli that draw upon or influence their subject matters or certain parts of their duties (Dearborn & Simon, 1958). These stimuli may hence transform into issues of discomfort that can become part of the CEO's agenda and that of other senior members of the organization. Nonetheless, on the grounds that the problem was first witnessed by a particular individual from the TMT, when it is presented to other people (including the CEO), its context (or structure) is most likely emphatically impacted by the member of the TMT who presents it (Cannella & Holcomb, 2005). Here, the person who brought the issue to the group's consideration is verifiably viewed as a "subject matter expert" with a better position in delivering a solution to the problem. Then again, if there are clashes in outlining the issue, it is probably going to be the CEO who eventually decides the general outline, the degree of significance, and the relevant resources that will be reached out to sort out the problem.

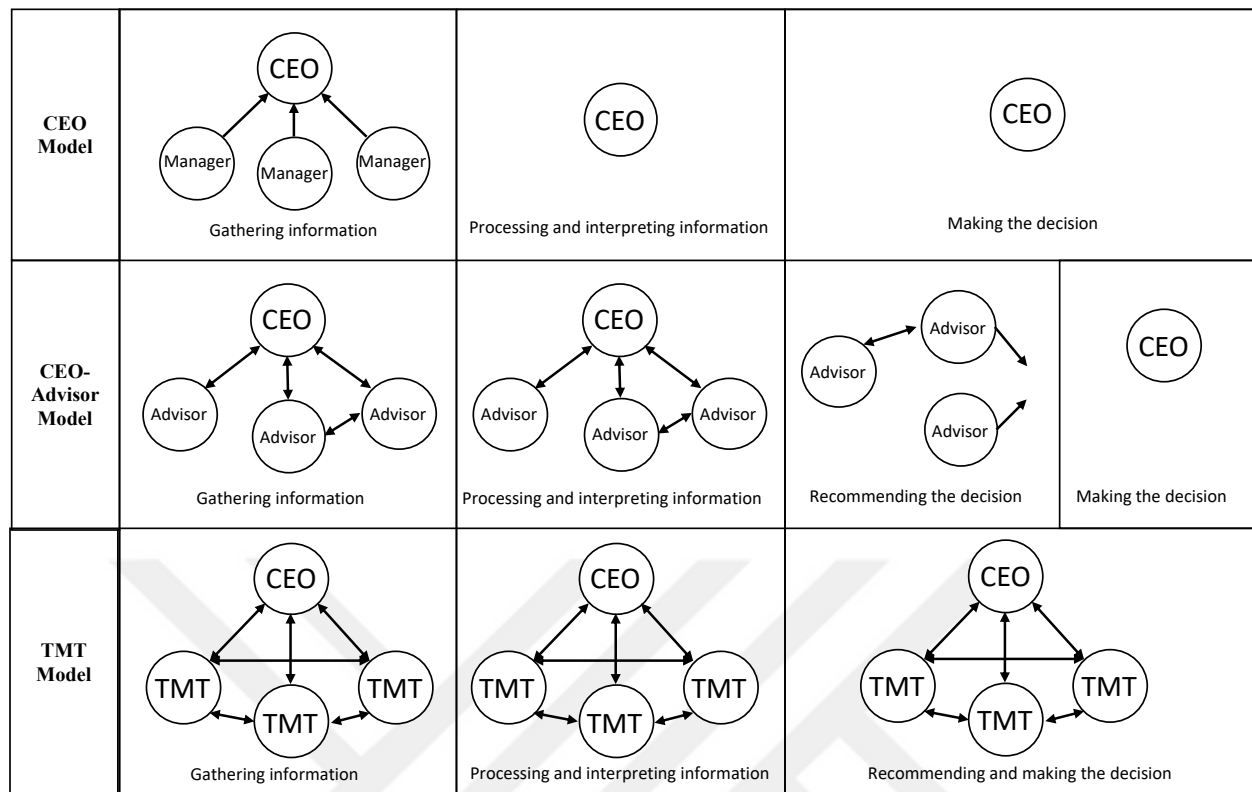
The second path that issues can take to reach the TMT for consideration includes the CEO. It can be acknowledged that the CEO is exposed to a wider selection of stimuli than different individuals within the TMT because of his or her obligations to manage both internal and external stakeholders and partners. Compared to other members of EMT, the CEO obviously has more power and influence within the organization. In this manner, the outlining offered by the CEO might be to such an extent that different individuals from the TMT essentially acknowledge it without critical conversation. It does not necessarily mean that every issue raised by EMT members would eventually end up on the TMT's schedule. In most cases, the CEO's acknowledgement that a certain matter should be considered would eventually mean that it would be evaluated. Additionally, the CEO has the authority to decide which members of TMT will engage in assessing the issue, choosing whether a reaction is necessary or not, and, assuming this is the case, designing that response to the matter (Dutton & Jackson, 1987). As CEOs become mindful of issues that require organizational response, either through their own observation or through the presentation of the issues by other members of the organization, their discernments about the issue will determine how the strategic decision-making process will flow. Therefore, the CEO's recognition of an issue will influence which executives will participate in the process, how the issue is structured, and what assets and capabilities can be utilized. The CEO may decide to include executives for a variety of reasons, such as bringing an expanded view of the problem, employing critical resources, or having external advisors.

The selection of participants in the strategic decision-making process can be shaped by how the CEO perceives the decision setting (Hickson et al., 1986). In some cases, these strategic issues may necessitate the use of external individuals or groups that possess the required experience, skill, or assets that are crucial for executing an efficient process. In these

circumstances, organizations may prefer to look for external resources rather than internal members of the organization (Pfeffer & Salancik, 1978) when these external resources can aid in the process by providing the needed set of expertise and skill in resolving the problem.

CEOs are normally accepted as the commanders-in-chief of the organization. They almost always have the last say in the organization, and their capability to perceive and decide which individuals will partake in the strategic decision-making process ultimately affects the outcomes. CEOs' preferences and decision-making styles determine whether the CEO will bring in multiple individuals to the process to have as many views as possible and conduct thorough discussions or simply make the decision by himself/herself based on his/her insights and observations. In a study conducted by Arendt (2005), and Ndofor (2005) that focused on the types of relationships that are observed in terms of behavior, it was found that there are three categories: (1) the CEO as the sole decision maker who manages the whole self; (2) the/herself; and (3) an advisor model where the CEO acts as the sole decision maker but consults with either internal or external advisors. (3) A CEO-TMT model where there is a greater degree of collaboration between the CEO and the TMT, and the final decisions are jointly taken. The figure below from the Arndt, Priem, and Ndofor (2005) study is an insightful illustration of these types of engagements. This research aims to explain this situation from a leadership theory perspective and investigate whether different types of leadership result in different types of engagement or advice-seeking behavior among any potential stakeholders that could be involved in the strategic decision-making process.

Figure 3 - Models of Involvement in the Strategic Decision-Making Process (Arendt, Priem, & Ndofor, 2005)



2.2.3 Advice Seeking within a Contextual Framework

Elbanna et al. (2020) have conducted a thorough analysis of the whole literature on the strategic decision process to draw a comprehensive framework that includes almost all the antecedents, processes, and outcomes of the strategic decision process that have been examined in prior studies.

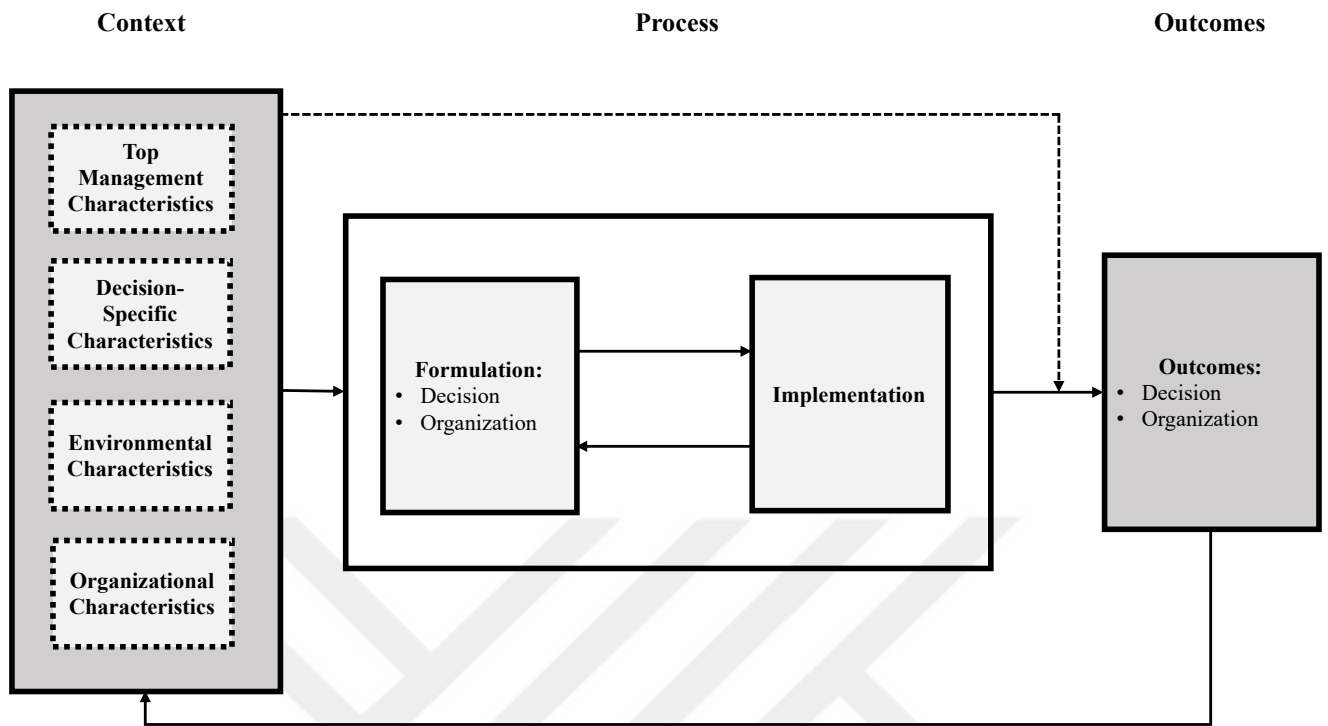
In the context part, they state that there are four major factors in the process, which are top management characteristics, decision-specific characteristics, environmental characteristics, and organizational characteristics. Top management characteristics investigate the topic both from an individual and group perspective as well as the interaction between them. Decision-

specific characteristics include studies that focus on decision importance, decision uncertainty, and decision motive. Environmental characteristics look at how factors such as environmental control, uncertainty, and hostility or benevolence affect the strategic decision-making process. Finally, organizational characteristics investigate the impact of organizational performance, company size, type of ownership, etc.

The decision-making process consists of two major processes: formulation and implementation of the decision. Formulation looks at how the strategic decision-making process is structured and organized. Implementation, on the other hand, investigates how the decision is executed. Then, these processes end up as either decision-level outcomes or organizational-level outcomes.

From a contextual perspective, top management characteristics, especially CEO characteristics, and their leadership styles will be the focal point of the study. From a process perspective, advice-seeking behavior and source of advice selection will be evaluated in terms of decision formulation and implementation. In terms of the outcomes, the research will focus on decision-level outcomes such as speed and quality.

Figure 4 - The integrative framework for studying strategic decisions (Elbanna, Thannos, & Jansen, 2020)



2.3 Leadership Theories and Leadership Styles

In a wide variety of study domains, leadership is a topic that has generated a substantial amount of discussion and attention in recent years. When people hear the word "leadership," they often conjure up an image of an influential and energizing individual. These types of people are frequently portrayed with examples of commanders in armies, visionary politicians, successful sportspeople, or powerful corporate executives who have attained the point where they are seen and regarded as "legends" in their fields. In point of fact, the majority of the history of our world is relayed or taught through influential figures from the past, particularly those who have held positions of authority in the religious, social, political, military, or business spheres, despite the fact that these individuals did not truly have a great deal of knowledge and detail on how these significant events took place.

The search for explanations to the mysteries that surround leadership, such as how certain leaders rose to great power, how they inspired and built large communities and sometimes entire nations, and how they motivated people to give their lives for them, has been a topic that has been widely discussed for a very long time. Specifically, the questions that have been asked include how certain leaders became leaders, how they rose to great power, how they inspired and built large communities and sometimes entire nations, and how they On the other hand, scientists did not actually start conducting studies on leadership until the twentieth century (Yukl & Gardner, 2020). Studies conducted in the past focused a lot of attention on the factors that determine how effective leaders are. There has been a significant amount of work done, particularly in the field of social studies, to investigate the qualities, competencies, behaviors, sources of power, and circumstances that enable leaders to inspire and motivate their followers

and assist them in effectively achieving their goals. Although there has been a significant increase in the number of journals, articles, and research projects on the topic of leadership, particularly in the past ten years, the goal of coming up with an integrated or universal definition or model of leadership is still an ongoing quest. This is because there is no one model that can adequately describe leadership in all situations (Avolio B., 2007).

Since the 1980s, a great deal of innovation in terms of management strategies has taken place. Many experts in the field have voiced their disagreement with these new approaches, stating that they are merely updated variations of already established theories. With the research that has been done on the topic of leadership, as well as in a variety of journals and publications, it is not uncommon to find theories of leadership that are incompatible with one another, as well as theories that present opposing or contrasting points of view. In addition to causing academics who work in the field to have a misunderstanding of leadership theories, the many points of view and variations in the literature prevent the subject from progressing in the proper way and prevent it from going forward. Unhappily, academics who study leadership literature (Kellerman, 2012; Snook et al., 2012) might readily adopt and put a lot of weight on a new notion about leadership and use it to explain the whole area of research. This is a problem because new ideas about leadership are always emerging (Kellerman, 2012; Snook et al., 2012). When one examines the entirety of the published research on leadership, one observes that a common characteristic or affection shared by many researchers is the propensity to swiftly accept and own new thoughts and techniques. This has obviously resulted in the publication of a great number of ideas, concepts, and theories. These ideas, concepts, and theories are sometimes a reiteration of an older idea or a complete disbandment of previous studies, despite the fact that they still can be considered as an extension of each other.

Even though every new theory or approach brings a new and fresh angle to the field, which helps readers and especially scholars working in leadership see and re-evaluate existing theories and concepts from a different perspective, some of these theories may discard or ignore other previous work and put too much emphasis on the new idea, which means they miss the whole context and picture of leadership (House & Aditya, 1997). There are currently an excessive number of theories in the leadership literature; thus, many academics spend a large amount of time analyzing this ever-expanding list of ideas in an effort to develop an integrated viewpoint on the topic. Even these research present contrasting viewpoints and methods of investigation. Northouse (2016), for example, examines sixteen of the most prominent leadership ideas, whereas Kellerman (2012) examines forty distinct leadership theories, and Meuser et al. (2016) suggest that there are perhaps sixty-six distinct leadership theories. It is practically impossible to have an integrated approach that can provide a general and consolidated explanation of the area as a result of the variety of ideas and theories that are presented in the body of research that is currently available.

2.3.1 Definitions of Leadership

For almost half a century, researchers have been racking their brains to come up with a definition of leadership, and ever since then, the concept has been in a constant state of flux. According to Metcalfe and Metcalfe (2006) and Daft and Pirola-Merlo (2009), the literature contains an astounding amount of diverse definitions of leadership (approximately 350), yet none of these definitions provides a full, all-inclusive definition of leadership.

It is common knowledge that Bass and Stogdill (1990) make a claim regarding the never-ending search for a single definition that is completely accurate of leadership. They claim that it

is impossible to find a single, genuine definition of leadership because the correct definition is dependent on the context that the scholar is investigating and should match the goal of the scholar to present a clear image of what it is that the scholar is trying to accomplish.

Additionally, Stogdill (1974), after reviewing a large body of literature, is credited with making the famous statement, "There are almost as many definitions of leadership as there are persons who have tried to define it." Since that time, people have been making consistent efforts to identify a single term that best describes leadership.

Leadership has been defined in various ways throughout the body of academic work, including in terms of things like influence, the way in which a leader and their followers interact with each other, the relationship between a leader and their followers, the behavior of the leader, the characteristics or abilities of the followers, and the role of the leader as a manager or administrator. To put these facets into one sentence, it is possible to summarize the definition of leadership as a process where some kind of influence is exercised on other people within the organization to lead, design, and enable a series of tasks and interactions in a group or organizational setting. This can be done by saying that leadership is the process of exercising some kind of influence on other people in the organization to lead, design, and enable a series of tasks and interactions. On the other hand, it is also noticeable that these definitions seem to differ around terms such as the person who imposes the influence, the purpose of the influence, the medium of this influence, and the outcome of this influence process. [Case in point:] Disagreements may also arise on the nature of the leadership itself, including who the leaders are and how they exercise their authority.

Because there have been so many attempts to define leadership, some academics (Alvesson & Svenigsson, 2003; Calder, 1977; Miner, 1975) argue that it is actually a scientific term. This is due to the fact that there have been so many attempts to describe leadership. On the other hand, the majority of professionals in the industry are of the opinion that leadership is a scientific notion that plays a significant role in gaining an understanding of how efficiently an organization operates. As this is the case, there has been a significant amount of interest in the subject matter up until the present day, which has resulted in a substantial amount of brand new scientific investigation. This ongoing work, as well as the people who have overseen it at various points in time, are detailed in the table below.

Table 1 - Definitions of Leadership Over Time (Yukl & Gardner, 2020)

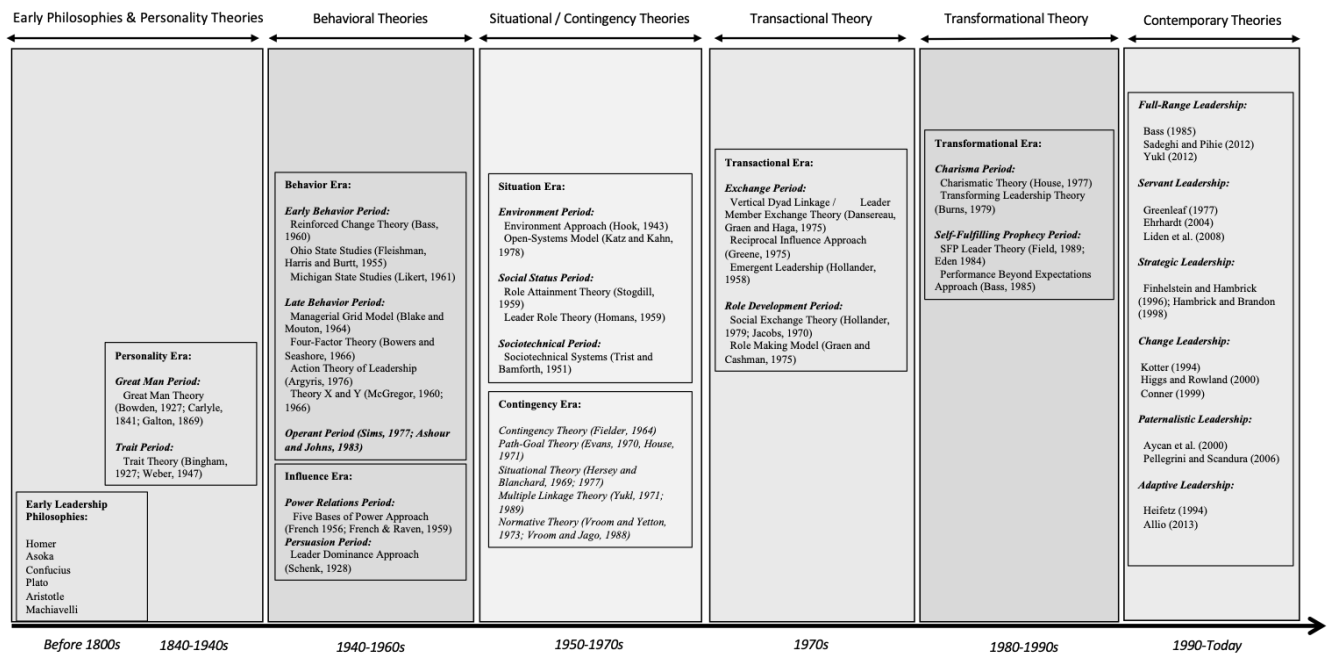
Definition of Leadership	
1	Leadership is “the behavior of an individual ... directing the activities of a group toward a shared goal” (Hemphill & Coons, 1957)
2	Leadership is “the influential increment over and above mechanical compliance with the routine directives of the organization” (Katz & Kahn, 1978)
3	Leadership is “the process of influencing the activities of an organized group toward goal achievement” (Rauch & Behling , 1984)
4	“Leadership is about articulating visions, embodying values, and creating the environment within which things can be accomplished” (Richards & Engle, 1986)
5	“Leadership is a process of giving purpose (meaningful direction) to collective effort and causing willing effort to be expended to achieve purpose” (Jacobs & Jacques, 1990)
6	Leadership “is the ability to step outside the culture ... to start evolutionary change processes that are more adaptive” (Schein, 1992)
7	“Leadership is the process of making sense of what people are doing together so that people will understand and be committed” (Drath, 2001)
8	Leadership is “the ability of an individual to influence, motivate, and enable others to contribute toward the effectiveness and success of the organization ...” (House, et al. 1999)

9 “Leadership is a formal or informal contextually rooted and goal- influencing process that occurs between a leader and a follower, groups, of followers, or institutions” (Antonakis & Day, 2018)

2.3.2 Leadership Theories and Styles

The passage of time has resulted in the development of a variety of distinct leadership theories, in addition to the various definitions of leadership that have been presented in published works. These can be thought of as either revisions or updates of earlier ideas, the majority of which still have relevance in today's environment dependent on the context of the issue or the topic being discussed. They can be broken down into two categories: The internal and external environments, organizational climate or culture, legal environment, access to information, organizational structure, psychological or social conditions, and other factors can have a substantial impact on leadership. These settings can be classified as the factors that can have a considerable influence on leadership (Amabile, et al., 2004). Literature on leadership has gone through distinct eras throughout history, each of which has focused on a particular facet of leadership. Leadership literature still continues to evolve, transform, and develop as new dimensions of leadership come into play as a result of changes and advancements in the societal, economic, political, and technological context. The following table provides a chronological evolution and history of the primary theories that were studied in the past as well as modern theories that are still discussed in academic environments today. The table also includes contemporary theories that are still discussed in academic environments today. This section will examine these various ideas that have arisen over time in greater depth, and will later correlate it with the leadership style literature in order to present a more holistic view of the subject matter.

Figure 5 - Chronological Overview of Leadership Theories (Compiled through research)



2.3.2.1 Great Man Theory

In 1847, during the time of the industrial revolution, a historian by the name of Thomas Carlyle proposed one of the earliest theories regarding leadership. In this theory, Carlyle asserted that "universal history, the history of what man has accomplished in this world, is at the bottom of the history of the great men who have worked here." This was one of the earliest theories regarding leadership (Allio, 2013). In addition, his thesis was founded on the fundamental presumption that leaders possessed innate qualities and could not be developed. As events occurred in the past, other academics contended that this theory's legitimacy was very much in question. They pointed to well-known figures in history, such as Hitler and Napoleon, as examples of individuals who caused these academics to assert that the theory contained ethical flaws. After facing considerable controversy and criticism, the literature gradually moved away

from the idea that "leaders were born" and toward the concept that "leaders are formed" in many of the ideas that followed.

2.3.2.2 Trait Theory

After the Great Man Theory came the Trait Theory, which didn't become fully developed until the 1880s but remained influential until the 1950s (Kao & Kao, 2007). It was a widely held belief among the academics who supported this thesis that leaders were born with a predetermined set of qualities and physical attributes that distinguished them from other people who did not have these leader traits. These studies have led to the discovery of two primary traits: emergent traits, which are characteristics that can be considered genetic, such as height, intelligence, and attractiveness; and effectiveness traits, which are characteristics that are acquired through personal experience and/or learning, such as charisma (Ekvall & Arvonen, 1991). According to this theory, in order for a leader to have an effective leadership presence under a variety of conditions while simultaneously directing his or her subordinates to reach a common goal, the leader must possess and successfully integrate these attributes (Zaccaro, 2007, Bass & Stogdill, 1990). In these studies, a number of important personal characteristics of effective leaders, including veracity, wisdom, willpower, devotion, trustworthiness, and amiability, were frequently discussed. These characteristics are difficult to learn or acquire, and they are also difficult to quantify in a scientific setting (Bolden, et al., 2003) The table that follows provides a synopsis of the characteristics that were investigated by earlier researchers in the field.

Figure 6 - Studies of Leadership Traits (Northouse, 2016)

<u>Stogdill (1948):</u>	<u>Mann (1959):</u>	<u>Stogdill (1974):</u>	<u>Lord, DeVader and Alliger (1986):</u>	<u>Kirkpatrick and Locke (1991):</u>	<u>Zaccaro, Kemp, and Bader (2017) :</u>
Intelligence	Intelligence	Achievement			
Alertness	Masculinity	Persistence	Intelligence	Drive	Cognitive ability
Insight	Adjustment	Insight	Masculinity	Motivation	Extraversion
Responsibility	Dominance	Initiative	Dominance	Integrity	Conscientiousness
Initiative	Extroversion	Self-confidence		Confidence	Emotional stability
Persistence	Conservatism	Responsibility		Cognitive ability	Openness
Self-confidence		Cooperativeness		Task Knowledge	Agreeableness
Sociability		Tolerance			Motivation
		Influence			Social intelligence
		Sociability			Self-monitoring
					Emotional intelligence
					Problem solving

2.3.2.3 Behavioral Theories

Behavioral Theory emerged in early 1950s after some scholars began criticizing the trait approach and addressing its flaws. Contrary to trait theory and the great man theory, behavioral theory of leadership suggests that leaders are actually made, not born. The theory particularly pays special attention on leaders' activity and performance rather than the leaders' specific skills or traits (Gupta & Singh, 2013). As the name suggests, behavioral approach entirely concentrates its focus and effort on how leaders act and execute. In the literature, behavioral theorists categorize leadership into two common types of behavior which are task behaviors and relationship behaviors. Task behaviors study how leaders help his/her followers or subordinates accomplish their goals whereas relationship behaviors look at how leaders interact with his/her followers or subordinates.

Behavioral leadership was studied extensively by numerous research but one of the first and most famous of this research was called "Ohio State Studies" conducted by Fleishman, Harris, and Burt in 1955 which was a 150-item questionnaire that investigated how frequently

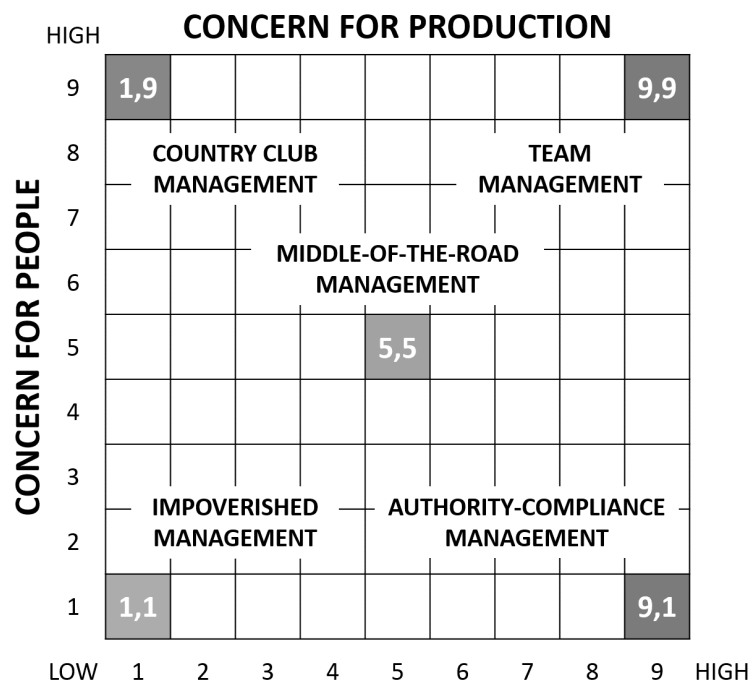
leaders displayed specific types of behavior in certain conditions. The results of the study showed that there were two major types of behaviors which were *initiating structure* and *consideration* (Stogdill, 1974). Initiating structure behaviors can be viewed as task behaviors which consist of organizing and planning the task, providing a structural view of the task, identifying, and assigning the roles and responsibilities and providing a timeline for these tasks. On the other hand, consideration behaviors consist of mutual relationship behaviors such as companionship, belief, fondness, etc.

The second famous study was conducted regarding behavioral approach was “Michigan State Studies” which was conducted by several researchers at the university of Michigan who paid special attention to how leaders behave, and their behavior effect the performance of smaller groups in an organization (Cartwright & Zander, 1970). This study also revealed two types of general behaviors which are called *employee orientation* and *production orientation*. Employee orientation explains how leaders interact and form relationship with his/her followers by taking a more humanistic approach. In this sense, employee orientation very much resembles consideration behavior defined in Ohio State Studies. On the other hand, production orientation brings a more mechanistic view of the leader’s behavior from a technical and production standpoint. This behavior also resonates with initiating structure behavior defined in Ohio State Studies. However, the major difference between two studies is that Michigan studies view these two general behaviors as contrasting behaviors rather than complementing behaviors.

Finally, another famous and possibly the most recognized and applied study on behavioral leadership theory is referred to as “Managerial (Leadership) Grid” study conducted by Blake and Mouton which is reviewed and updated a number of times over time (Blake &

Mouton, 1964; 1978; 1985). This model also centralizes on two main types of behaviors of leaders which are *concern for production* and *concern for people*. This model is represented by 9x9 grid matrix where its axes are composed of these two distinct behaviors. The study is conducted through a questionnaire based on a 9-point item Likert scale that tries to quantify these two behaviors (concern for people and concern for production) and the result of the study is explained through five main leadership styles are which are authority-compliance management, country-club management, impoverished management, middle-of-the-road management, and team management.

Figure 7 - The Managerial (Leadership) Grid (Blake & Mouton, 1985)



2.3.2.4 Contingency and Situational Theories

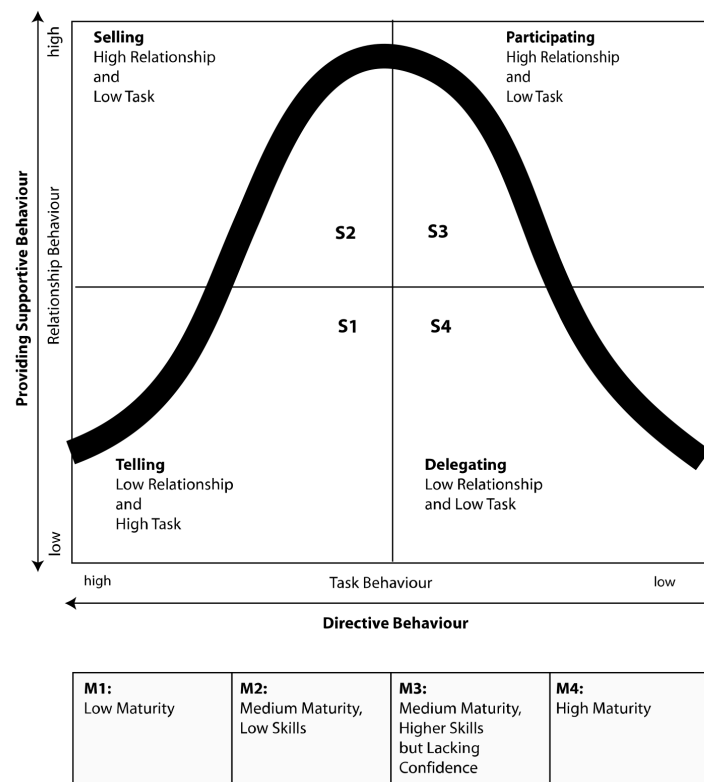
Following trait and behavioral leadership era, a new kind of approach to leadership was formed by Fiedler in 1967 which suggested that a leader's response and behavior is contingent upon the nature and the conditions associated with a certain situation and leaders tend to portray diverse styles of leadership under different circumstances (Fiedler, 1971; Verkerk, 1990). The fundamental idea behind this approach is that situational dynamics dictate the performance and effectiveness of a leader and there is no single approach or leadership style that matches and performs well in every kind of situation (Greenleaf, 1977).

A similar approach to leadership was developed by (Hersey & Blanchard, 1969) referred to as "situational leadership". This theory, as the name suggests, investigates how leaders act in different situations and asserts that for a leader to be effective the leader must be flexible or agile enough to change his or her leadership style based on the situation that he or she is involved in (Hersey & Blanchard, 1969). Situational leadership theory suggests that leaders should display two distinct types of behaviors (directive and supportive) under a certain situation by assessing their followers' level of competency and commitment to accomplish a certain task. The approach claims that since the abilities and motivations of the followers change in time, the leaders should be able to adjust or switch between directive and supportive behavior.

According to situational leadership theory, there are four different types of leadership styles based on the leader's directive or supportive behavior as well as the level of the followers in an organization. The first leadership style involves "delegating" style which is observable when the competency and the commitment level of the followers are both high and the leaders displays low directive and low supportive behavior. The second style involves "supporting" style

where the followers have moderate to high competence and their commitment level is variable. In this type of style, the leader shows a low directive and high supportive behavior. The third style is called “coaching” style where the leader exhibitions high directive and high supportive behavior because the competency level of the followers are low-to-medium, and the commitment level is low. Finally, the last style is referred to as “directing” style where the leader displays high directive and low supportive behavior because even though the followers have high commitment, their competency level tends to be low. These for different leadership styles are represented in the figure below.

Figure 8 - Situational Leadership Styles adapted from (Hersey & Blanchard, 1969)



2.3.2.5 Path-Goal Leadership Theory

Path-Goal leadership theory investigates the relationship between the leaders and followers from a motivational perspective and tries to understand how leaders can motivate and satisfy their followers and improve their performance to attain a specific goal (Hughes, Curphy, & Ginnett, 2015). The theory was pioneered around 1970s by the works of Evans (1970), House (1971), House & Dessler (1974) and House & Mitchell (1974). The theory views leadership from a motivational perspective and suggests that leaders need to enhance the motivation and satisfaction of their followers through communication, gratification and supportive mechanisms and also based on the environmental conditions.

The theory can be seen as a combination of both behavioral and situational theories where it explores leadership from a situational perspective by combining the behaviors of leaders with the motivational factors that influence the performance of the followers in reaching a certain goal (Northouse, 2016). Path-goal sets itself apart from these theories by combining the previous major factors that were seen as the central component of leadership. For instance, in situational leadership the commitment and competency level of the followers is a key factor in defining the leadership behavior and in contingency theory of leadership style should meet the conditions given in a specific situation. Path-goal theory on the other hand states that it is critical to meet the motivational needs of the followers with the right leadership style in a given organizational setting (Northouse, 2016).

The reason why this theory put a lot of emphasis on the motivation of the followers is that the famous work of Vroom (1964) of expectancy theory of motivation serves as the core idea of this theory which states that in order for the followers to accomplish a certain goal they

need to develop these types of thoughts or beliefs which are the belief that follower is capable of accomplishing the task, the belief that the follower's efforts will end up with a material result and finally the belief that the follower's return on their effort will be meaningful (Vroom V., 1964). Therefore, according to path-goal theory, a leader must be able to help his/her followers choose an achievable task that is meaningful and rewarding at the same time.

According to Path-Goal theory of leadership states that different types or styles of leadership behavior can have a different impact on the motivation of the followers and at the same time the followers' motivation is also dependent on the characteristics of the follower and the task itself. Therefore, the theory identifies for general types of leadership behavior which are directive, supportive, participative, and achievement-oriented (House R., 1971).

Directive leadership style can be compared with previous concepts that were developed in previous theories such as the initiating structure behavior depicted in Ohio State Studies and the telling leadership style described in situation theory of leadership. Directive approach can be observed when the assigned task is not clear and/or complicated and the internal dynamics of the organization are uncertain and the leaders need to provide a detailed description of what the task is and how it can be achieved (House & Mitchell, 1974).

Supportive leadership style is also comparable with consideration behavior explained in Ohio State Studies (Stogdill, 1974) where the assigned task is routine, physically demanding, well-defined, not so complex, or thought-provoking. Therefore, the leaders need to adopt a supportive style where they need to show appreciation and concern for the follower's wellbeing and do what they can to make the task feel enjoyable by.

For participative leaders it is quite essential for them to include their followers in the decision-making process. A participative leader tends to benefit from his/her followers' ideas and know-how in the decision-making process so that the followers can build confidence and trust amongst them which can lead to an increased group performance and commitment (Northouse, 2016).

Finally, achievement-oriented leaders have the highest expectation from its followers where they set a very high bar for their expected performance and define very challenging and complex goals where they are quite clear and measurable. These leaders display a great level of confidence and trust in their followers' capabilities and experience where it creates a higher sense of motivation among the followers (House R., 1971).

According to (House & Mitchell, 1974) and path-goal theory leaders should be able to change and adapt their behavior based on the task in hand and be able to build motivation and confidence in diverse set of situations.

Table 2 - Dimensions of Path-Goal Theory adapted from (House & Mitchell, 1974)

Leadership Behavior	Follower Characteristics	Task Characteristics
Directive (Guiding)	Dogmatic Authoritarian	Ambiguous Unclear Rules Complex
Supportive (Nurturing)	Unsatisfied Need for affiliation Need for human touch	Repetitive Unchallenging Mundane
Participative (Involved and advice seeking)	Autonomous Need for control Need for clarity	Ambiguous Unclear Unstructured
Achievement-oriented (Challenging)	High Expectations Need to excel	Ambiguous Challenging Complex

2.3.2.6 Leader-Member Exchange Theory

Another major theory that was developed in the leadership literature is called Leader-Member Exchange (LMX) which, as the name suggests, investigates the relationship between the leader and the follower (Dansereau, et al., 1975; Graen & Cashman, 1975). The main theme in this theory suggests that leaders the relationship between each follower and the leader can differ and the level of the relationship between each follower and the leader can result in different outputs (Uhl-Bien, 2006).

The origins of the LMX model are arguably set by another model which was previously developed by Dansereau, et al. (1975) which is known as the Vertical Dyad Linkage model. These two models are in fact widely used interchangeably, however, Graen & Uhl-Bien (1995) argue that there exists a difference between the two where LMX theory explores the overall exchange process between the leader and the follower as well as the level of this interaction

between the two (Northouse, 2016). Until the development of LMX model, theories prior to it all had the same assumption that the relationship and characteristics of this relationship between the leader and the member would not be different as they all investigated the subject dominantly from the leader's perspective (Liden, et al., 2006). On the other hand, LMX model focuses on the individualistic relationship between the leader and each member suggesting that each of these relationships can be different in terms of their nature and this could greatly influence the organizational outcomes (Gerstner & Day, 1997).

Around 1980s, researchers have started extending the VDL model to LMX model where the majority of the attention was centered around the job itself and task domains (Liden, et al., 2006). Then, in 1990s, LMX has become the dominant model which aimed to incorporate different major subjects such as organizational citizenship behavior, perceived organizational support, job satisfaction and organizational commitment (Gerstner & Day, 1997). Then, the famous work of Graen & Uhl-Bien (1995) brought a “multi-level domain perspective” to the theory, was able to solidify the theory's place in literature by suggesting a four-stage evolution model.

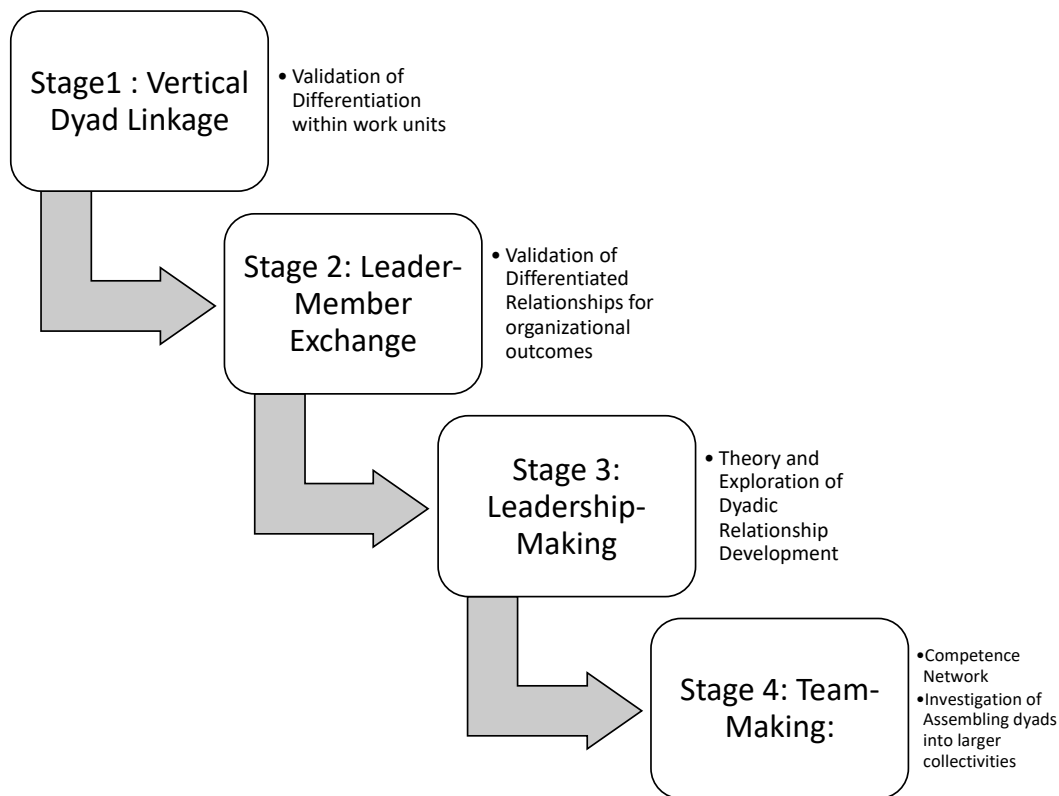
The first stage of the four-stage model is called Vertical Dyad Linkage model which gets its name of the original work of LMX theory. This stage looked at the initial relationship formation process between the leader and the follower. In their study, Graen & Uhl-Bien (1995) asked each individual team member to comment on their manager's style and each member had a different answer. Then, Graen & Uhl-Bien (1995) tried to categorize these answers into two groups which are referred to as “high-quality” and “low-quality” exchanges based on the level of the mutual trust, respect and commitment experienced between each follower and the leader.

The second stage is called “Leader-member exchange” stage where the quality and the frequency of the relationship between the leader and the follower increases. Compared to the initial stage, the exchanges between the leader and the follower are not always on a transactional basis and seldom these interactions can happen at a personal level rather than a work level.

In the third stage, instead of having differentiated levels of exchange such as “in-group” or “out-group” relationships the leader tends to form a higher level of interaction between each follower. This stage is referred to as the “leadership making” stage because the leader establishes high-quality interactions with the followers where there is a greater level of mutual respect, trust and support which results in higher performance and leadership influence.

In the final stage, which is called “team-making”, the quality of the exchange between the leader and the followers reach to a point where these relationships last much longer due to higher level of loyalty and support. There is a stronger bond between both the leader and the followers at an emotional level and the span of these relationships grow bigger to form larger networks within the organization. The figure below, which is adapted from Graen & Uhl-Bien (1995), is an overall representation of these four stages.

Figure 9 - Four Stages of LMX Theory - Adapted from (Graen & Uhl-Bien, 1995)



LMX theory was widely used in the literature due to its difference from other approaches and some advantages. Some of these include its unique and descriptive perspective on how some relationships within the organizations affect the organizational outputs differently. In addition, its major focus on the exchanges between the followers and the leaders especially from communications perspective and its influence in the overall performance of the organization is something that is not investigated in other theories of leadership.

In opposition, the theory also has received some criticism from scholars in the field. One of the major criticisms regarding LMX theory was that it centralizes on the effect of putting more emphasis or forming stronger relationships with a certain group of followers rather than all which raises some questions around fairness and organizational justice. The second criticism

involves the lack of a strong measure of LMX that explains its effect on the performance of the organization and its failure to explain how “high-quality” exchanges are or can be formed (Elkins & Keller, 2003).

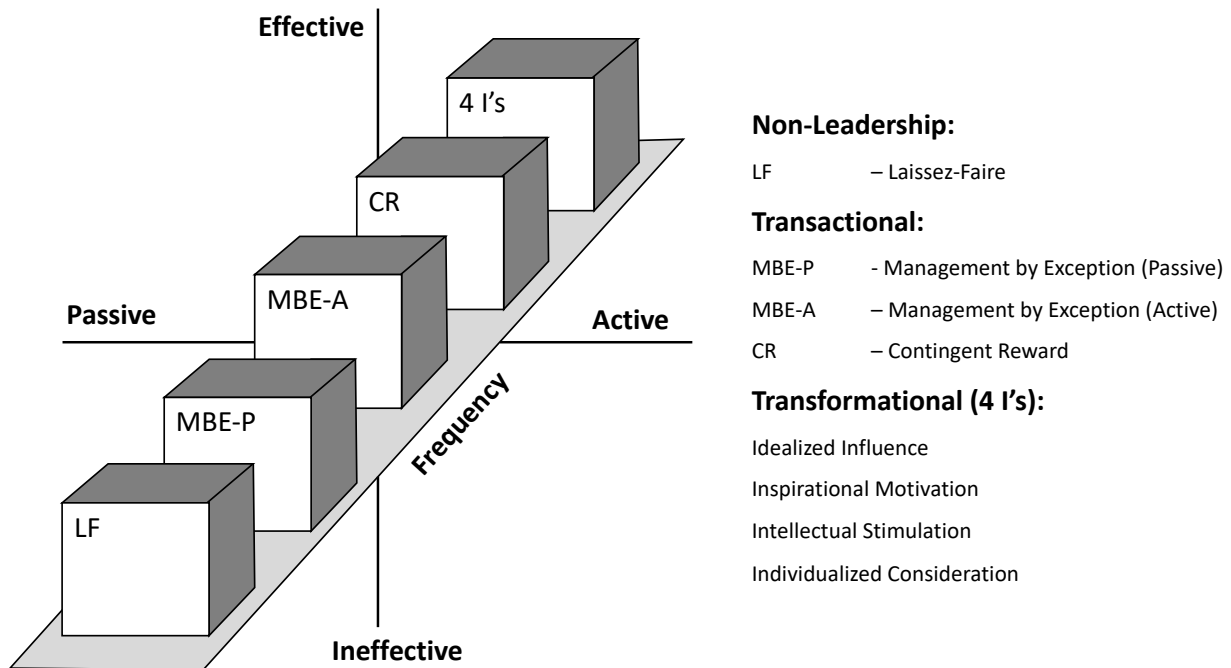
2.3.2.7 Full-Range Leadership Theory

"Full-Range Leadership Theory," which is also frequently referred to as "Transformational Leadership Theory," is one of the most well-known and researched leadership theories in the literature. The term "Full-Range Leadership Theory" was first coined by the well-known work of (Burns, 1978), in which he investigates the relationship between the roles of leaders and followers and describes two distinct types of leadership styles, which are transactional and transformational, respectively. According to Burns (1978), a transactional leader focuses on the exchange or transactional relationship between the leader and the follower, whereas a transformational leader focuses more on establishing a connection with his or her followers to meet their goals and increase their motivation for completing a specific task. Consequently, (Burns, 1978) considered these two distinct methods of leadership to be in a "either/or" connection, which meant that the two approaches represented opposite extremes of a spectrum. The full-range leadership theory is widely considered to be the most influential piece of research published in the field of leadership studies, with around one third of the studies published in the field of leadership studies being founded on this theory (Lowe & Gardner, 2001).

The well-known work of Burns (1978) was then reviewed and enriched by the well-known work of Bass B. (1985). In Bass's work, the emphasis was placed more on the needs of the followers than on the needs of the leaders, which led to the conclusion that transformational

leadership could be observed even in circumstances in which the final outcome is unfavorable. Bass's study considers transformational leadership as a continuum that can transition to other types of leadership over time, which stands in contrast to Burns's concept of different styles of leadership as being mutually independent from one another (Yammarino, et al., 1998). The research conducted by Bass also took into account another style of leadership known as "Laissez-Faire Leadership," which is also sometimes referred to as "passive avoidance." On the one end of this continuum, laissez-faire leaders are considered to be highly ineffective and inactive leaders, while on the other end, transformational leaders are considered to be highly effective and active. Both ends of this continuum can be measured by the level of activeness and effectiveness that the leader possesses. According to Bass B. (1985), transformational leaders work to boost the motivation of their followers to go above and beyond what is expected of them. They do this by bringing attention to the significance and merit of the particular task at hand, shifting the focus away from the self-interest of the individual and toward the interest of the team, and encouraging their followers to strive for excellence. On the other hand, transactional leaders focus more on the contractual relationship between their followers and the method for rewarding them in exchange for the achievement of a particular goal (Avolio & Bass, 1995; Antonakis, et al., 2003).

Figure 10 - Leadership Continuum (Northouse, 2016)



Full-Range Leadership Theory, as most of the previous studies in the literature, is an extension of these studies which provides a more enriched and developed perspective by focusing on the limitations of previous studies. An example to this is where the behavioral leadership theory fails to point out which types of behaviors emerge in case of organizational change where full-range leadership theory asserts that transformational leadership results in profound and radical change in the organization whereas transactional leadership results in gradual change in the organization (Bass B., 1997). In addition, one of the components of transactional leadership which is contingent reward is comparable initiation structure and consideration behavior described in previous behavioral studies as well as path-goal theory.

2.3.2.7.1 Transformational Leadership Style

One of the most well-known and arguably the most prominent leadership styles in the literature that have gained a lot of notice is transformational leadership (Northouse, 2007).

Scholars have conducted numerous relevant works around transformational leadership both from different contextual perspectives and exploring its relationship with a wide range of variables. (Burns, 1978) was the first researcher who suggested the term “transformational leadership” in his research which was conducted on politicians. (Burns, 1978) treated transformational leadership as a continuum rather than a single time occurrence. Transformational leaders’ interaction takes place with multiple individuals and this relationship is a mutually beneficial relationship where both the leader and the team member elevate each other’s mood and commitment. According to (Burns, 1978), these leaders establish a further degree of association and provide more elevated levels of responsibility, sense of unity and dedication in order to achieve or execute a groundbreaking and long-lasting change in the organization.

(Bass B., 1985) have conducted research to expand on Burn’s (1978) previous work in several additional environments by merging two different fields such as psychology and political science (Yammarino, Spangler, & Dubinsky, 1998). (Bass B., 1985) concluded with a contrasting view between transactional and transformational leadership stating that transformational leadership is a more profound and long-lasting relationship where the leader raises the team members’ utility rate and efficiency whereas in transactional leadership the expectation is rather short-term and more result focused. (Bass B., 1985) also contends that a transformational leader urges their team members to go beyond the expectation by raising awareness about the importance and the impact of the end goal and by creating an environment of cooperation and collaboration where the creativity and the productivity is high. Based on his views on the characteristics of a transformational leader, Bass (1985) also classified transformational leadership into four distinct traits which are intellectual stimulation, individualized consideration, inspirational motivation, and idealized influence.

- i) *Intellectual stimulation*: This occurs when the transformational leader not only expect the team member to accomplish the task in hand but also invent and devise new innovative or creative solutions along the way by continuously learning during the process. This type of leadership promotes and incentivizes followers to be part of the problem-solving process by developing their own thoughts.
- ii) *Individualized Consideration*: Transformational leaders also establish a personal-level and more connected relationship with an individualized consideration where the leader has a more connected and open relationship with the team member by paying a great deal of attention to comprehend the abilities, needs, worries and perspectives of the team member. This type of leaders pays special attention the needs of the team members and try to act more like mentor or a coach by guiding them and letting them develop themselves by facing issues directly.
- iii) *Inspirational Motivation*: Transformational leaders also display a visionary image by conveying a clear and inspirational message about the future to create an atmosphere filled with motivation and passion for the task. (Bass B., 1985) refers to this as inspirational motivation where the leader communicates in a clear, optimistic, passionate, and inspirational way to the team members to help them go beyond what is expected to reach the future that the leader envisions. This type of leader often uses signs and sentiments through communication to raise the overall spirit of the team.
- iv) *Idealized Influence*: Finally, transformational leaders are very good at projecting an image of a leader, which is referred to as idealized influence with high confidence, charisma and power which invites a high degree of trust, respect, and confidence from the team members where the leader is seen as a role model based on the leader's high standards of work ethic and moral values.
- v)

2.3.2.7.2 Transactional Leadership Style

The concept of transactional leadership was first brought forth by (Burns, 1978). According to (Burns, 1978), transactional leaders' interaction with the team member is often reciprocal and the relationship is based on an exchange of mutual benefits, such as a reward, in return for accomplishing a goal. (Bass B., 1985) then build on this description and included two new features to the definition which are contingent reward and management by exception which can also be classified into two sub-components which are active and passive. The leader makes an agreement with the member for attaining a goal and once this goal is reached the team member receives his/her reward. This transactional relationship between the leader and the team member helps the leader to accomplish his/her goals efficiently and effectively. According to (Bass B., 1985), this relationship also allows the leaders to observe fidelity and dedication at the team member level.

Although this transactional relationship set by a reward mechanism creates a positive working relationship between the leader and the team member, the leader can also use this mechanism to punish the team member based on their poor show of performance (Jung & Avolio, 2000). (Northouse, 2007) asserts that the transactional leaders are usually not interested in upskilling their team members. On the contrary, their sole focus is on accomplishing a goal and to achieve this they do their best to give a clear direction of what needs to be accomplished and what will be the reward/punishment mechanism as an output of the team member's performance (Burns, 1978). Contingent reward is an active and positive transactional relationship between the leader and the follower where both the job outcomes and the reward/punishment mechanism are negotiated by both parties (Avolio & Bass, 1995). On the

other hand, in management by exception the leader intervenes either when he/she observes an issue or once the issue occurs (Boerner, Eisenbass, & Griesser, 2007).

Transactional leaders may prefer to actively monitor and keep track of their follower's performance to observe if they are on course with their goals or if there is an issue (Wu, et al., 2006). Once the leader detects a problem, then the leader chooses to interfere with the process and tries to resolve the issue by taking remedial steps to correct the situation (Bass B., 1985). In some cases, the transactional leader may choose not to interfere until the issue occurs. This is referred to as passive management by exception where the leader establishes a clear set of rules and standards as well as expected outcomes and decides to involuntarily interfere when a problem occurs, or the team member makes a mistake (Gill, 2006).

2.3.2.7.3 Laissez-Faire Leadership Style

Another popular leadership style in the leadership literature is referred to as “laissez-faire” leadership which was coined by (Bass B., 1985). In this type of leadership, the leader often takes no responsibility and refrains from actively participating in the imminent matters of the organization (Avolio & Bass, 1995). Laissez-faire leaders show complete avoidance by intentionally objecting to make important decisions and are usually absent when these decisions are taken. These leaders are very well-known for their indecisiveness, demotivating behavior, and lack of empathy for the members of the team (Bass & Avolio, 1994).

Laissez-faire leaders assume no responsibility for not showing any leadership behavior and they are often reluctant to provide any direction or advice to the members of the team to guide them on how to accomplish a task (Avolio & Bass, 1995). Because of their incapacity to

lead, decisions regarding important matters in the organizations are mostly taken by the other members of the team and this continuous behavior often causes the leader to lose their power and position in the organization (Avolio & Bass, 1995). According to (Bass B., 1997), laissez faire leaders is often inept of setting clear goals and setting a medium for exchanging information and knowledge the between their colleagues. They often let the other members of the team to make decisions on their behalf by assuming no accountability (van Eeden, Cilliers, & van Deventer, 2008). Laissez-faire leaders prefer not to interfere with any decision-making process or provide any supervision or guidance at all. Therefore, the other members of the team are usually self-driven or motivated to accomplish any significant task in hand (Cummings, et al., 2010). Therefore, in an organization with a laissez-faire leadership style, usually the other members of the team are more skilled and talented than the leader and actively involve and manage all the decision-making processes in the organization.

2.3.3 Leadership Theories and Styles from a Contextual Perspective

As mentioned in previous sections of this study, leadership is an ever-growing and developing literature that attracts a lot of attention not just in management literature but also in other major scientific areas. At the same time, every theory that is discussed in this literature review has achieved to contribute and still continues to enrich and improve upon the common purpose of guiding leaders to become better and more effective leaders (Allio, 2013). The leadership literature has produced numerous theories and styles which are sometimes complementary or contradictory to each other, but it is easily foreseeable that it will continue to be an area of interest in the future as well.

Table below is both a summary of the recent comprehensive literature review studies regarding leadership theory and a clear representation of how diverse and at the same time similar types of theories have been studied throughout the literature. On the other hand, it is quite easy to recognize that most of the previous integrative literature studies have included either full-range leadership theory or transformational theory to categorize and differentiate other theories from each other.

Table 3 - Different Categorizations of Leadership Theories

Author(s)	Year	Number of Categories	Theories Included
Brungardt	1996	Five	Trait Theory, Behavior Theory, Situational Theory, Power-Influence Theory, Transformational Theory
Bolden et al.	2003	Seven	Great Man Theory, Trait Theory, Behavior Theory, Situational Theory, Contingency Theory, Transactional Theory, Transformational Theory
Yukl	2002	Five	Trait Theory, Behavior Theory, Situational Theory, Power-Influence Theory, Integrative Theory
Daft	2005	Six	Great Man Theory, Trait Theory, Behavior Theory, Situational Theory, Influence Theory, Relational Theory
Kao & Kao	2005 & 2007	Four	Trait Era, Behavior Era, Contingency Era, New (Transformational) Era

DeChruch et al.	2010	Six	Leader Traits, Leader Behavior and Contingency Approaches, Leader-Member Exchange (LMX), Transformational Leadership, Strategic Leadership, Shared Leadership
Uhl-Bien et al.	2007	Three	Complexity Leadership Theory: Administrative Leadership, Adaptive Leadership, Enabling Leadership
Bass	1985	Three	Full-Range Leadership: Laissez-Faire Leadership, Transactional Leadership, Transformational Leadership

For researchers conducting research in the leadership field, along with leadership theories leadership style is one of the main aspects that have gathered a lot of attention for the past five decades. Leadership style is widely accepted and researched due to its material influence on the future of an organization. According to (Gebert & Steinkamp, 1991), the financial performance of an organization is positively affected by the leadership style. (Yousseff, 1998) states that leadership style is a major factor in explaining how the strategic decisions are taken inside of an organization. In his famous article on the topic, (Goleman, 2000) asserts that each leadership style can have an immediate and distinctive impact on the whole organization, its structure, culture as well as its economic success or failure. On the other hand, leadership style is also perceived as a set of executive actions or behaviors that is crucial in aligning the individuals' and organizations' interest in accomplishing the set of goals defined by the organization. (Fiedler, 1969).

The field of leadership styles have also been an area that gathered significant amount of attention in the literature and scholars have come up with a wide range of leadership styles with an attempt to provide a contextual definition.

According to (Hussain & Hassan, 2016), scholars have attempted to come up with representative definitions of leadership styles by continuously generating new definitions which resulted in a complete confusion around leadership research. Table 3 is a clear representation of this overlapping list of numerous leadership styles coined by researchers in the field.

Table 4 - List of Leadership Styles in the Literature (Hussain & Hassan, 2016)

Leadership Style	Referred By	Leadership Style	Referred By
Autocratic	De Cremer, 2006	Instrumental	Rees and Segal, 1984
Democratic	Woods, 2004	Task Oriented	Yukl, 2012
Laissez-Faire	Skogstad, Einarsen, Torsheim, Aasland, and Hetland, 2007	Delegative	Rees and Segal, 1984
Transformational	Bass and Stogdill, 1990	Supportive	Pardey, 2008
Consultative	Hopkins and Putnam, 2013	Relationship-Oriented	Bass and Stogdill, 1990
Malevolent	Woods, 2004	Charismatic	Bass and Stogdill, 1990
Participative	Yukl, 2012	Expressive	Groves, 2006
Transactional	Bass and Stogdill, 1990	Visionary	Groves, 2006
Ethical	Toor and Ofori, 2009	Pacesetting	Goleman, Boyatzis, and McKee, 2002
Authoritative	Bass and Stogdill, 1990	Laissez-faire	De Cremer, 2006
Authoritarian	Bass and Stogdill, 1990	E- leadership	Bennis, 2007

Servant	Yukl, 2012	Authentic	Avolio and Bass, 1995
Advisory	Hopkins and Putnam, 2013	Aversive	Stoller, Taylor, and Farver, 2013
Explosive	Motamedi, 1978	Implosive	Motamedi, 1978
Abrasive	Motamedi, 1978	Narcissistic	Motamedi, 1978
Impulsive	Motamedi, 1978	Apprehensive	Motamedi, 1978
Primal	Goleman, Boyatzis, and McKee, 2002	Tolerant	Goleman, Boyatzis, and McKee, 2002
Cultural	Cunningham and Gresso, 1993	Conflict Inducer	Woods, 2004
Integrity	Craig and Gustafson, 1998	Adaptive	Heifetz, Grashow, and Linsky, 2009
Shared	Ensley, Hmieleski, and Pearce, 2006	Toxic	Kerr and Jermier, 1978
LMX	House, 1971	Diplomatic	Woods, 2004
Situational	Fiedler and Garcia, 1987	Consideration	Fiedler and Garcia, 1987
Directive	Kahai, Sosik, and Avolio, 2004		

Based on the literature review on leadership theories and styles, Full-Range Leadership Theory and three leadership styles mentioned in this study which are transformational, transactional, and laissez-faire leadership are selected as the focus of this research from a contextual perspective due to its universality and applicability in the literature.

From a universality perspective, full-range leadership theory is applied in many diverse numbers of fields ranging from management to psychology, nursing, education, military, government, and engineering (Antonakis & Day, 2018). In addition, according to (Bass B., 1997)

the theory “transcends organizational and national boundaries.” The theory was also very widely applicable from a cultural perspective as it was researched both in very individualistic cultures such as United States as well as in collectivistic cultures such as Asian countries (Bass B., 1997).

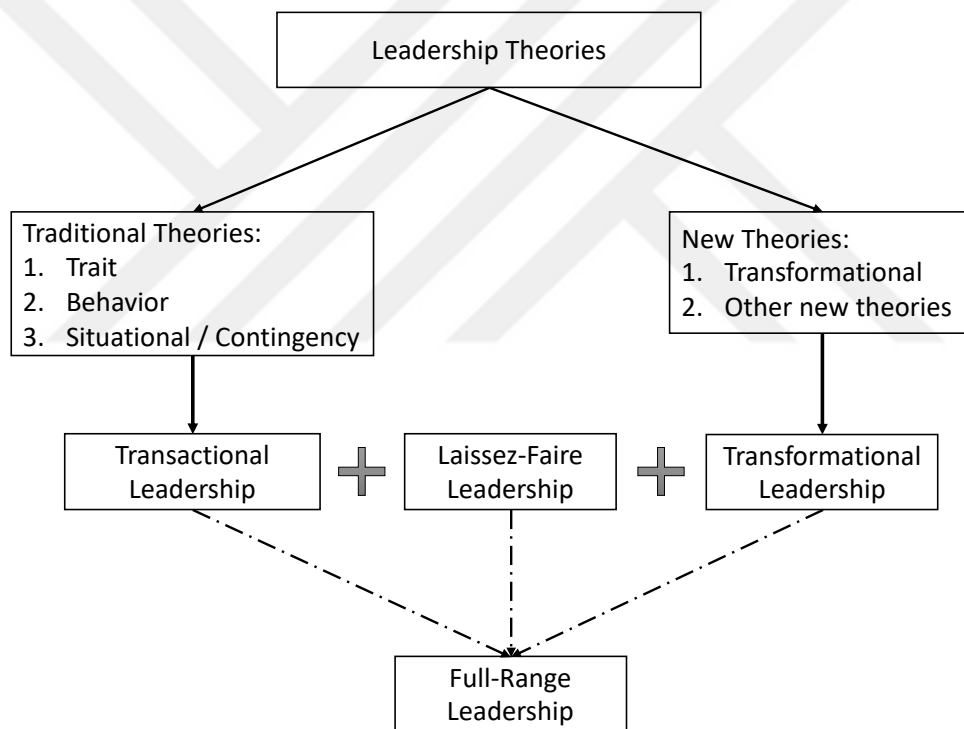
Furthermore, (Bass B., 1997) claims that the theory itself includes many universal features which can be categorized into five which are “simple universal”, “variform universal”, “functional universal”, “systematic universal” and “variform functional universal.” From a “simple universal” standpoint, the theory suggests that in any circumstance where there is a group formation, there is always a leader. “Variform universal” claim suggests that in every business organization, there is always one single leader who manages the organization. “Functional universal” asserts that there is a universal correlation between each variable and such correlation can be observed between perceived ineffectiveness and laissez-faire leadership where a leader who refrains from taking responsibility are instantly perceive ineffective and demotivating by his/her followers. “Systematic universal” claims that full-range leadership theory can provide a measurable causal outcome explanation across different cultures and organizations. Finally, “variform functional universal” asserts that the theory includes a widely accepted relationship between charisma and satisfaction.

According to (Lowe & Gardner, 2001), based on the content analysis of relevant literature between 1990 and 2000 transformational leadership theory was present in 34% of these studies. One of the reasons for this result is that transformational leader profile described in the theory resonates with many societies as these leaders are drivers of profound change with a clear vision who can people feel related and attracted to. In addition, the theory can be viewed as a process where the leader and the follower interact, and the followers and their needs are crucial

part of this process which results in the appearance of a transformational leader (Bryman, 1992). Transformational leadership theory brings an additional approach which focuses on the needs and the growth of the followers which sets it apart from many previous leadership theories which were predominantly focusing on the transactional aspect of the relationship between the leader and the follower (Avolio B., 2007).

Figure below is a representation of the encompassing and integrative nature of the full-range leadership theory.

Figure 11 - Evolution of Full-Range Leadership Theory – Adapted from (Bass B., 1997)



Due to its universal characteristics and wide range of application in many different cultures and fields of research, transformational leadership theory or full-range theory leadership and its three major styles defined in the literature which are transformational, transactional, and laissez-faire will be studied throughout the study.

2.4 Advice Seeking Behavior

Advice seeking has been a relative nascent and upcoming field of research in the literature. A handful of studies in the past have focused on what drives advice seeking behavior and from whom the advice is sought. (Hoffman, Lei, & Grant, 2009) and (Yaniv & Kleinberger, 2000) in their studies have recognized that the characteristics of advisors who are sought by people with decision making responsibilities include availability, reliability, and preciseness. According to scholars who have conducted research in the field, there are several factors or conditions that lead to the act of seeking advice. According to (Gibbons, Sniezek, & Dalal, 2003) individuals often seek advice when they are undecided about taking the first step or according to (Gino, Brooks, & Schweitzer, 2012) anxiety is one of the main drivers for seeking advice. On the other hand, (Schrah, Dala, & Sniezek, 2006) assert that people usually ask for advice when there is a low cost associated or when they face a problem that is too complicated.

2.4.1 Advice Seeking as a Type of Resource Seeking Behavior

Apart from the resources given to the individuals in the organization, individuals might feel the urge to look for additional resources to accomplish a task in an effective and efficient manner. While seeking for these resources, these individuals often need to interact with other members inside and sometimes outside the organization such as their colleagues, managers, and external parties such as friends, consultants, or advisors. These additional resources which the individual seeks might come in various forms. This resource could be an information or data that could help the individual get a better understanding about the nature of the task or the organization. Alternatively, it could be an additional help from another individual to finish an assigned task. Sometimes, these individuals might just look for useful feedback which they could

use to improve how they are performing. Finally, it could take the form of an advice where the individual is faced with an important decision might be complex or ambiguous for that individual and they might need a second opinion on how to move forward. All these different types of resources have been separately researched by many scholars in the past and sometimes these resources have conflicting or overlapping definitions. According to (Halbesleben, et al., 2014), these resources can be defined by anything that helps the individual accomplish a certain objective and the value of these resources are only realized when they make a direct impact on the final output.

With the aim to draw a contextual boundary between these different resources and distinguish advice seeking from other behaviors, the research will expand on the definition of each behavior's commonalities and differences between advice seeking behavior and others.

One of the most specifically researched types of resource in this context is information seeking behavior can be defined as the exercise to look for additional information or data that could help the individual deal with uncertainty regarding a decision or a task or have a better understanding about the organizational culture or the climate (Miller & Jablin, 1991; Saks & Ashforth, 1997). Most of the relevant literature regarding information seeking behavior interestingly pays specific attention to new members of an organization and how they gather data about the role and the organizational setting to cope with the uncertainty. While researching on the topic of information seeking behavior, researchers mostly analyze the context from a cost-benefit perspective.

Another type of resource which can be considered as niche research topic is called help seeking behavior which can be deemed as the act of seeking help from other parties to deal with

either job-related or individual issues that could influence the performance of the individual (Bamberger, 2009). The nature of the help that the individual seeks in this context might either include or do not include information which could be in form of an emotional aid from another colleague. Majority of previous studies around help seeking benefit from a utilitarian approach by contrasting the mental and social cost of getting help from the value obtained from using the resource (Bamberger, 2009; Nadler, 1997). According to other researchers in the field, this relationship between the help seeker and the giver is often based on a mutual relationship that expects a return for the help provided (Gouldner, 1960; Spitzmuller, Van Dyne, & Ilies, 2008).

The third type or resource mentioned in the literature what has a richer historical background is feedback seeking behavior. The term was first introduced by (Ashford & Cummings, 1983) which regarded it as a personal resource rather than an organizational resource which defined the terms as “the conscious devotion of effort toward the correctness and adequacy of behavior for attaining valued end states” (Ashford S., 1986).

Finally, the last type or resource which will be one of the central components of this research which has attracted a limited amount of attention, and which is under development is called advice seeking. Most of the scholars working in the field agree on a common description that advice seeking behavior is often triggered by a need to get reliable second opinion on either a direct answer to a problem or a suggestion on a method to use to tackle an issue (Harvey & Fischer, 1997; Goldsmith & MacGeorge, 2000; Goldsmith & Fitch, 1997; Gino, 2008).

(Brooks, Gino, & Schweitzer, 2015) assert that some scholars use advice seeking behavior either in conjunction with or as a substitute of other seeking behaviors. For example, both advice seeking and feedback seeking behavior naturally seek for information from other

sources, but they tend to contrast in terms of the kind of information they seek. From a temporal perspective advice seeking behavior is often based on future events whereas feedback seeking is often based on past events. When compared with help seeking, advice seeking tend to oppose in several dimensions. One important difference is that help seeking is more direct where advice seeking is more prescriptive. Another difference is in help seeking the individual asking for help may abandon decisional responsibility whereas in advice seeking the individual is actively involved in the process. Finally, in advice seeking the person taking the advice is often aligned with the advisor's principles and methods whereas in help seeking the person seeking the help does not necessarily have to have similar beliefs (Gino, 2008; Brooks, Gino, & Schweitzer, 2015).

Advice seeking is thoroughly studied especially by scholars in social exchange theory literature where the behavior is seen as a form of social exchange between parties often establish a mutually beneficial relationship (Emerson, 1976; Clark, 2016; Colquitt, et al., 2014). The researchers in the field have identified several factors that influence advice seeking behavior such as organizational similarity and archetypical. According to (Copeland, Reynolds, & Burton, 2008), the advice seekers would prefer advisors who have similar organizational status rather than lower ranked individuals and advisors who tend to be display more atypical profile rather than a typical profile. In addition to these factors, according to the study conducted by (Gino, Brooks, & Schweitzer, 2012) people would feel the urge to seek for advice when they experience low self-esteem and high anxiety.

2.4.2 Definition of Strategic Advice

According to (Ashford S., 2003), advice seeking behavior is a well-researched area of literature, especially in the field of organizational behavior, however, there has been a rather small interest in focusing on a type of advice which takes place at the upper echelon level from strategic standpoint. The study around what strategic advice is and how it is interacted and exchanged at the top management level in larger organizations and at the entrepreneurial level in startups and impact on the overall organization's decision-making process is an essential area of study that can contribute significantly to the scholars' work in the strategy practice (Chatterji, Delecourt, Hasan, & Koning, 2019).

While establishing and/or reviewing an organization's strategy, often the leaders who have direct responsibility for making strategic decisions at organizations, specifically entrepreneurs and CEOs, often look for advice from others (Arendt, Priem, & Ndofofor, 2005). These leaders usually try to set the course of the organization in the right path by utilizing advice from their different sources of advice either through acquiring strategic information from their advisors or recommendations for a method or process that can be used to accomplish their strategic goals (Hirai, Watanabe, & Inuzuka, 2013). At the end of this advice seeking process, the leaders often end up deciding which resources to use or determine which method or path to utilize as a part of strategy formulation and strategic decision-making process (Mintzberg, Raisinghani, & Theoret, 1976).

Although this interaction between the advisors and the leaders at organizations seem to have a direct effect on a strategic level, the scholars have not paid great attention to the antecedents or the components of strategic advice seeking process. One of the rare studies

conducted in the field was the research by (McDonald & Westphal, 2003) where they interviewed top management team members concerning their strategic advice seeking behavior and their preference regarding the frequency of advice sought, the source of advice and the purpose of advice, i.e., internal operations or new investments. (Hirai, Watanabe, & Inuzuka, 2013) on the other hand, dug deeper to understand the details around the leaders' external strategic advice seeking behavior. Another study which was done by (Vissa & Chacar, 2009) studied software companies and their leaders to have a better understanding on the types of external advisors that the leaders of those companies have turned to get strategic suggestions on topics such as access to highly skilled human capital, technology adoption trends and fundraising. According to (Chatterji, et al., 2019), the strategic advice sought at the upper echelon level could be related to many aspects of the business such as human resources, technology/IT, finance, and marketing. Leaders prefer to benefit from these "strategic advisors" to utilize their know-how and expertise on strategic topics that can help the leaders formulate and/or revise a well-thought and impactful strategy (McDonald & Westphal, 2003).

Based on the maturity of the organizations, the leaders seek for advice from several different types of external advisors. For organizations that are relatively smaller in size, such as startups, the leaders often seek strategic advice from their informal contacts such as their friends and relatives (Bennett & Robson, 1999). In some cases, they might consult with other fellow executives at other organizations that have relevant expertise and know-how in similar markets or specific aspects of the business (Chatterji, et al., 2019; McDonald & Westphal, 2003; Vissa & Chacar, 2009). On the other hand, for organizations that are rather established and larger in size, the leaders might be equipped with a team of formal strategic advisors such as investors, shareholders, or board of directors (Politis, 2008). In addition, these larger organizations often

engage in formal arrangements with paid sources of strategic advisors such as management consultants or subject matter experts (Bennett & Robson, 1999).

2.4.3 Types of Advisory Sources

As discussed in the previous section, CEOs often turn to a few advisors to seek for guidance or recommendation on strategy related matters. These advisors can either include external parties or internal team members of the CEO's organization (Alexiev, Jansen, & Van den Bosch, 2010; De Alwis, Majid, & Chaudhry, 2006; Menon & Pfeffer, 2003; Menon, Thompson, & Choi, 2006). These different sources of advice can be sought and utilized for a variety of strategic decision-making initiatives that can be either related to the existing situation of the organization or for drawing a set of options for the future of the organization.

Scholars working in the advice seeking domain treat this process an omni-present activity where the leader has a stronger preference to use informal and verbal advice rather than formally established advisory mechanisms and well-documented strategy plans (Elenkov, 1997; McDonald & Westphal, 2003; Mintzberg, 1973). The leaders who seek strategic advice pays greater attention to ingredients of the advice rather than where the advice comes from. Therefore, the source of advice can come from either internal members of the organization or from individuals or groups that are external to the organization. According to a significant number of prior research, the main driver of the strategic advice interaction is to form a goal-oriented advisory channel that can optimize the strategic decision process to result in better strategic outputs (Bonaccio & Dalal, 2006; Goldsmith & Fitch, 1997; McDonald & Westphal, 2003). Another goal of this advice seeking process is to gain access to a variety of new strategic options that were not taken into account or to help the leader evaluate the current issues from different

viewpoints. These set of strategic options or recommendations provided by advisors, whether they are internal or external, can ultimately make an impact on the decision-making process of the leader of the organization which can result in profound and transformational changes in the organization (Druckman, 2001).

2.4.3.1 External Advisory Sources

Executives often turn to outer sources of advice when the required knowledge, experience or skill does not exist within the organization (Menon & Pfeffer, 2003). One of the main reasons for why the executives prefer to seek external advice is that they consist of a set of sagacious information, knowledge or wisdom which is accumulated over the years and in diverse settings that can help the executives get a better and deeper understanding of the situation and have a wider lens on what is going on (Cohen & Levinthal, 1990). External advisors can also help the executives to make better decisions by providing recommendations or set of alternatives based on their evaluation on their expertise and industry know-how (Larsson, Hedelin, & Garlin, 2003).

Executives often choose to seek for external advice for being an independent and unbiased source on the grounds that they can provide a critical perspective that addresses, and questions hidden management assumptions and methods that can have or already had an adverse or detrimental impact on the future of the organization (Menon & Pfeffer, 2003; McDonald & Westphal, 2003; Robson & Bennett, 2000). According to (Menon & Pfeffer, 2003), executives can sometimes favor external advisors in a subjective manner as they are perceived as critical and limited even though advice coming from external sources can in some case be unsatisfactory in terms of depth. In addition, this independence of external advisors might cause their

suggestions to be too broad, basic, or less insightful as external advisors are often unattached to the organization and have no or very little knowledge about the hidden or organization-specific irregularities or dynamics of the organization. In some cases, the executive's advice seeking behavior might be received as an incompetence of the executive by the advisor where he/she makes future projections in an isolated and self-governed approach. In most of the cases, external advisors can experience the freedom of coming up with harsh and highly critical assessments and suggestions as they often have no accountability for the results of a decision (Goldsmith & Fitch, 1997).

The external advisors often fall into trap of neglecting or not considering the already established practices and systems inside the organization which cause the output of the advisor's act of advice seeking giving to be less insightful or sometimes damaging. Whether it comes from an internal or an external source, these sources are channels of useful information and insight which is shaped by the absorption and utilization capacity of the executive or the organization as a whole. In a business setting, due to the exclusive nature of the CEO's role where the CEO act as a linkage between the outside environment, the firm itself and the top management team, it is essential to have a grasp on their thinking process regarding advice seeking and advice utilization.

As well downsides or drawbacks of utilizing external advice, there are also numerous advantages and opportunities that comes with it. For instance, external advice can act as a channel of essential information and knowledge concerning the outside world to provide opportunities for a potential know-how or technology transfer that can help the organization innovate and optimize their internal processes in an unprecedented way, especially in R&D

heavy business settings (Kaplan, Murray, & Henderson, 2003). As an independent party, external advisors are often used as a mechanism for reaching a consensus on a conflict raising issue or for endorsing and providing credible support for a fundamental change within the organization (Gable, 1996; Ko, Kirsch, & King, 2005; Menon & Pfeffer, 2003; Menon, Thompson, & Choi, 2006).

2.4.3.2 Internal Advisory Sources

Another source of advice comes from the very internal resources of an organization such as employees at non-manager positions or managers that are not part of the executive decision-making team which allows the CEO or TMT to acquire or to gain access to a critical insight or information regarding the organization that can help with their decision-making process (Raes, et al., 2011; Spender, 1996). Internal advisors are favored both due to their comparably lower cost of access to valuable information which is shaped by a deep understanding of the internal dynamics of organization developed over the years and their relevance to organization-specific issue which could allow the executive to implement a solution or a new process in a more efficient and integrated way (Maurer, et al., 2011; Beck & Kieser, 2003). Using internal sources of advice can help the executives implement a more effective strategy by having a preemptive access to critical information regarding limitations and flaws within the organization's working environment that could otherwise the success of the strategic initiative. Internal advisors can also help executives focus and capitalize on the strengths of the organization by providing first-hand knowledge concerning the internal dynamics of the organization. Allowing internal advisors in the decision-making process can also allow the executives to establish a more dedicated, motivated, and participative working environment that promotes innovation (Tsai & Ghoshal,

1998). Seeking advice from the internal sources can lead to the establishment of a working environment with high levels of trust, commitment, and transparency where the other team members feel free to share their ideas with the executive team (Inkpen & Tsang, 2005; Snizek & Van Swol, 2001). On the contrary, keeping the other members of the organization away from the decision-making process can cause an adverse environment resulting in lower levels of engagement and motivation, hence poorer performance in executing the decision.

Compared to external advisor's rather adventurous but usually infeasible advice, internal advisors could provide more grounded and more applicable advisory feedback regarding strategic decisions. This could also help the CEO have a better grasp on the range of talent and experience that he or she has which could come in handy when executing such decisions such as launching a new product where there should be a match between the required set of skills and capabilities and what is actually available within the organization (Grant, 1996; Wernerfelt, 1984). It could also establish a healthy feedback mechanism where the internal teams provide input details on how to execute the decision more efficiently and effectively.

On the other hand, predominant thinking mechanism of the organization that is developed over a long period of time may result in biased or bounded rationality due to the cognitive filters of the organization (Argyris, 1976; Bettis & Prahalad, 1995). This bounded rationality also reflects in the decision-making process as the internal advisors often base their advisory input on their perceptions and convictions regarding the internal dynamics of the organization which are mostly unradical or creatively disruptive. Another downside of utilizing internal advice is that the internal advisors often refrain from proposing ideas that is constructively critical of the existing views and beliefs of the TMT or the CEO as they might feel that their job might be at

risk when providing such ideas. Instead, these internal advisors often prefer to share ideas that complementary to or supportive of the TMTs' and CEOs' opinions no matter how infeasible they are in order to build trust and rapport (Park, et al., 2011). In addition, the internal advisors can sometimes have ulterior motives when providing advice to the TMT or the CEO as they often aim to get promoted or at least to calcify their existing roles within the organization that could serve in the best interest of these individuals rather than the organization's (Menon, et al., 2006).

Finally, the perception of the CEO regarding this advisory feedback also plays a critical role in their preference of either internal or external advice such that prior studies have shown that in some organizations the CEOs often favor external advisors more than internal sources of advice as they might feel they are losing power or authority when they receive and utilize advice from their internal team members which are competing to take their seat (Menon & Pfeffer, 2003; Salancik & Pfeffer, 1982). Such power and social identity related issues can ultimately force the CEOs seek for external advice even though the internal advice might provide a better result. Another reason why the CEOs or TMTs may prefer external advice is that external advice is often hard to find, and they usually come at a cost whereas internal advice is always accessible, and they do not incur any costs (Menon & Pfeffer, 2003; Menon, et al., 2006). In contrast, some CEOs or TMTs might carry a more conservative or "nationalistic" approach when making a preferential decision between internal and external advisors as they might think that ideas coming from outside the organization might not have any connection with the internal realities and dynamics of the organization. These executives also value the internal team members' ideas more due to their service and contributions to the organization as well as their "hard-to-replicate" knowledge about the internal dynamics of the organization (Katz & Allen, 1982). In some cases, these executives that pay ultimate respect to their internal team members

and “the DNA” of the organization might go great lengths of scorning any external advice or idea and instead completely embrace and follow internal advice even though they might have less successful consequences.

2.4.4 Main Components of CEO Advice Seeking

People often seek advice when they are about to make important decisions. However, in the case of CEOs’ strategic decision-making process, advice seeking behavior carries more importance and responsibility as these decisions often have long-lasting and consequential impacts that can define the future of an organization (Heyden, et al., 2013; McDonald, et al., 2008; Garg & Eisenhardt, 2017). In addition, when making these decisions, CEOs often tend to turn to specific sources of advice which can either be internal or external (Arendt, et al., 2005). CEOs’ advice seeking behavior also depends on the governance model of the organization as well as its TMT structure and the relationship between the CEO and this structure. The CEO’s relationship with the board of directors and TMT can ultimately affect CEO’s advice seeking behavior as they can either provide a constructive, catalytic, and insightful information exchange or alternatively slow-down or restrict the decision-making process of the CEO (Garg & Eisenhardt, 2017; Sundaramurthy, et al., 2014).

Leaders in organizations often seek for information and advice from other sources when they are about to make strategic decisions (Alexiev, et al., 2010). These decisions can involve many strategic decisions such as new product launch, M&A investment, diversification, or organizational transformation. When making such critical and transformational decisions which are usually taken in conditions with great uncertainty and complexity, they turn to multiple sources of information or knowledge as much as possible so that they can mitigate the risks

involved and achieve the expected results (Arendt, et al., 2005; Tichy & Bennis, 2007). Many researchers who have conducted work in the upper echelons' literature have consistently emphasized on how knowledge or information from other sources can deeply shape the decision-making process of the executives (Carpenter, et al., 2004). The executives accumulated knowledge and experience during their career can ultimately affect their decision-making process as they often act as a cognitive lens on how they perceive their environment (Hambrick & Mason, 1984). On the other hand, these executives are often faced with new strategic decision options that are completely new or extraordinary that their accumulated experience or knowledge may sometimes be irrelevant or useless as these situations require a new perspective (Collins, et al., 2011; Sacchi & Burigo, 2008; Gino & Moore, 2007). Therefore, many scholars have identified that executives often seek for information from other sources for acquiring strategic knowledge to facilitate in their decision-making process (Boyd & Fulk, 1996; Forbes, 2007; Garg, et al., 2003). These scholars have observed that executives' sources of information and knowledge can either be through internal and external sources as well as either through formal or informal connections (Garg, et al., 2003; Heavey, et al., 2009). These sources could include individuals or groups such as the board of directors, the TMT, consulting firms or other CEOs, etc. (Arendt, et al., 2005; Garg & Eisenhardt, 2017; Kor & Mesko, 2013; Ma & Seidl, 2018; McDonald, et al., 2008). According to many scholars conducting research in advice seeking behavior assert that this behavior is an key and influential activity not just in CEO's strategic making decision process but also other important subjects such as determining the overall strategy, CEO and board performance, entrepreneurial behavior, organizational performance and R&D productivity (Aacquah , 2007; Garg & Eisenhardt, 2017; Geletkanycz & Hambrick, 1997; Sundaramurthy, Pukthuanthong, & Kor, 2014).

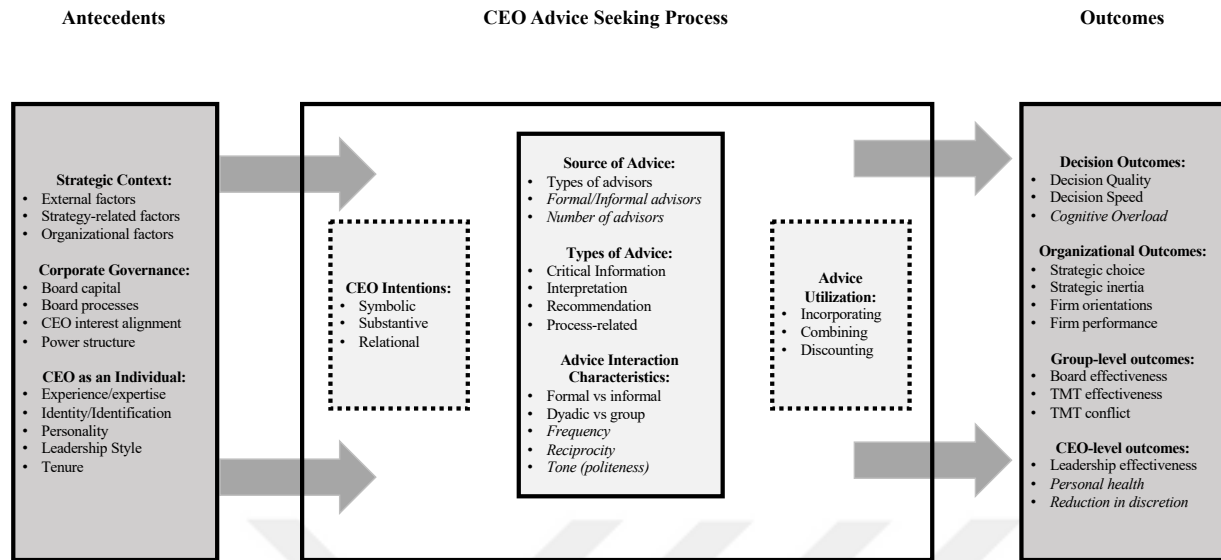
Executives often utilize formal sources of information or knowledge that can come from numerous sources that provide processed and organized information such as market databases, reports, newspapers, journals, etc. These information sources can turn out to be very insightful for the executive during their strategic decision-making process as they help the executive gain specific knowledge on a certain topic. On the other hand, these sources of information often consist of historical data which sometimes can become less relevant or contextually fulfilling at the time the executive tries to make a strategic decision (Eisenhardt & Bourgeois, 1988; Mintzberg, et al., 1976). In today's business environment, executives are flooded with these types of formal information that come through both external and internal sources of data and information which makes the executive's decision-making process more complex and time-consuming as they often find it hard to obtain insightful information from this overabundance of data and information (Chernhall, 2003). This also causes the executives to seek for more practical and actionable insights or advice from informal and personal sources rather than more codified and technologically driven information (Nebus, 2006).

CEO position is almost always a key and crucial position in a company where the CEO is empowered to conduct comprehensive yet effective decision-making activity to ensure the sustainability of the business (Lewin & Stephens, 1994). Formal or secondary sources of data or acquiring firsthand or secondhand experience regarding a specific issue do not always provide the most needed information or the insight regarding a key strategic decision (Hambrick & Mason, 1984; Nag & Gioia, 2012; Bonaccio & Dalal, 2006; Auster & Choo, 1993). CEOs often seek advice in order to get their hands on an exclusive, implicit, and private knowledge or information that they think the competition does not possess or would be very difficult to acquire through his or her own resources (Haas & Hansen, 2007; Inkpen & Tsang, 2005). According to

many scholars, CEOs who seek for advice often is in a better position make more sound decisions by having a more thorough knowledge and intelligence about the organization itself and the competitors and by having a wider variety of strategic options (McDonald, et al., 2008; Yaniv, 2004; Nebus, 2006; Schrah, Dala, & Snizek, 2006). Furthermore, CEOs who prefer to seek advice tend to pay greater attention and show higher adoption rates compared to other sources of formal information such as market databases, market reports, operational data of the company (McDonald & Westphal, 2003; Schrah, Dala, & Snizek, 2006).

Given its extensive and far-reaching impact on the organization, advice seeking behavior of CEOs has gained a lot of attention from many scholars. Especially the depth and the number of studies conducted in the recent years have rapidly increased however from a contextual perspective many of these studies seem to be unrelated and very diverse which focus on a wide range of areas in management such as upper echelons theory, corporate governance, strategic decision making, etc. These prior studies have revealed many aspects of by whom and how advice seeking behavior such as the relationship between the CEO and the board of directors, the TMT and the CEO's external network (Kor & Mesko, 2013; Garg & Eisenhardt, 2017; Krause, Semadeni, & Cannella, 2013; McDonald & Westphal, 2003). These studies also vary in terms of their unit analysis where some research focus on the group of executives or the organization itself and some research on the other hand focus on the decision itself or the advice seeking behavior. Therefore, it's very difficult to build a link between these disparate studies to draw an overall picture of what factors affect advice seeking behavior and what advice seeking behavior affects.

Figure 12 -CEO Advice-Seeking Framework and Future Research Agenda (Ma, Kor, & Seidl, 2020)



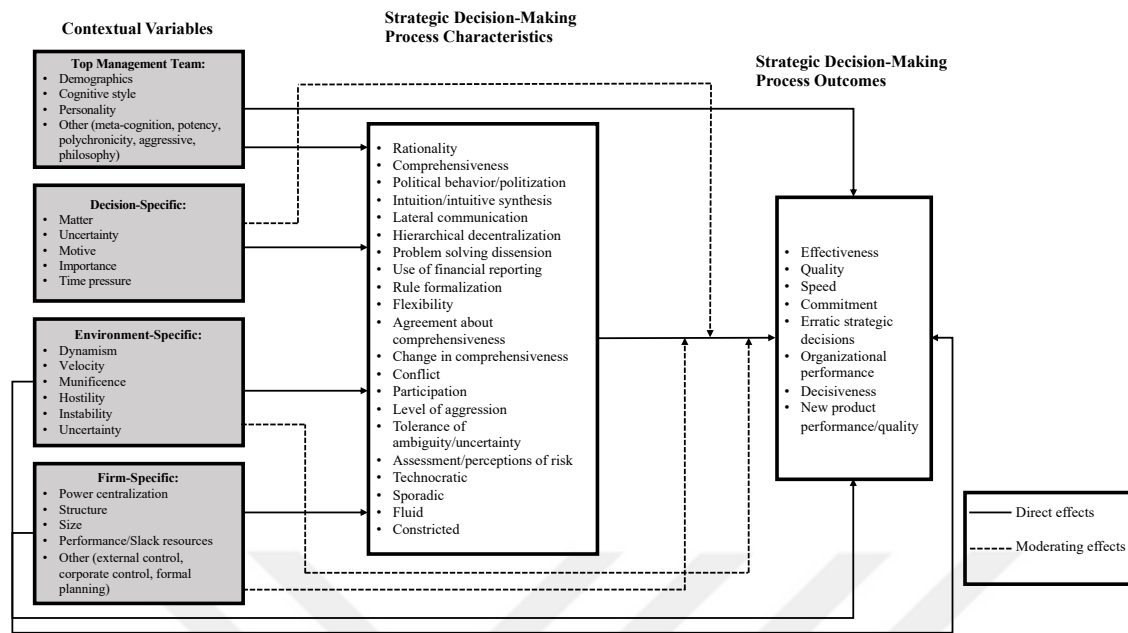
The only comprehensive study conducted in the field to provide an integrated view of the antecedents and outcomes of advice seeking behavior was published by (Ma, Kor & Seidl, 2020). In their conceptual study, they provide a very comprehensive overview of the advice seeking literature and share a very thorough and informative list of topics to be explored as a recommendation for further research. The scope of this research also tries to focus on some of the gaps they have identified in the literature and requires further investigation. Based on their framework regarding the antecedents and outputs of the advice seeking process, displayed in Figure 11 above, the research intends to provide more insight on how different leadership styles (CEO personal context as an antecedent) affect the strategic decision outcome (Decision-level outcomes) and the utilization or the selection process of advisors are affected by each different leadership style affects strategic decision outcomes.

2.5 Strategic Decision-Making Process and Strategic Decision Outcomes

Many scholars have come up with a different definition of a strategic decision however most studies still cite the early works of (Eisenhardt & Zbaracki, 1992; Mintzberg, Raisinghani, & Theoret, 1976) which define a strategic decision as a type of decision that is made by the top management of an organization that have a long-lasting and consequential impact on the whole organization and its sustainability. The nature of these decisions tends to have infrequent, unstandardized, far-reaching, and mostly vaguely structured. The process of making these decisions, which is referred to as strategic decision-making process can be viewed as a series of activities which consist of information collection, scenario or strategic option development and selection of a decision (Wally & Baum, 1994).

A well designed and executed strategic decision-making process is one of the essential activities for the top management of an organization in order to implement and execute successful strategic decisions. From a contextual perspective, this process involves major components such TMT factors, decision specific variables, environmental factors, and firm-specific factors (Sharfman & Dean, 1997). According to (Shepherd & Rudd, 2014) and (Elbanna, et al., 2020), the literature is missing an integrated approach that tries to establish a connection between contextual factors and characteristics of strategic decision-making process and its outcomes. In a comprehensive literature review conducted by (Shepherd & Rudd, 2014), the researchers have come up with a framework that clearly shows all these contextual factors and their relationship with the characteristics and outcomes of strategic decision-making process which is displayed in Figure 6.

Figure 13 - Integrated Framework on Strategic Decision-Making Process Research (Shepherd & Rudd, 2014)



One of the most commonly researched types of strategic decision outcome in the literature is decision quality where scholars have looked at “dormant ties” in terms of advice seeking and how that affects decision quality (Eisenhardt K. , 1989; Garg & Eisenhardt, 2017; Levin, et al., 2011; Walter, et al., 2015). Another frequently studied aspect of strategic decision outcome is decision speed where the scholars have analyzed the effect of CEOs’ advice seeking behavior affects decision making speed in “high-velocity” environments and how the relationship between the CEO and the TMT improves decision speed (Garg & Eisenhardt, 2017; Eisenhardt K., 1989).

Although the researchers have studied strategic decision outcomes of CEOs’ advice seeking behavior based on a wide variety of theories such as information processing, resource dependence and social capital, the number of these studies are not high enough to tackle all the aspects of the subjects such as how the types of advisors or sources of advice can affect CEOs’ advice seeking behavior and hence outcomes such as decision speed and quality (Shepherd &

Rudd, 2014). On the other hand, in terms of other types of outcomes of strategic decision-making process, the literature is extremely limited. Therefore, this research aims to contribute to the field by looking at different types of strategic decision outcomes such decision speed, quality and effectiveness and the effect of selection of sources of advice on these outcomes.

2.5.1 Decision Speed

One of the most researched types of strategic decision outcome is decision speed which is defined as the capability of making timely strategic decisions that could greatly influence the course and the future of an organization (Eisenhardt & Zbaracki, 1992; Judge & Miller A., 1991; Pettigrew, 1992; Mintzberg, 1973). Strategic decision-making process often requires a comprehensive study and evaluation of possible alternatives that could have different outcomes and this comprehensive process usually requires significant amount of time and resource consumption which could negatively influence the decision-making speed (Frederickson & Mitchell, 1984; Vroom & Yetton, 1973).

According to (Mintzberg, 1973), executives who are effectively and frequently engaging in advice or information seeking activities have a greater chance of reducing the time to make strategic decisions making process by gaining access to a more enriched pool of unique and strategic recommendations that can help these executives deal with uncertainty and complexity more efficiently and effectively. (Eisenhardt K., 1989) asserts that instead of the number of strategic options, the ability to simultaneously evaluate various strategic options has a greater affect in speeding up the decision-making process. Therefore, executives who strive to exchange or acquire as much information as possible has a better chance of making timely strategic decisions.

On the other hand, being exposed to significant number of information or engaging in high volumes of information exchange could also have adverse effects in terms of decision-making speed if the executives cannot effectively handle any conflict or disagreement that could arise during this process (Eisenhardt K., 1989). Therefore, the executives are expected to accurately assess the pros and cons of each suggestion or recommendation which presents a diverse range of perspective and alternatives regarding a strategic decision.

2.5.2 Decision Quality

One of the most difficult and multi-layered types of decision outcomes to measure in the literature has been decision quality which is generally described as an outcome that explains the match between the strategic option selected by the executive and the level of success received as an outcome of that strategic option (Eisenhardt K., 1989; Amason, 1996). Researchers have evaluated decision quality mainly from two different perspectives which are decision quality as an outcome of the decision itself and the quality of the decision-making process (Jones, et al., 1997; Keren & de Bruin, 2003). On the other hand, (Vroom & Yetton, 1973) described decision quality as a relationship between the amount of information available to the decision maker and the correct selection and adoption of these information to solve a specific strategic problem.

Researchers have attempted to provide a comprehensive and universally accepted measure and definition of decision quality as an outcome; however, the prior research have provided more incremental description rather than an integrated approach. According to (Keren & de Bruin, 2003), well-structured decision-making processes often result in high quality decision outcomes and vice versa, yet there has been a limited amount of research regarding factors that lead to quality decisions. Some scholars commonly viewed quality decisions or

decision quality as an outcome from a cause-and-effect perspective that is defined as a methodological way to acquiring decision-specific data or information from well-known sources and a methodological evaluation and utilization of those data and information to successfully attain a specific strategic goal or objective (Eisenhardt K., 1989; Amason, 1996; Jones, et al., 1997; Vroom & Yetton, 1973).

Other scholars have also contributed to the literature by providing additional descriptions or definitions to decision quality by looking from different perspectives. One example to this is (Visinescu, et al., 2017) where they state that a quality decision is a combination of various variables such as risk-taking behavior of the executive and how well the executives assess relevant information to resolve a specific strategic issue. On the other hand, (Forbes, 2007), explained decision quality in terms of social perspective where a well-established connection between the decision maker and other stakeholders in the process can influence decision quality. (Carmeli, et al., 2009) have taken a different approach in describing decision quality by studying how the level of participation or the inclusion of other stakeholders in the process affect the quality of the decision. Finally, (Feldman, et al., 2018) asserted that the quality of the data or the information that is gathered linked with a well-established decision-making algorithm often leads to a high-quality decision. In summary, the notion of decision quality has gathered a reasonable amount of attention from many scholars however, the attempts in providing a comprehensive description have been rather unrelated. This research will attempt to provide an additional perspective by looking at how different leadership styles and selection and utilization of different sources of advice can affect decision quality as a decision outcome.

3 Research Model and Hypotheses

This chapter elaborates on the research model and hypotheses that will set the foundation of the whole study. The explanation on the underlying research model is followed by the discussion around the hypotheses.

3.1 Research model

The proposed model of the study is illustrated in the Figure 13 below. The first part of the model constitutes the independent variable which is the leadership style. Leadership style is examined under three diverse types of leadership styles which are transactional, transformational, and laissez-faire. A moderating variable referred to as “source of advice” is used as a moderating variable that influences the relationship between the independent and the dependent variables. The source of advice in this context is evaluated by four different types of sources of advice which are none-advice seeking, external and internal advice sources. Finally, the dependent variable of the study which is the decision outcome is analyzed from three different attributes which are speed, and quality.

3.2 Relationships and Hypotheses Formation

This section discusses the relationship between each variable based on previous research and their results and try to explain the hypotheses generated as an output of the proposed research model based upon both the proposals brought forth by other scholars in the field and the gaps observed in the literature.

3.2.1 Leadership Styles and Decision Outcomes

The independent and dependent variables in this research will be leadership styles (transformational, transactional, and laissez-faire) and decision outcome variables (speed and quality) as discussed in the earlier sections. Both variables have been studied and is still being studied extensively in the literature, yet the number of studies that try to link these two variables either directly or indirectly through other variables is still limited. In addition, studies that consider both dimensions of decision outcomes, which are speed and quality, at the same time are quite restricted as well. Decision speed and decision quality as decision outcome variables have been investigated heavily from many perspectives but the linkage between leadership theories and styles with these two variables are not clearly established. Therefore, this research will also try to explore the relationship between how different leadership styles might impact decision speed and quality.



(1) Leadership Styles and Decision Speed:

From the broader perspective of strategy literature, strategic actions or decisions made by an organization are neither necessarily thoroughly designed nor improvised, neither always taken on purpose nor involuntarily, and neither conflicting nor completely integrated which constitute the actual strategy of the organization and hence the overall performance (Mintzberg & Waters, 1985). Every strategic decision or action is generated through the process of decision making which can be different in nature such as formal vs informal, centralized vs decentralized. No matter the output or the details of the process, this strategic decision-making process necessitates the utilization of time as the process contains several sub-tasks and requirements. According to Wally & Baum (1994) and Frederickson & Mitchell (1984) there are five “cognitive stages” to a

decision-making process which involves (i) paying attention to the issue or the occasion (ii) gathering information (iii) building a set of options (iv) risk-and-return analysis (v) choosing the scenario with the greatest payoff. On the other hand, (Fiske, 1992) and (Isenberg, 1986) suggest that intuition and experience can play a role in speeding up the process of decision making.

It is quite essential to have an idea about the complete picture or have access to all required information to make the right decision. However, seeking all the relevant information and then evaluating all that information can take significant amount of time and might lengthen the overall process. Therefore, scholars who research on decision making suggest that decision making speed is one of the most important factors of strategic decision making (Eisenhardt K., 1989). On the other hand, there are obviously other factors that affect the overall success of the decision such as the quality of the decision. Hence, in order to reach an optimal result these variables need to support each other. According to (Eisenhardt K., 1989), particularly in dynamic environments, it is essential that the leaders can both make quick and high-quality decisions in order to display an effective leadership and strategy execution. In her study, she also proposes four different steps on how to make higher quality decisions. The first one is to establish shared intuition at the top management level so that the TMT can realize risks and opportunities faster and clearer. The second step is to bring conflicting views to execute more productive strategic thinking activities without causing a delay in the overall process. Third step is to have a disciplined approach that executes the process to stick with the deadlines. Final step is to alleviate any unnecessary discussions which lowers the overall productivity and increases the overall duration of the process.

In addition, Baum & Wally (2003) have significantly contributed to the literature through their study which analyzed the effect of decision speed on the overall performance of the organization by observing several hundred CEOs. In their study, they have categorized the factors that impact the decision speed as internal and external factors. Internal factors include factors such as “centralization of strategy”, “decentralization of operations”, “formalization of routines” and “informalization of routine tasks”. On the other hand, external factors that influence decision speed are “environmental dynamism” and “munificence” (Baum & Wally, 2003).

Based on this prior work that it is possible to establish a link between the antecedents of decisions speed that are discussed in the literature and the leadership styles that will be investigated in this research. By taking Eisenhardt’s (1989) and Baum & Wally’s (2003) studies into consideration, a hypothetical relationship between different leadership styles and decision speed can be established. For instance, establishing a shared intuition at the TMT level, bringing conflicting views to expedite the decision-making speed and decentralization of operations can be linked with some of the aspects of transformational leadership. On the other hand, having a disciplined approach and preventing any unnecessary conflicts between the followers, centralization of strategy and formalization of routines can also be associated with some aspects of transactional leadership.

It is commonly held that transformational leadership, which entails inspiring and encouraging followers to attain their full potential and contribute to the organization's mission, may be effective in a number of contexts. This is one of the key components of transformational leadership. However, it is feasible that a transformational leadership style could slow down the

rate at which strategic decisions are made under certain conditions. This is something that should be considered.

One of the reasons that this may be the case is that transformational leaders frequently promote open communication and collaboration among members of the team. This can result in a more comprehensive consideration of all of the choices that are available and more input from a more diverse group of people. This can be a beneficial component of transformative leadership, but it may also lead to lengthier decision-making processes as more time is spent discussing and considering choices. Although this can be a positive aspect of transformational leadership, it may also lead to longer decision-making processes.

Additionally, transformational leaders are likely to be more inclined to involve their team members in the decision-making process, which can lead to a sense of shared ownership and commitment to the decision that has been made. However, this can also lead to longer decision-making procedures because team members may need to be brought up to speed on the topic and may need to be consulted before a final choice is reached. Before a decision is taken, it may be necessary to consult team members.

In conclusion, although transformational leadership can be useful in a variety of contexts, there is a possibility that it could slow down the rate at which strategic decisions are made. This is because transformational leadership places an emphasis on open communication, collaboration, and shared ownership among members of the team.

A leadership style known as transactional leadership places an emphasis on creating clear expectations, establishing goals, and offering rewards or consequences to followers based on

their performance in relation to those expectations and goals. When certain conditions are met, this style of leadership may have the ability to have a favorable impact on the rate at which strategic decisions are made.

One of the reasons for this is that transactional leaders often set clear objectives and goals for the members of their team, which can help to concentrate their efforts and streamline the decision-making process. Transactional leaders may also be more inclined to transfer decision-making authority to their team members, which can help to speed up the decision-making process by allowing decisions to be made closer to the point when action is being taken.

Furthermore, transactional leaders frequently make use of rewards and penalties as a means of motivating the people of their team to work to the best of their abilities. This can assist to generate a sense of urgency, and it can motivate members of the team to make decisions as quickly as possible so that they can reach the intended result.

In conclusion, transactional leadership has the ability to have a beneficial impact on the rate at which strategic decisions are made as a result of its emphasis on the formulation of clear expectations and goals, as well as the utilization of rewards and consequences to encourage performance. It is essential to keep in mind, however, that the success of any particular method of leadership will be determined by the particular conditions that exist as well as the qualities of the group that is being directed.

Laissez-faire leadership, often known as "hands-off" leadership, is a style of leadership in which the leader offers their team members a great degree of autonomy and independence in decision-making. Another name for this type of leadership is "bottom-up" leadership. This type

of leadership may have the ability to be effective in certain circumstances; but it is likely that in other instances it may slow down the rate at which strategic decisions are made. This may be the case if the circumstances are:

One of the reasons for this is because leaders that take a laissez-faire approach may not provide their team members with sufficient direction or guidance, which can result in confusion and doubt regarding the decision-making process. Because of this, the time it takes to make decisions could increase as members of the team strive to figure out what is expected of them and how to go forward.

In addition, executives that take a laissez-faire approach may not be approachable or responsive when members of their team have questions or require clarification, which can also slow down the decision-making process. This can be especially troublesome in circumstances in which prompt decision-making is required or when there is a lack of experience or competence among members of the team.

In conclusion, while a laissez-faire leadership style may be effective in certain circumstances, it is possible that it could negatively affect the speed of strategic decision-making due to its emphasis on autonomy and independence, which may lead to confusion as well as a lack of direction and support. This possibility exists due to the fact that it may be possible for it to have a negative impact on the speed of strategic decision-making.

Looking at the some of the most common traits and attributes of transformational leaders, these leaders are eager to make profound changes within an organization that will have a longer impact on the future course of the organization. Transformational leaders usually emerge in

situations when the internal systems are not functioning as expected and there is a heavily dominant bureaucratic culture. Therefore, transformational leaders might need some additional time to make these profound changes when the internal dynamism of the organization is low which can possibly lengthen the speed of the decision. On the contrary, transactional leaders establish a contractual relationship between their followers and provide very clear and straightforward instructions about a specific goal and can display a combination of other leadership styles such as autocratic leadership style. Therefore, it is expected that transactional leaders can engage and direct their followers to execute both the decision making and implementation process in the quickest way possible. Finally, laissez-faire leaders which are renowned for being avoidant leaders are very reluctant to make any decisions at all. Therefore, it is quite clear that this leadership style will try to slow down the decision-making process as much as possible.

Consequently, the relationship between each three leadership styles and decision speed are hypothesized as below:

H1a: Transformational leadership style negatively affects the speed of a strategic decision

H1b: Transactional leadership style positively affects the speed of a strategic decision outcome

H1c: Laissez-faire leadership style negatively affects the speed of a strategic decision outcome

(2) Leadership Styles and Decision Quality:

From the broader perspective of decision literature, there are three major constructs that are continuously investigated which are the decision itself, decision making and decision outcomes such as decision quality (McNamee & Celona, 2005). Scholar have spent significant amount of time on understanding what constitutes a good decision or what qualifies as a bad decision and also understanding if good decisions actually result in good outcomes. According to McNamee & Celona (2005), leaders need to have a very good understanding and knowledge about their environment (internal and external) and spend considerable amount of time in assessing the available information to generate the optimum decision that could bring in the optimum result or performance.

Amason (1996) defines decision quality as the decision that reaches the targeted outcome and decision quality is observed at the end of the strategic planning and decision-making process. Due to the nature of their roles in the organization, leaders are required to make strategic decisions which often include sophisticated issues under highly uncertain conditions which can be taken by utilizing significant amount of resource during the decision-making process (Mason & Mitroff, 1981). Therefore, scholars have paid a great deal of attention on the antecedents and consequences of the concept of decision quality. In terms of the antecedents to decision quality, researchers have come up with two common factors which are cognitive skills of the top management team and how the top management team interacts with each other during the decision-making process (Amason, 1996).

The first factor which investigates the effect of the cognitive capabilities of the top management on the quality of the decision investigates this relationship from a cognitive

diversity perspective. Cognitive diversity can be viewed as the combination of different resources that the decision-making team can utilize when faced with a sophisticated strategic decision (Hoffman, et al., 1962; Wanous & Youtz, 1986). According to the study of Bantel & Jackson (1989), they assert that an effective decision process occurs when the decision-making team is composed of individuals that have different capabilities, approaches and talents which is also supported by the empirical study that cognitive diversity within the decision-making team leads to higher quality decision outcomes.

The second major factor that affects the decision quality investigates how the individuals interact with each other during the decision-making process. Without a well-functioning process, teams will not be able to come up with high quality decisions even if they have cognitively well-diversified decision-making teams (Amason, 1996). Therefore, the ability to establish a harmony and synergy between the individuals that have different skills, capabilities and perspectives plays a crucial role in executing an effective decision-making process with high quality. According to Amason (1996) and the prior work mentioned in the research, utilizing different interaction methods such as “devil’s advocacy” and “dialectical inquiry” that promotes a healthy discussion between different perspectives or opposing views will result in more innovative and productive discussions that will eventually lead to higher quality decision outcomes. Therefore, activating both factors during the decision-making process is expected to result in higher quality decisions during the strategic decision-making process.

Transformational leadership encourages followers to reach their maximum potential and contribute to the vision of the business by inspiring and motivating those followers to do so. It is a commonly held belief that transformational leadership can be useful in a range of contexts, and

that it may, under certain conditions, have the ability to have a beneficial impact on the caliber of strategic decision-making.

One of the reasons for this is that transformational leaders frequently promote open communication and collaboration among the members of a team. This can result in a more comprehensive consideration of all of the options that are available as well as more input from a more diverse group of individuals. By ensuring that all pertinent elements are taken into account and by using the experience and skills of diverse team members, this can assist to improve the quality of the strategic decisions that are made.

Additionally, transformational leaders are likely to be more inclined to involve their team members in the decision-making process, which can lead to a sense of shared ownership and commitment to the decision that has been made. By ensuring that all members of the team feel invested in the outcome and are motivated to see the decision through to effective execution, this can assist to improve the quality of strategic decisions.

In conclusion, the focus that transformational leadership places on open communication, cooperation, and shared ownership among members of a team has the potential to have a beneficial effect on the quality of strategic decision-making. However, it is essential to keep in mind that the success of any particular style of leadership will be determined by the particular conditions that exist as well as the qualities of the group that is being led.

Transactional leadership is a type of leadership that emphasizes defining clear expectations, establishing goals, and offering incentives or punishments based on performance.

This leadership style may influence the quality of strategic decision-making positively under certain conditions.

One explanation for this is that transactional leaders often establish clear goals and expectations for their team members, which helps to focus their efforts and ensures that everyone is aware of what is expected of them. This can increase the quality of strategic decisions by ensuring that all team members are working towards the same goals and that their efforts are aligned with those of the organization.

Moreover, transactional leaders frequently employ rewards and consequences to drive their team members to perform at their highest level. This can assist generate a sense of urgency and motivate team members to make high-quality decisions in order to reach the intended objective.

Due to its emphasis on clear expectations, goal setting, and the use of rewards and penalties to motivate performance, transactional leadership may have the ability to positively influence the quality of strategic decision-making.

Laissez-faire leadership, sometimes known as "hands-off" leadership, is a style of leadership in which the leader offers team members a great deal of autonomy and freedom in decision-making. This leadership style may have the ability to be beneficial in some settings, but it may have a negative impact on the quality of strategic decision-making in some scenarios.

One explanation for this is that laissez-faire leaders may not provide sufficient direction or advice to their team members, leading to confusion and uncertainty over the decision-making process. As a result, team members may not have a clear idea of what is expected of them or how to proceed, which may result in worse quality decisions.

Moreover, laissez-faire leaders may not be accessible or responsive when their team members require assistance or explanation, which can also have a detrimental effect on the quality of strategic decisions. This can be particularly problematic in instances where swift decision-making is required or when team members lack experience or competence.

In conclusion, while laissez-faire leadership may be helpful in some settings, its emphasis on autonomy and independence may severely impact the quality of strategic decision-making, leading to confusion and a lack of direction and support.

Based on the literature on decision quality, two major factors identified in the literature can also shed some light on how different leadership styles can affect the decision quality overall. For instance, transformational leaders are referred to as “out-of-the-box” thinkers who bring in fresh views and approaches to the existing dynamics within the organization. This could sometimes require transformational leaders to set up a decision-making team that consists of top management team members or other employees in the organization to promote a thought-provoking and creative environment that could yield in higher quality of decisions. On the other hand, transactional leaders are often in continuous search for efficiency for reach a specific goal and in order to achieve that transactional leaders might sometimes have to establish a link with their followers to get access to a continuous flow of information about the internal dynamics of the organization. This could also trigger the set-up of a well-designed interaction process

between the followers and the leader which could be a driver for a higher quality decision making process. Finally, as expected, laissez-faire leaders with their “hands-off” approach and high tendency to avoid any responsibility are naturally expected to make decisions with much lower quality.

Consequently, based on the antecedents to decision quality mentioned in the previous literature and the traits and behaviors of leadership styles mentioned in the research, the following hypotheses can be suggested:

H2a: Transformational leadership style positively affects the quality of a strategic decision outcome

H2b: Transactional leadership style positively affects the quality of a strategic decision outcome

H2c: Laissez-faire leadership style negatively affects the quality of a strategic decision outcome

3.2.2 Leadership Styles and Advice Seeking Behavior

When faced with complex and risky strategic decisions or extraordinary problems or crises in an organization, leaders often turn to other people to seek advice to make the right strategic decision (Alexiev, et al., 2010). Advice seeking process is a bilateral process where both the leaders and the followers can seek advice, feedback, help or information from each other. A leader’s judgmental influence while making a strategic decision can make a great impact on the outcome of that decision as the leader tries to employ his/her task delegation skills

as well his/her charisma to raise the motivation and the commitment of his/her followers (Priem, 1994). Leaders seek advice on a variety of strategic challenges such as reorganization, investment planning, innovation, strategy development, etc. (Alexiev, et al., 2010). When faced with difficult and mission-critical strategic issues and when the top management team lacks specific experience or know-how related to the issue, leaders also turn to outside sources of advice (Krause, et al., 2013; McDonald & Westphal, 2003). Alternatively, leaders can also seek advice and feedback on non-business-related issues such as their leadership journey or personal challenges in order to develop themselves into a better leader (McDonald & Westphal, 2011).

From a strategic decision-making perspective, according to Finkelstein et al. (2009) leadership style has a great effect on how the leaders make strategic decisions by having an influential effect on their observations, views, and analyses on the received information. In junction with this, they argue that this also affects how they execute a strategic decision (Finkelstein, et al., 2009). In a conceptual study conducted by Arendt et al. (2005) which focused on the interaction between the CEO and advisors, the researchers claim that different styles of leadership can also influence the utilization of different sources of advice whether internal or external when making a strategic decision. Arendt et al. (2005) propose that two different leadership styles, which are transformational and transactional, display two different advice seeking behaviors in terms of sources of advice that they might benefit from. Their first proposition is that leaders with transformational style have a higher tendency to receive advice from their informal networks that exist outside of the organization. Alternatively, they also propose that transactional leaders are more prone to benefit from a more structured and formal advisory mechanism which benefits from the internal team members.

(1) Transformational leadership and advice seeking:

According to Bass (1985) and his description of transformational leaders, leaders with transformational style are in constant search for new prospects who are always eager to make a profound change in the organization by utilizing their unorthodox visionary influence over the whole organization. In order to do that, these types of leaders need to establish a constant and instantaneous flow of information that they can benefit from which most of the time is available in networks that are outside of the organization. The reason behind this view is that the situational factors that cause the emergence and success of a transformational leader is that the organization is in need of a simpler, more agile, and flexible organizational structure and tightly knit culture with an elevated sense of cooperation and collaboration. Organizations that are going through such a change need regular access to information on the external environment which is almost impossible to come from internal sources. Transformational leaders often take helm when the organization is not functioning well due to the bureaucracy and the status-quo already established within the organization and is clearly in need of an organizational change that will create new pathways for a better future.

In addition, from a personality trait and characteristics perspective transformational leaders often seen as personalities who tend to be more agreeable, outgoing, and eager to have new experiences and thoughts (Judge & Bono, 2000). According to Bass (1985) and Lowe et al. (1996), transformational leaders are charismatic figures who are viewed as inspirational and intellectually stimulating and always looking for new ways of doing things through constant dialogue and social interaction with their environment. Due to their proneness in seeking new opportunities and experiences, transformational leaders often tend to be “outside-the-box” type

of thinkers who can preferably make their decisions based on the information that they receive about their internal and external environment or different sources of information (Lowe & Gardner, 2001). Transformational leaders tend to build more profound and long-lasting relationship to raise the team members' utility rate and efficiency (Bass B., 1985) by urging their team members to go beyond the expectation.

Transformational leadership, which entails inspiring and motivating followers to realize their full potential and contribute to the organization's mission, is widely thought to be beneficial in a range of contexts. When making a strategic choice, a CEO who has a transformational leadership style may be more likely to seek assistance from inside sources.

This is due, in part, to the fact that transformational leaders frequently promote open communication and collaboration among team members, which makes them more likely to seek feedback and counsel from their team when making strategic decisions. Transformational leaders may also place a high emphasis on enhancing the talents and abilities of their team members, which may make them more receptive to seeking advice from inside sources.

Moreover, transformational leaders may be more inclined to involve their team members in the decision-making process, which may enhance their likelihood of seeking advice from internal sources. This can ensure that all relevant considerations are considered, and that the final decision reflects the team's pooled understanding and skill.

As a result of their emphasis on open communication, cooperation, and the development of team members' skills and capacities, a CEO with a transformational leadership style may be more likely to seek advice from internal sources when making a strategic choice.

For this reason, our first hypothesis suggests that when it comes to making strategic decisions, transformational leaders seek more advice from their internal network.

H3: The more transformational the CEO's leadership style, the more likely the CEO seek advice from internal sources when making a strategic decision.

(2) Transactional leadership and advice seeking:

According to Burns (1985), transactional leaders create a contractual exchange relationship between them and their followers where the leaders use their influence by showing interest in the needs of their followers and also by building a reward mechanism for their involvement to accomplish or complete a specific goal or a task.

From a situational and conditional perspective, transactional leaders are found in organizations where a strict and mechanical organizational structure with a bureaucratic governance model that seeks efficiency in their operations (Burns, 1978). To establish such structures, culture and working setting, transactional leaders employ contingent reward mechanisms to align the followers on a specific and defined goal. In order to achieve or reach higher levels of efficiency within the organization, leaders also need to be continuously fed by a constant flow of information regarding the internal situation and the progress towards the defined goal. Therefore, rather than turning to internal networks for strategic advice or information, transactional leaders are expected to seek advice from their formal and external sources.

Transactional leadership is a type of leadership that emphasizes defining clear expectations, establishing goals, and offering incentives or punishments based on performance.

When making a strategic choice, a CEO who demonstrates a transactional leadership style may be more prone to seek input from external sources.

This is due, in part, to the fact that transactional leaders may be more focused on attaining specific objectives and more likely to recruit outside expertise to do so. Additionally, transactional leaders may be more interested in employing rewards and penalties to encourage their team members, and they may view external sources of guidance as a means of introducing new viewpoints and ideas to the firm.

Moreover, transactional leaders may be more focused on obtaining outcomes and more willing to seek guidance from external sources in order to uncover best practices or novel techniques that could assist them in accomplishing their objectives.

Hence, the second hypotheses claims that transactional leaders are likelier to seek advice from their formalized external sources of advice when making a strategic decision.

H4: The more transactional the CEO's leadership style, the more likely the CEO seek advice from external sources when making a strategic decision.

(3) Laissez-faire leadership and advice seeking:

According to leadership continuum dimensions of Bass (1985), transformational and transactional leaders stand on the “active” leadership end of the continuum where laissez-faire leaders are on the opposite and “passive” end of the continuum. Laissez faire leaders are typically known for their avoidant behavior, and this is also true when it comes to making strategic decisions and taking on supervisory roles in the organization (Den Hartog, et al., 1997).

Laissez faire leaders are considered as leaders with “hands-off” approach that gives almost complete freedom to their followers when making a strategic decision (Bass & Stogdill, 1990). These leaders are usually reluctant to take any kind of responsibility and have a high tendency to delay or delegate any kind of important decision (Northouse, 2016). In almost all prior studies, laissez faire leadership is perceived as the most ineffective and inactive leadership type in the literature as laissez faire leaders have an avoidant decision-making style and are absent when their followers need them (Bass, 1985). As laissez faire leaders try to avoid responsibility and critical decision making, these leaders allow their followers to make decisions on their own and therefore they are dependent on their follower’s decisions which make them a dependent decision maker (Scott & Bruce, 1995). When it comes to strategic decision making which requires taking responsibility and handling a difficult and complex situation, it is assumed that laissez faire leaders are quite reluctant to any kind of advice that they can get from their internal sources or external sources which will push them to make a decision.

Laissez-faire leadership, sometimes known as "hands-off" leadership, is a style of leadership in which the leader offers team members a great deal of autonomy and freedom in decision-making. When making strategic decisions, a CEO who demonstrates a laissez-faire leadership style may be less inclined to solicit counsel from both internal and external sources.

One explanation for this is that laissez-faire leaders may not provide sufficient direction or advice to their team members, leading to confusion and uncertainty over the decision-making process. As a result, they may be less inclined to seek counsel from internal or external sources, as they may not perceive a need for extra guidance or support.

In addition, laissez-faire leaders may not be as involved in the decision-making process as other leaders, which may diminish the possibility that they will seek input from internal or external sources. This can be particularly problematic in instances where swift decision-making is required or when team members lack experience or competence.

Thus, the third hypothesis asserts that laissez faire leadership most likely will seek less advice either from internal or external sources when making a strategic decision.

H5: The more laissez-faire the CEO's leadership style, the less likely the CEO will seek advice from both internal and external sources when making a strategic decision.

3.2.3 Source of Advice and Decision Outcomes

Advice seeking and its effect on decision outcomes such as decision speed and decision quality have been studied from different perspectives and a variety of theories which include social capital, resource dependence and information processing (Levin, et al., 2011; Walter, et al., 2015; Garg & Eisenhardt, 2017). However, most of these studies are quite nascent and therefore the amount of work in the literature still has a room for more exploration.

Levin, et al., 2011 and Walter, et al., 2015 both investigate advice seeking through the concept of “dormant ties” within the lens of social capital theory where the scholars claim that advice that comes from the dormant ties rather than current contacts exhibit more value and help when making a strategic decision.

On the other hand, Eisenhardt (1989) investigates decision making in “high-velocity” settings where the research asserts that the higher the experience of the TMT members, the

higher the speed of the decision when CEOs looked for advice. According to the study, instead of utilizing a more centralized and consensus-dependent decision-making process, seeking advice from a small group of TMT professionals who have rather more experience will expedite the decision-making process. In addition, in a more recent study conducted by Garg & Eisenhardt (2017) where the exchanges between the CEO and the board members are explored through a comparison between dyadic and group-based relationship, the authors argue that forming and executing a dyadic relationship with the board members will help CEOs make faster decisions.

Even though there are some prior works which study the relationship between advice seeking and decision outcomes, the topic still lacks further research such that there is no study which investigates how different sources of advice (internal vs external, formal vs informal, etc.) affect decision level outcomes such as decision speed and quality. Therefore, this research aims to hypothesize on the consequences of using different sources of advice such as internal vs external on two distinct decision outcomes which are decision speed and quality.

Based on the literature review, both internal and external advice seeking has different advantages and disadvantages when it comes to making a strategic decision. The advantages of internal advice include the ease of access and obtainability, confidentiality, the know-how of internal advisors about the internal operations of the organization and the potential to increase the motivation and the commitment of internal team members. On the other hand, seeking advice from internal sources can also result in extra competition within the organization, over-criticizing, carrying less value than external sources and ignoring biases within the advisors. External advisors on the other hand have advantages such as bringing more insight about the

external environment, providing a more comprehensive view of situation, overcoming the status-quo established in the organization whereas the disadvantages include lower adoption of the advice by internal stakeholders, inability to assess whether the information is accurate and aligned with the realities of the organization.

Based on all these different advantages and disadvantages of seeking advice from internal and external sources, the research hypothesizes on several aspects that moderate the relationship between leadership styles and decision outcomes.

- *H6a: Seeking more advice from internal sources will moderate the relationship between the speed of the strategic decision outcomes and transformational leaders*
- *H6b: Seeking more advice from internal sources will moderate the relationship between the speed of the strategic decision outcomes transactional leaders*
- *H6c: Seeking more advice from internal sources will moderate the relationship between the speed of the strategic decision outcomes laissez-faire leaders*
- *H7a: Seeking more advice from external sources will moderate the relationship between the quality of the strategic decision outcomes and transformational leaders*
- *H7b: Seeking more advice from external sources will moderate the relationship between the quality of the strategic decision outcomes and transactional leaders*
- *H7c: Seeking more advice from external sources will moderate the relationship between the quality of the strategic decision outcomes and laissez-faire leaders*

Based on the proposed model, the hypotheses generated through the literature are discussed in the next section.

Figure 14 - Hypothesized Research Model

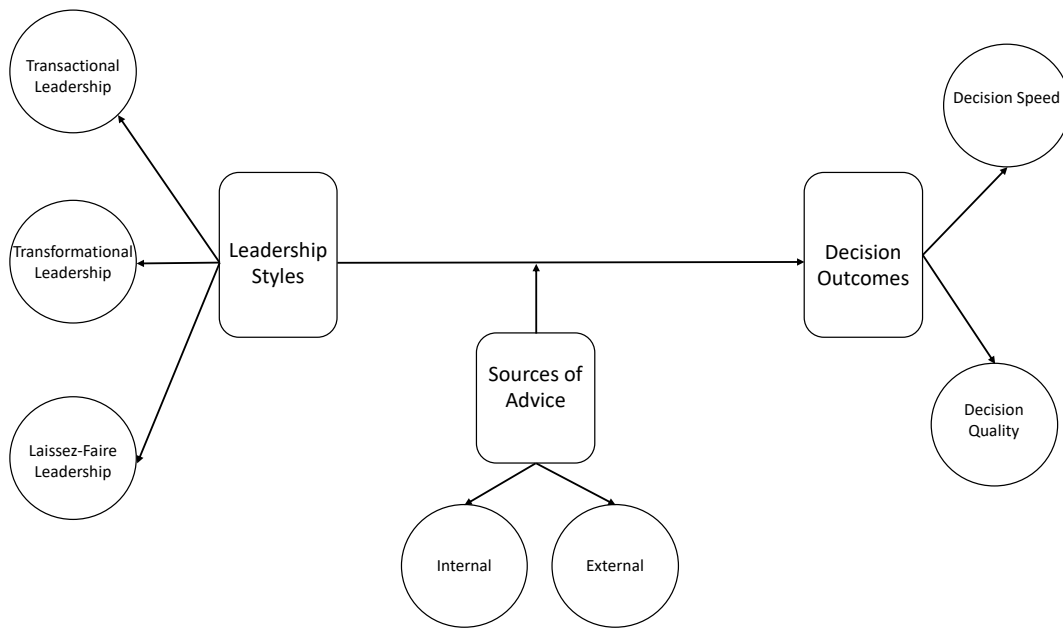
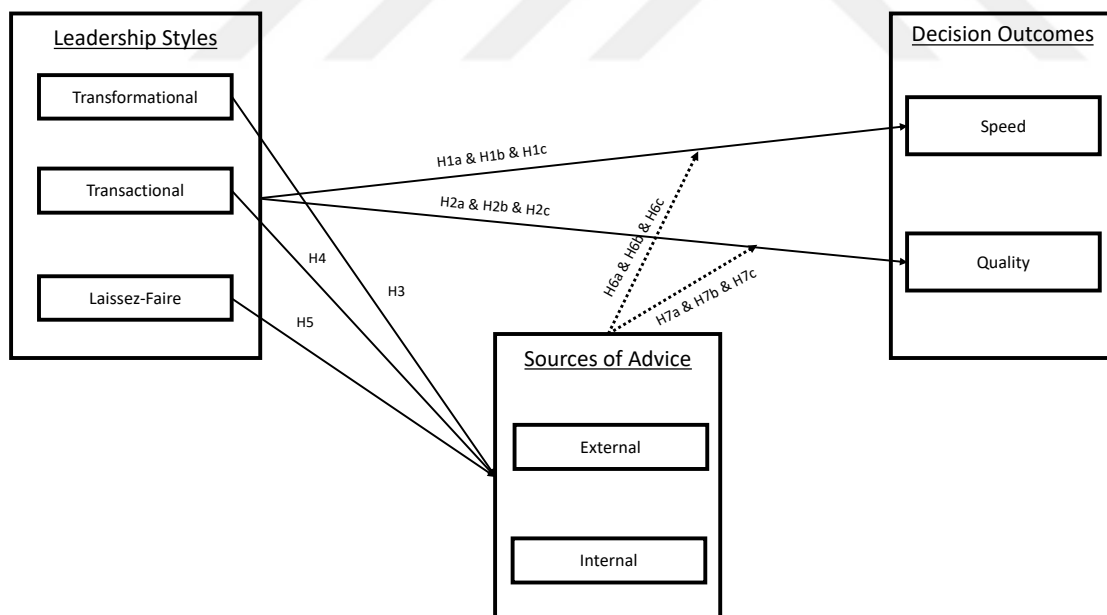


Figure 15 – Hypotheses Illustrated



4 Chapter 4: Research Design and Methodology

This chapter discusses the design of the research which consists of the methods that will be executed to test the hypotheses proposed in the study as well as the data collection and analysis approaches that will be used to evaluate the findings of the research.

4.1 Introduction

The research aims to conduct a mixed method study by using an explanatory sequential design. In explanatory sequential design method, both qualitative and quantitative methods are applied. In this sequential method, the data collection process is based on a sequential flow the data gathered from the first part of the study relates to the second part of the study (Creswell & Clark, 2011; Driscoll, et al., 2007).

In explanatory sequential design the qualitative data is utilized with the goal of explaining the results collected from the quantitative data analysis. In general, the quantitative part of the study is more central to the study where the qualitative study usually plays a supporting role. In this method, the researcher analyzes the results collected from the quantitative process and tries to provide further detail and explanation to the quantitative study by utilizing the results from the qualitative study.

4.2 Methodology

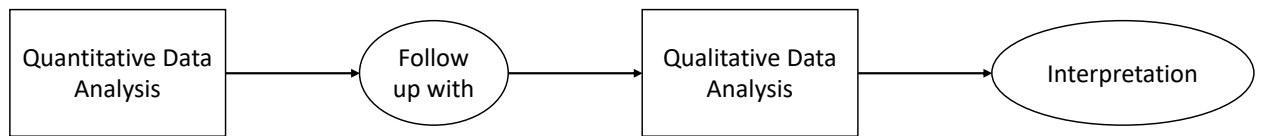
This section explains the details and the components of the explanatory sequential design which is a type of mixed method research by discussing which quantitative and qualitative methods will be used for the study.

A research methodology known as an explanatory sequential design combines quantitative and qualitative methodologies to explore a phenomenon. Data is gathered and examined at the study's initial phase utilizing quantitative techniques, such as experiments or surveys. This stage aims to give a comprehensive overview of the phenomenon and spot any trends or patterns.

The second phase involves developing explanations for the phenomenon under study using the findings from the quantitative phase. Typically, during this stage, data is gathered and analyzed utilizing qualitative techniques like focus groups and interviews. By examining the phenomenon from many angles and offering explanations for the patterns and trends found in the quantitative phase, the objective of this phase is to provide a more in-depth understanding of it.

Researchers can combine the advantages of both quantitative and qualitative methodologies using the explanatory sequential design, which results in a more thorough and complex knowledge of the topic under study. When researching complicated phenomena that are difficult to measure or capture with a single research tool, this strategy can be especially helpful.

Figure 16 - Explanatory Sequential Design Flow



The table below is a representative flow of the research design and methods that will be employed throughout the study.

Table 5 - Illustrative Flow of the Explanatory Sequential Mixed Method Research Design

Phase	Process	Output
1. Quantitative Data Collection	Online Survey	Numeric Data
2. Quantitative Data Analysis	Data Screening Frequency Analysis Means SPSS Software Analysis	Descriptive Statistics, Linearity
3. Snowball Sampling: Online Survey	Participant selection Developing survey questions	Survey Protocol
4. Qualitative Data Collection	Individual in-depth face-to-face meeting	Interview Transcripts, Written Questionnaires
5. Qualitative Data Analysis	Coding and thematic analysis Case theme development Cross-thematic analysis	Codes and Themes Similar and different themes
6. Consolidation of Quantitative and Qualitative Results	Evaluation and explanation of results from both studies	Discussion Implications Future Research

4.2.1 Quantitative Method – Cross-Sectional Design Method

For the quantitative part of the mixed method research, a quantitative cross-sectional survey will be conducted to collect data regarding the variables selected for the study. The quantitative data will be collected through the online survey that will be distributed to participants who are senior leaders who have either strategic decision-making roles or have strategic decision-making experience.

4.2.2 Qualitative Method – Phenomenological Design Method

For the qualitative part of the study phenomenological design method for conducting the qualitative part of the study. Like in all explanatory consequential studies, the qualitative study follows the quantitative studies' results. Therefore, the qualitative study will be conducted after the quantitative part of the study is executed. Phenomenology is a research methodology that has transformed into a that aims to capture the actual details behind an individual's lived experience in the past (Creswell, 1998). The overall goal of a phenomenological research is to comprehend and explain a certain phenomenon and gather details of the individual's perceived life experience (Moustakas, 1994).

4.3 Data Collection and Sampling

This section discusses how the samples will be collected to gather data that will be used for analyzing the results and findings of the study.

4.3.1 Quantitative Research Sampling and Data Collection

For the quantitative part of the study, an online survey that contains all the items that are previously formed by other scholars will be used. Snowball sampling method will be used for the sampling process where the initial list of participants will be asked to reach out or provide reference other suitable participants. An initial list of eligible participants will be identified and contacted. This initial list will consist of executives who either have current executive roles with strategic decision-making responsibility or who have experience with strategic decision making in the past. The proposed list of participants will include a diverse variety of companies ranging from startups to SMEs to large enterprises. A list of these companies was generated through some publicly or privately available databases and indexes such as:

- Startupswatch.com – Turkey’s leading database that includes detailed information on all the start-ups that are active in Turkey
- Deloitte Fast 50 – Is an award program that tracks the performance of rising or scaling technology companies in Turkey
- Fortune 500 – Is a list generated by Fortune Magazine Turkey that ranks the largest 500 companies in Turkey
- ISO 500 – Is a list generated by the Istanbul Chamber of Industry that ranks the largest 500 and 1000 companies that are active in the Turkish market

The sources above sum up to total of roughly 3200 companies that are active in the Turkish market. Based on the size and the scale of these companies a total number of approximately 15,000 potential CEO and/or C-level participants can be reached. According to (Gray, 2004), recommended sample population for a research study needs to be above 10,000 samples and the recommended sample size for a research study with over 10,000 sample population needs to be above 370 participants using a 95% confidence level. Therefore, since the sample population will be above the recommended population, the target sample size will be more than 370 participants.

4.3.2 Qualitative Research Sampling and Data Collection

The qualitative part of the study will involve a semi-structured interview with executives that have experienced strategic decision making in their careers. According to (Cresswell, 2014), an appropriate sample size for a phenomenological study must have between 3-10 respondents where this number can go up to 25 respondents if possible. For this research, the researcher aims to come up with a sample of 12 participants, who share relatively similar professional backgrounds, by using a homogenous sampling method.

4.4 Measures and Operationalizations

This section discusses what measures and techniques will be used for the research study as well as how these measures will be operationalized in order to meet validity, reliability, and generalizability criteria.

4.4.1 Quantitative Research Measures

The research model measures and constructs are summarized in the table below. Details of these measures will be discussed in the next sections.

Table 6 - Research Model Measures and Constructs

Construct	Measure	Source
Transactional Leadership	9 item scale	(Flood, et al., 2000)
Transformational Leadership	21 item scale	(Flood, et al., 2000)
Laissez-Faire Leadership	3 item scale	(Flood, et al. 2000)
Internal Advice Seeking	3 item scale	(McDonald & Westphal, 2003)
External Advice Seeking	3 item scale	(McDonald & Westphal, 2003)
Decision Speed	3 item scale	(Wally & Baum, 1994)
Decision Quality	3 item scale	(Amason, 1996)

4.4.1.1 Independent Variables – Leadership Styles

The independent variables in the research model which are the leadership styles (transactional, transformational, and laissez-faire) will be measured by using the scale developed

by (Flood, et al., 2000). The survey items will be based on a 5-point Likert scale which will range from “strongly agree” to “strongly disagree”.

Transactional leadership will be measured by a 9-item scale. Transformational leadership will be measured by a 21-item scale. Laissez-faire leadership scale will be measured by a 3-item scale.

In their work, Flood et al. (2000), analyzed leadership based on four different categories which are authoritarian, laissez faire, transactional and transformational by using a 5-point Likert scale. Leadership style questionnaire was answered by the TMT members of the organization. Reliabilities of all leadership-style measures were well above the acceptable boundaries which ranged between 0.82 and 0.97. Then, a one-way ANOVA analysis was conducted with leadership styles and dependent variables and results showed that F-ratios were quite significant except for laissez-faire leadership ($F=1.247$, $p=0.11$). In addition, inter-rater reliability values were also at acceptable levels (above 0.70) for each leadership style. As a final analysis on the factor structure of the scales, a confirmatory analysis was conducted and one-factor model resulted with a chi-square value of 4925.8, with 779 degrees of freedom whereas the four-factor model resulted with a chi-square value of 2993.7, with 773 degrees of freedom. Root-mean square error of approximation was 0.104, and the comparative fit index was 0.733. The result is not an excellent fit but is a clear representation of the dominance of the four-factor model over one-factor model.

4.4.1.2 Moderating Variables – Advice Seeking Behavior

The moderating variables in the model which are the types of advice seeking behavior (internal and external) will be measured by the scale developed by (McDonald & Westphal, 2003). The survey items will be based on a 7-point Likert scale which ranges from “not at all” to “to a great extent”.

Reliability test of this scale resulted in a rather high Cronbach alpha value at 0.90. After the original survey, McDonald and Westphal (2003), asked the participants to share the names of the managers at other firms who they asked for advice and the results showed that the number of advice-seeking interaction with mentioned individuals for each question in the scale was on average above 95%. McDonald and Westphal (2003), then compared the kappa coefficients for advice-seeking related items and kappa coefficients for each item was well above 0.75 which is an indicator of excellent level of agreement.

4.4.1.3 Dependent Variables – Strategic Decision Outcomes

The dependent variables in the study will be measured by using several scales developed by various researchers. Decision speed will be measured by a scale developed by (Wally & Baum, 1994) which is 3 item scale with 5-point Likert scale that ranges from “strongly agree” to “strongly disagree”. Decision quality will be measured by using (Amason)’s 3 item scale based on 4-point Likert scale which ranges from “poor” to “excellent”.

4.4.2 Control Variables

The research will use a set of control variable to enhance the internal validity of the construct and to make sure that the influence of extraneous variables is kept at minimum.

The first control variable in the study is the *firm size* because the size of the organization has a key role in how the organization functions and how decisions taken by the top management can be executed. The second control variable in the study will be *CEO tenure* as inexperienced CEOs might be in need of strategic advice early in their roles. *TMT size* is also one of the control variables that will be used in the study because this could be a crucial factor that can influence the advice seeking behavior of the CEO. Finally, a control variable for *Formalized decision making* will also be used because depending on the organizations formalized procedures and processes the advice seeking behavior might be affected.

4.4.3 Qualitative Research Design

For the qualitative research phase of the study, phenomenological qualitative research, which is both a philosophy and a type of qualitative research which was coined by (Husserl) around 1970, will be conducted. The purpose of employing a phenomenological study in the research is to both support the findings from the quantitative study and also explore the “affective, emotional, and often intense human experiences” (Merriam & Tisdell, 2016) related to the effect of leadership style on advice seeking behavior and its consequential impact on the strategic decision outcomes. The fundamental data collection method for the study will be to conduct a semi structured interview with selected participants.

The questionnaire of the interview will be structured in a way to explore how, what and in which circumstances the experience of the selected participants reflects on the utilization of advice in the strategic decision-making process and how this results in terms of different strategic decision outcome variables such as speed, quality, and effectiveness.



4.5 Pilot Study

Pilot study is often seen as a feasibility study that is a smaller version of a full-scale research study. Pilot studies are an essential process in a research study as it guides the researchers on how the final research study should be conducted. A pilot study does not ensure a successful execution of the main research, but it does help the researchers validate or revisit their research questions, identify the best approaches to conduct the study and determine what kind of additional work will be required to conduct a final full-scale research study with a greater chance of success.

According to (van Teijlingen & Hundley, 2001), there are various reasons for doing a pilot study that include:

- 
- *Developing and testing adequacy of research instruments*
 - *Assessing the feasibility of a (full- scale) study/survey*
 - *Designing a research protocol*
 - *Assessing whether the research protocol is realistic and workable*
 - *Establishing whether the sampling frame and technique are effective*
 - *Assessing the likely success of proposed recruitment approaches*
 - *Identifying logistical problems which might occur using proposed methods*
 - *Estimating variability in outcomes to help determining sample size*
 - *Collecting preliminary data*
 - *Determining what resources (finance, staff) are needed for a planned study*
 - *Assessing the proposed data analysis techniques to uncover potential problems*
 - *Developing a research question and research plan*

- *Training a researcher in as many elements of the research process as possible*
- *Convincing funding bodies that the research team is competent and knowledgeable*
- *Convincing funding bodies that the main study is feasible and worth funding*
- *Convincing other stakeholders that the main study is worth supporting*

According to (Hazzi & Maldaon, 2015), pilot studies cannot be used for testing hypotheses and a formal sample size for a pilot study should be between 10-20% of the targeted sample size of the main research.

A quantitative survey-based pilot study was conducted with a small scale of participants in an attempt to check whether the scales and items for the study are reliable and suitable for a broader experiment that will reach to a greater number of participants. The survey was sent to 40 different individuals selected based on the targeted audience of the research who were then asked to share the survey with their network. As a result, a total of 64 responses were received. The initial target for the pilot study was to reach out to 50 respondents. Hence, the final number of responses received are well above the number of this target sample size.

As mentioned in previous chapters, the purpose of this study is to find answers to the following research questions and the questionnaire was designed based on the available and appropriate scales that are previously used in the literature:

Research Questions:

- *How do strategic decision-making processes and strategic advice seeking behavior change according to the different types of leadership at the upper echelon level in organizations?*

- *What kind of sources of advice do CEOs and top management teams select and utilize for seeking aid in their strategic decision-making process?*
- *What kind of sources of advice do CEOs and top management teams select and utilize based on their leadership style?*
- *What is the effect of using internal resources on strategic decision outputs?*
- *What is the effect of using external advisory sources on strategic decision outcomes?*
- *What is the effect of using hybrid or mixed teams of advice on strategic decision outcomes?*

This chapter aims to present the data collection strategy, data analysis and statistical findings of the pilot study along with description of the data with descriptive statistics, assumptions and inferential statistics that are suitable for such a study.

4.5.1 Data Collection

For collecting the data, a survey was designed and uploaded on a Google Forms survey. This form was used as the main source of collecting the data. The survey was conducted anonymously. The questions in the survey did not include any personal data and none of the respondents were directed to survey directly. A formal message regarding the aim and the purpose of the survey along with a link was shared with all potential participants. These participants were then asked to share it with their network who fit with the overall targeted sample group which are mentioned in the previous chapters. Additionally, no demographic data was collected as it was not the purpose of the study.

The survey was conducted over a period of 60 days and the invitations were sent to these potential participants in the meantime. The survey was kept open and accessible after these 60

days to receive any additional responses. Finally, the final list of responses was collected on June 8th, 2022, which was a total of 64 responses. The data was then downloaded on an excel spreadsheet and was processed accordingly to export into SPSS for further analysis. Data obtained from the study was coded, keyed, and stored in the SPSS software version 28.0.1.1. Before doing any statistical study for the pilot study such as reliability analysis, etc. the data went through a data screening process to identify if there are any outliers and/or missing data. As a result of this data screening process, no outliers or missing data was found that required additional process on the data.

The questionnaire consisted of 8 main sections of which are:

- 
- a) Introductory questions that included questions regarding control variables
 - b) Questions regarding transformational leadership style
 - c) Questions regarding transactional leadership style
 - d) Questions regarding laissez-faire leadership style
 - e) Questions regarding external advice seeking
 - f) Questions regarding internal advice seeking
 - g) Questions regarding decision speed
 - h) Questions regarding decision quality

4.5.2 Descriptive Statistics of the Sample

An introductory section that includes questions regarding the control variables were included in the study. Table 7 represents the overall descriptive statistics of these responses.

Firm Size. A questionnaire that included 5 different choices for the firm's size were presented to the participants. As widely accepted, as the firm's size grows bigger the decision processes and mechanisms tend to get more complex and most of the time more bureaucratic. Therefore, these questions were asked to see if there was any relationship between the firm's size and advice seeking behavior as well as the speed and the quality of these strategic decisions.

Firm Age. Another questionnaire used as a control variable in the study is the firm's age. This questionnaire included 4 items investigating the lifespan of the companies that the respondents are working in. Like the firm size, firm age is also an important factor that could potentially impact the overall strategic decision-making process and hence the outcome of these decisions. Therefore, these questions were asked to see if there is such relationship between advice seeking and decision outcomes.

CEO Tenure. As the key person in any organization. The CEO as the decision maker has a great influence over the strategic decision-making process and the CEO's leadership style could potentially change over the course of their tenure in a given organization. Therefore, a questionnaire that included 4 items asking about the tenure of the CEO in the organization were presented to the respondents to see if there is relationship between leadership styles, advice seeking behavior and decisional outcomes.

TMT Size. Another important antecedent in the strategic decision-making literature is the upper echelon's theory that studies the influence of the top management teams in the strategic decision-making process. Therefore, a questionnaire with 4 items regarding the TMT size was also included in the study to see if the size of the TMT influences the decision-making process and the decisional outcomes.

Formal Decision Process. The final control variable used in the study was a 2-item questionnaire which was simply consisted of a yes or no question investigating to see if there is any formal decision-making process in the organization. The aim of this variable to see if structured and formal decision process in an organization has an effect on the overall decision-making process and its outcomes.

Table 7 - Descriptive Statistics of the control variables (n=64)

Variable	N	%
Firm Size		
1-10 employees	8	12.5%
11-100 employees	10	15.6%
101-1000 employees	11	17.2%
1001-5000 employees	16	25.0%
5000+ employees	19	29.7%
Firm Age		
<1 year	7	10.9%
1-3 years	10	15.6%
3-7 years	18	28.1%
7+ years	29	29.7%
CEO Tenure		
<1 year	10	15.6%
1-3 years	27	42.2%
3-7 years	21	32.8%
7+ years	6	9.4%
TMT Size		
1 person	3	4.7%
2-4 people	30	46.9%
4-8 people	16	25.0%
8+ people	15	23.4%
Formal Decision Process		
Yes	32	50%
No	32	50%

decision-making process in the organization. The aim of this variable to see if structured and formal decision process in an organization has an effect on the overall decision-making process and its outcomes.

4.5.3 Reliability Analysis

The purpose of the reliability analysis is to check whether the results generated through instruments used in the research are stable and consistent every time they are executed meaning that they have an “error-free” nature (Sekaran, 2003). The most widely accepted method of assessing reliability is to look at the Cronbach’s alpha coefficient which is also referred to as internal consistency reliability. There are also other ways for checking reliability such as test-retest method and alternate-form reliability, but this study will focus on the internal consistency reliability method where SPSS will be used to assess the Cronbach’s alpha values for each factor.

The internal consistency method reveals whether the results of the study generated through the scales will be similar over time with different sample groups and under uncontrollable conditions. The reliability analysis also demonstrates that the instruments are evenly distributed, and they can assess the model independently. It also shows that the participants in the study have the same understanding of each item.

For an instrument to be deemed reliable, the internal consistency should be assessed at least two times. Therefore, in attempt to satisfy this criterion, the items will be evaluated more than once during the pilot and the main study.

Previous researchers have different theoretical opinions when it comes to the appropriate value for Cronbach’s alpha. According to Hair, et al., 2011, the ideal value for Cronbach’s alpha should be above 0.7. On the other hand, (Sekaran, 2003) states that a value that is below 0.6 is considered unsatisfactory whereas a value around 0.7 can be satisfactory and any value above 0.8

can be considered as highly satisfactory. Hence, as a generally accepted rule a Cronbach's alpha value of 0.7 can be viewed as the threshold for an acceptable value.

After running the reliability analysis on the SPSS software, the Cronbach's value for each variable was well above 0.8 which means all of the items are highly reliable and acceptable.

Table below shows the results of this reliability analysis for each variable.

Table 8 - Reliability Analysis Results

Variables	Number of items	Cronbach's Alpha
Transformational Leadership	21	.980
Transactional Leadership	9	.934
Laissez-Faire Leadership	3	.903
Internal Advice Seeking	3	.927
External Advice Seeking	3	.910
Decision Speed	3	.884
Decision Quality	3	.995

4.5.4 Factor Analysis

Factor Analysis is one of the most widely utilized multivariate analysis methods for evaluating the validity of the constructs in a research study. One of the main goals of factor analysis is to identify and cluster a large group of correlating variables by reducing them into a smaller group of factors or components that are represented under a shared dimension. Factor analysis helps the researchers recognize a set of variables that tend to move synchronously as a group. These movements are distinguished through factor rotation and extraction.

In order to assess whether a given set of data is suitable for factor analysis, researchers need to pay attention to two main points which include the size of the sample and the strength of

the correlation between the variables. For assessing the validity of the sample size, the generally accepted and used test is referred to as Kaiser-Meyer-Olkin (KMO) test whereas Bartlett's test of sphericity is used for checking the robustness of the association between the variables.

For a sample size to pass the KMO test, KMO value should be greater than 0.5. Although there are different views on what this value should be, most researchers suggest that 0.5 should be the cut-off value. Any value between 0.5 and 0.7 is an average score whereas values between 0.7 and 0.8 are viewed as good and values above 0.8 are viewed as highly satisfactory.

On the other hand, the Bartlett's Test of Sphericity can be used for several purposes. One is to assess the multivariate normality of a set of distributed variables. The other is to see if the original correlation matrix of the null hypothesis produces an identity matrix. To pass the Bartlett Test of Sphericity, the significance value should be below 0.05 which means that an identity matrix is not formed, and the data carries multivariate normality which allows for additional analysis.

In factor analysis, factor extraction is used to identify a smaller group of factors which can represent the overall relationship between the variables. To identify these smaller sets of factors or component, numerous methods can be applied to decide which of the should be retained. One of the most utilized approaches is called the Eigen value rule or the Kaiser's criteria. According to this approach, factors that have Eigen values above 1 that can represent 70-80% of the variance are eligible for retention. Another method of identifying these factors is to use a Scree Plot which shows the factors with Eigen values above 1 on a chart.

As there are multiple ways to conduct a factor analysis, one of the most widely used approaches in the literature which is called Principal Component Analysis (PCA) will be used for this research. Even though, PCA is not a factor analysis however, both methods can provide very analogous results.

First, a total of 33 items regarding 3 different leadership styles which are transformational, transactional, and laissez-faire leadership were measured using SPSS. As a first step, the sufficiency of the sample size is checked through the KMO test to see whether the value is above 0.5 as the bare minimum. The KMO test results for this set of variables was 0.889 which is well above the expected value and a great indicator for the adequacy of the sample size. As a second step, Bartlett Test of Sphericity was conducted to observe the statistical significance to check whether the correlation matrix is factorable. The results showed that the significance value was below 0.001 which is a strong indicator that the factors are highly correlated.

Table 9 - KMO and Bartlett's Test for Leadership Styles

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.889
Bartlett's Test of Sphericity	Approx. Chi-Square	2066.464
	df	528
	Sig.	<.001

Principal component analysis also revealed that these variables can be grouped under 3 factors as expected and the total variance of these 3 factors is around 72%.

Table 10 – Scree Plot Factors for Leadership Styles

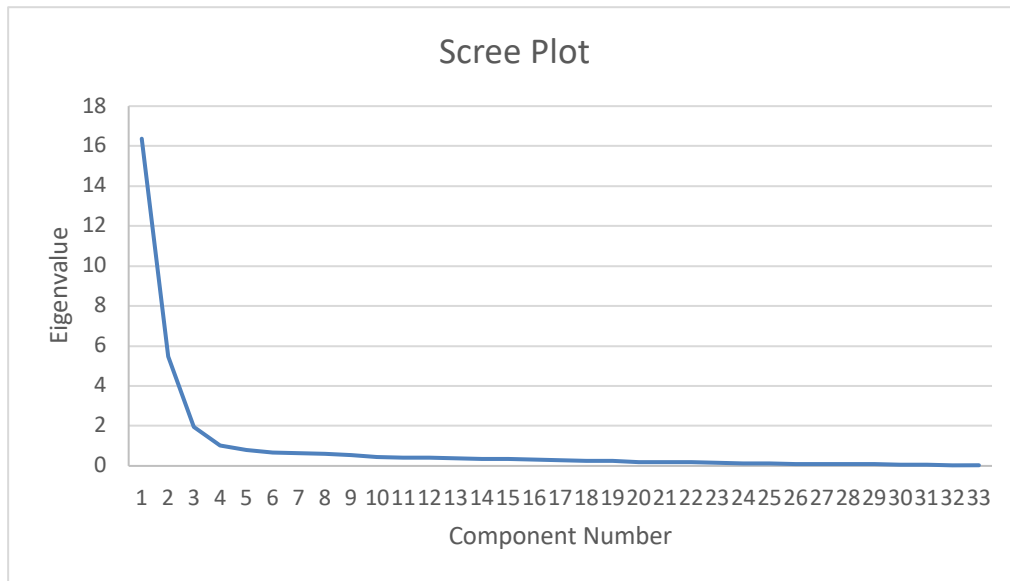


Table 11 - Labeling of Factors for Leadership Styles

	Component		
	1	2	3
Leadership Styles			
Factor 1: Transformational Leadership			
The CEO's ideas have forced me to rethink some of my own ideas which I had never before.	.952		
The CEO makes me enthusiastic about assignments.	.896		
The CEO provides a clear vision of where we are going.	.895		
The CEO provides a clear vision of who and what we are.	.892		
The CEO heightens my motivation to succeed.	.887		
The CEO enables me to think about old problems in new ways.	.868		
The CEO provides his/her vision of our organization to me	.863		
The CEO stimulates my efforts to excel.	.861		
There is no doubt that the CEO is very visionary.	.856		
The CEO makes me feel good to be around him/her.	.851		
The CEO encourages me to expect high performance from myself.	.841		
The CEO provides me with new ways of looking at things which used to be a puzzle.	.836		
The CEO provides me with reasons to change the way I think about problems.	.828		
The CEO provides a vision to our organization.	.812		
The CEO increases my optimism for the future.	.805		
The CEO encourages me to think I can do very well in my work.	.802		

Because of the CEO, I do more than expected I could do.	.792	
The CEO motivates me to do more than I originally expected I would do.	.785	
The CEO inspires me to get a lot more done than I could have if the CEO was not around.	.756	
I am ready to trust the CEO to overcome any obstacle.	.749	
The CEO arouses in me the effort to work harder and better.	.723	
Factor 2: Transactional Leadership		
The CEO establishes my goals for me	.856	
The CEO makes decisions about my compensation mainly on performance.	.844	
The CEO establishes the goals for my work	.841	
The CEO sets goals for my performance.	.839	
The CEO makes my compensation contingent upon my performance.	.839	
The CEO determines my compensation based on my performance.	.800	
I am ready to trust the CEO to overcome any obstacle.	.743	
The CEO establishes my performance goals.	.721	
The CEO will make sure I'm compensated more if I perform well.	.718	
Factor 3: Laissez-Faire Leadership		
No-one, including myself, expects much of me in terms of performance		.925
No-one, including myself, is providing any vision for our organization.		.857
No-one, including myself, is solving the problems of my job.		.807

Extraction Method: Principal Component Analysis.

Rotation Method: Oblimin with Kaiser Normalization.

a. Rotation converged in 3 iterations.

Then, a total of 6 items regarding different sources of advice seeking behavior which are internal and external advice seeking were measured using SPSS. As a first step, the sufficiency of the sample size is checked through the KMO test to see whether the value is above 0.5 as the bare minimum. The KMO test results for this set of variables was 0.761 which is well above the expected value and a great indicator for the adequacy of the sample size. As a second step, Bartlett Test of Sphericity was conducted to observe the statistical significance to check whether the correlation matrix is factorable. The results showed that the significance value was below 0.001 which is a strong indicator that the factors are highly correlated.

Table 12 - KMO and Bartlett Test Results for Sources of Advice

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.761
Bartlett's Test of Sphericity	Approx. Chi-Square	280.272
	df	15
	Sig.	<.001

Principal component analysis also revealed that these variables can be grouped under 2 factors as expected and the total variance of these 2 factors is around 86%.

Table 13 – Scree Plot for Sources of Advice

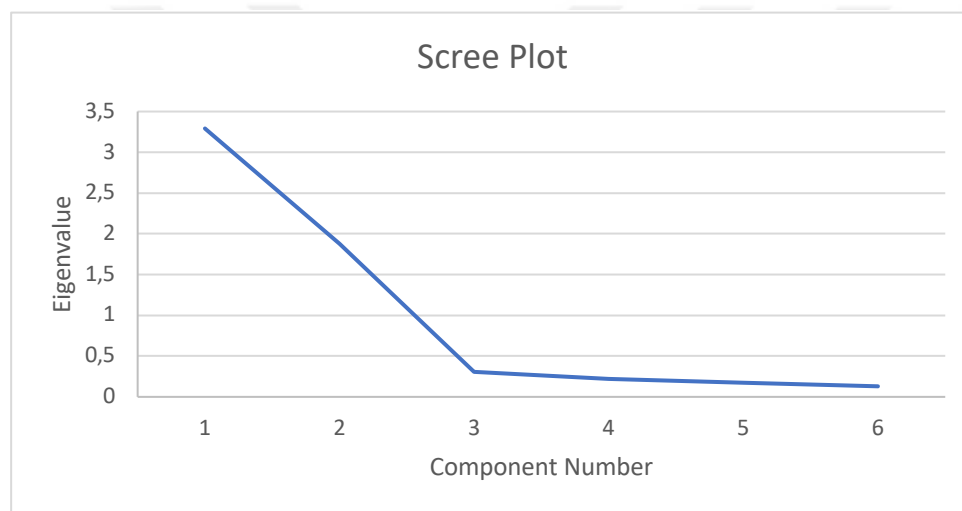


Table 14 - Labeling of Factors for Sources of Advice

	Component	
	1	2
Sources of Advice		
Factor 1: Internal Advice Seeking		
... ask for advice from managers of your own organization about the future strategy	.953	
... frequently use advisers from your own organization	.944	
... ask for advice from managers of your own organization about the current strategy	.907	
Factor 2: External Advice Seeking		
...ask for advice from managers of other organizations about the future strategy		.927
...ask for advice from managers of other organizations about the current strategy		.922

...frequently use advisers from other organizations	.914

Extraction Method: Principal Component Analysis.

Rotation Method: Oblimin with Kaiser Normalization.

a. Rotation converged in 5 iterations.

Finally, a total of 6 items regarding decisional outcomes which are decision speed and decision quality were measured using SPSS. As a first step, the sufficiency of the sample size is checked through the KMO test to see whether the value is above 0.5 as the bare minimum. The KMO test results for this set of variables was 0.764 which is well above the expected value and a great indicator for the adequacy of the sample size. As a second step, Bartlett Test of Sphericity was conducted to observe the statistical significance to check whether the correlation matrix is factorable. The results showed that the significance value was below 0.001 which is a strong indicator that the factors are highly correlated.

Table 15 - KMO and Bartlett Test Results for Decisional Outcomes

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.764
Bartlett's Test of Sphericity	Approx. Chi-Square	588.031
	df	15
	Sig.	<.001

Principal component analysis also revealed that these variables can be grouped under 2 factors as expected and the total variance of these 2 factors is around 90%.

Table 16 – Scree Plot for Decisional Outcomes

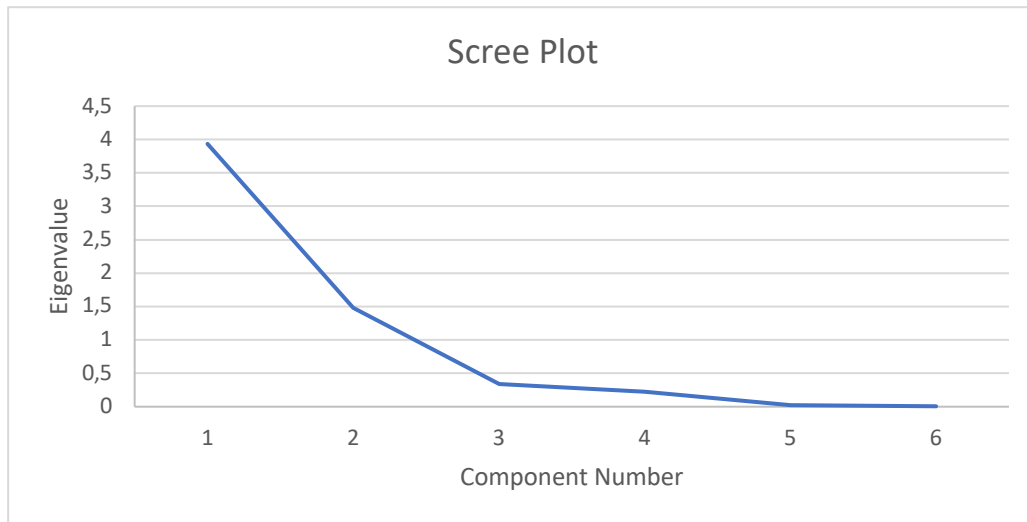


Table 17 - Labeling of Factors for Decisional Outcomes

	Component	
	1	2
Decisional Outcomes:		
Factor 1: Decision Quality		
The quality of the decision given its effect on organizational performance	.996	
The overall quality of the decision	.996	
The quality of the decision relative to its original intent	.993	
Factor 2: Decision Speed		
From start to finish we respond faster than our competitors to problems		.929
When this company sees an opportunity, it can move faster than its competitors		.926
Our competitors consider us fast in responding to their actions.		.844

Extraction Method: Principal Component Analysis.

Rotation Method: Oblimin with Kaiser Normalization.

a. Rotation converged in 4 iterations.

5 Chapter 5: Analysis and Findings

This chapter discusses the findings of a mixed-methods investigation into the relationship between different leadership styles, advice seeking behavior and decision outcomes. Following a summary of the research and methodology, the quantitative and qualitative findings that address each research topic are discussed. An explanatory sequential design was used to collect quantitative data followed by qualitative data (Creswell & Plano, 2018). For each demographic characteristic, descriptive statistics were applied to the assembled data. Following discrete analysis, the data were combined for cross-case comparison and interpretation, enabling the researcher to identify points of convergence or divergence. This chapter contains the conclusions from descriptive statistics and multiple regression.

5.1 Introduction

The data analysis and findings portion of this paper presents the study's outcomes and gives a thorough analysis of the obtained data. This section is a key component of the paper since it gives the evidence supporting the research hypothesis and the study's conclusions.

Analysis of data is a crucial element of any research work. It enables researchers to delve deeply into obtained data, revealing hidden patterns and trends that can yield significant insights. Researchers can increase our understanding of the world by developing hypotheses, testing ideas, and drawing conclusions based on rigorous data analysis. With the use of potent data analysis tools and methodologies, researchers are able to easily and swiftly filter through vast amounts of data to extract the most pertinent and significant information. Whether evaluating a tiny piece of data or a big and complicated dataset, data analysis is an essential phase in the research process, yielding useful insights that can influence and drive future study.

In this part, the paper describes the results gathered through surveys and analyzes the data, including any statistical techniques or software. The result of the study is presented with relevant tables, figures, and graphs to illustrate the major conclusions in a clear and succinct manner.

This section on data analysis and findings also addresses the relationship between the findings and the study questions or hypotheses, noting any unexpected or unanticipated results. Overall, the data analysis and findings section give a full and exhaustive study of the acquired data, presenting the results in a clear and simple manner.

5.2 Results of the Quantitative Study

The data collection occurred over the course of four months between July-November 2022. By using different sources of touchpoints such as WhatsApp, LinkedIn, forums etc., the survey generated on Google Forms platform was sent to 286 initial participants. These participants were reminded of the survey several times to check if they have submitted their response and also shared it with their colleagues. Then, these participants were asked to share the survey with their colleagues who they deemed would be relevant for such a study. As mentioned before the minimum number of participants were estimated to be around 370 respondents. However, at the end of four months a total number of 452 participants were reached.

The data were inspected for missing values. A screening of the data revealed no missing values, as all participant replies were complete; hence, no participants were excluded from this research project.

SPSS version 29.0.0 was employed to analyze the data gathered through the questionnaire. To begin, the participants' primary features were identified using descriptive analysis. Second, factor analysis and reliability studies of research concepts were performed using statistical methods. Cronbach's coefficient alpha was used to examine the degree of consistency between different measures, which is related to reliability.

To reduce the number of factors and the number of variables, "Principal Component Analysis" (PCA) was used in factor analysis to group together the variables that were shown to be significantly connected with one another. The "Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy" and the "Bartlett's Test of Sphericity" were used as benchmarks for determining whether or not research data is adequate for structure detection. When KMO is really large, it signifies that all scale variables can be predicted with absolute certainty using only other scale variables. When the value of the KMO test is under 0.50, it is assumed that factor analysis cannot be continued. The significance level of Bartlett's test is predicted to be lower than 0.05. (Hair et al, 2011).

For the purpose of determining the nature and strength of the connection between variables, regression analyses were performed.

5.2.1 Descriptive Statistics of the Sample

The table below shows data on various factors related to firms. The first factor is firm size, which is divided into five categories: 1-10 employees, 11-100 employees, 101-1000 employees, 1001-5000 employees, and 5000+ employees. The second factor is firm age, which is divided into four categories: less than 1 year, 1-3 years, 3-7 years, and 7+ years. The third factor

is CEO tenure, which is divided into four categories: less than 1 year, 1-3 years, 3-7 years, and 7+ years. The fourth factor is TMT size, which is divided into four categories: 1 person, 2-4 people, 4-8 people, and 8+ people. The fifth factor is the formal decision-making process, which is divided into two categories: yes and no. The table also provides the number (N) and percentage (%) of firms in each category.

For firm size, the largest category is firms with 5000+ employees, with 28.3% of firms falling into this category. The smallest category is firms with 1-10 employees, with 14.2% of firms falling into this category.

For firm age, the largest category is firms that are 7+ years old, with 48.2% of firms falling into this category. The smallest category is firms that are less than 1 year old, with 8.4% of firms falling into this category.

For CEO tenure, the largest category is CEOs with 1-3 years of tenure, with 43.6% of firms falling into this category. The smallest category is CEOs with less than 1 year of tenure, with 21.7% of firms falling into this category.

For TMT size, the largest category is TMTs with 4-8 people, with 42.3% of firms falling into this category. The smallest category is TMTs with 1 person, with 5.3% of firms falling into this category.

For formal decision process, the largest category is firms with a formal decision process, with 39.8% of firms falling into this category. The smallest category is firms without a formal decision process, with 60.2% of firms falling into this category.

Table 18 - Descriptive Statistics of the control variables (n=452)

Variable	N	%
Firm Size		
1-10 employees	64	14.2%
11-100 employees	77	17.0%
101-1000 employees	92	20.4%
1001-5000 employees	91	20.1%
5000+ employees	128	28.3%
Firm Age		
<1 year	38	8.4%
1-3 years	67	14.8%
3-7 years	129	28.5%
7+ years	218	48.2%
CEO Tenure		
<1 year	98	21.7%
1-3 years	197	43.6%
3-7 years	108	23.9%
7+ years	49	10.8%
TMT Size		
1 person	24	5.3%
2-4 people	173	38.3%
4-8 people	191	42.3%
8+ people	64	14.2%
Formal Decision Process		
Yes	180	39.8%
No	272	60.2%

5.2.2 Mean Value Analysis of Research Variables

Mean values of each variable were also calculated to analyze the overall perception of the respondents. The table presents statistics related to leadership styles, decision-making, and the use of advice. Each row in the table represents a different variable, and each column contains data about that variable. The first column lists the name of the variable, the second column specifies the Likert scale used to measure the variable (i.e., the range of possible values), and the remaining columns provide information about the mean and standard deviation of the variable.

Overall, the table provides a snapshot of how various factors related to leadership and decision-making are perceived or measured among a given group of people. It can be used to compare the relative prevalence or effectiveness of different leadership styles, decision-making processes, or use of advice, among other things.

It appears that the most commonly used leadership style is transactional leadership, with a mean value of 3.4971 on a scale of 1 to 5. Transformational leadership and laissez-faire leadership are also used, but to a lesser extent, with mean values of 3.1808 and 2.1150, respectively.

In terms of decision-making, the data shows that decisions are made relatively quickly, with a mean value of 3.5627 on a scale of 1 to 5 for decision speed. The quality of decisions is also generally high, with a mean value of 2.8968 on a scale of 1 to 4 for decision quality.

Finally, the data indicates that both external and internal advice are commonly used, with mean values of 5.1386 and 4.3768 on a scale of 1 to 7, respectively. The standard deviation for each of these variables is relatively high, which suggests that there is significant variation in the use of advice among different individuals or groups.

Table 19 - Mean Value Analysis of Variables

Variables	Likert Scale Range	Mean Values	Standard Deviation
Transformational Leadership	1-5	3.1808	1.08461
Transactional Leadership	1-5	3.4971	1.06349
Laissez-Faire Leadership	1-5	2.1150	1.19085
External Advice	1-7	5.1386	1.42824
Internal Advice	1-7	4.3768	1.49181
Decision Speed	1-5	3.5627	1.01370
Decision Quality	1-4	2.8968	.78459

5.2.3 Reliability Analysis of Variables

The Cronbach's coefficient alpha was calculated for the reliability analysis in order to establish whether or not there was consistency in the manner in which the participants answered the questions pertaining to each factor. It is a measurement that determines whether the variables in the scale are favorably related to each other or not. The evaluation can be done either positively or negatively. The majority of researchers agree that instruments ought to have a reliability of 0.70 or higher. The data in the table below demonstrate that the items have internal consistency. Cronbach's Alpha is a "measure of reliability that runs from 0 to 1, with values of 0.60 to 0.70 being the lower limit of acceptable," according to the definition provided by Hair et al. (2011). In a similar vein, Sekaran (2003) established that a reliability coefficient of 0.6 is suggested as the lowest acceptable limit for Cronbach's Alpha (0.80 or better is considered to be "excellent," in the 0.70s is considered to be "satisfactory," in the 0.60s is considered to be "reasonable," and 0.6 is considered to be "unsatisfactory").

Table 20 - Reliability Analysis of Variables

Variables	Number of items	Cronbach's Alpha
Transformational Leadership	21	.987
Transactional Leadership	9	.969
Laissez-Faire Leadership	3	.941
Internal Advice Seeking	3	.949
External Advice Seeking	3	.939
Decision Speed	3	.915
Decision Quality	3	.857

5.2.4 Factor Analysis of Variables

There are several other reasons why factor analysis might be used in research. One reason is to simplify complex data and make it easier to understand. By identifying underlying factors, researchers can reduce the number of variables they need to consider, which can make it easier to analyze and interpret the data.

Another reason to use factor analysis is to improve the reliability and validity of research findings. By identifying and accounting for underlying factors, researchers can improve the accuracy of their results and ensure that they are not being influenced by extraneous variables.

Additionally, factor analysis can be used to test hypotheses and to identify potential relationships between variables. By identifying underlying factors, researchers can test whether these factors are related to the variables they are studying and can explore the potential connections between different variables.

Overall, factor analysis is a powerful tool that can help researchers to better understand complex data and to identify underlying patterns and trends. It is often used in a wide range of research contexts, including social science, psychology, and other fields.

5.2.4.1 Factor Analysis of Transformational Leadership

The Kaiser-Meyer-Olkin (KMO) measure is a statistic used to determine if a sample is suitable for factor analysis. Factor analysis is a statistical method for determining the underlying patterns or factors in a set of variables. These variables can then be used to describe the relationships between sample variables.

The KMO measure is determined as the sum of the squared partial correlations between all sample pairs of variables, divided by the sum of the individual variables' variances. A value of 0.9 or greater is suggestive of adequate sampling, indicating that the sample is eligible for factor analysis. A value below 0.5 is deemed insufficient, indicating that the sample is unsuitable for factor analysis.

Bartlett's test of sphericity is a statistical test used to examine whether the correlations between a collection of variables differ significantly from zero. It is based on the chi-square distribution, and the null hypothesis is that the correlations between the variables do not differ significantly from zero. The degrees of freedom (df) are equal to the number of variables multiplied by the number of variables minus one. The test statistic is determined as the sum of the squared correlations between all pairs of variables.

If the null hypothesis is rejected, the correlations between the variables are significantly different from zero, indicating that the sample is appropriate for factor analysis. If the null hypothesis is not rejected, the correlations between variables are not substantially different from zero, indicating that the sample is unsuitable for factor analysis.

Table 21 - KMO & Bartlett's Test for Transformational Leadership Items

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.988
Bartlett's Test of Sphericity	Approx. Chi-Square	12651.547
	df	210
	Sig.	<.001

In the presented example, the KMO measure is 0.988, indicating that the sample is appropriate for factor analysis. The null hypothesis may be rejected because the Bartlett's test statistic is 12651.547 and the df are 210, suggesting that the correlations among the variables are significantly different from zero. This implies further that the sample is appropriate for factor analysis.

Figure 17 - Scree Plot for Transformational Leadership Items

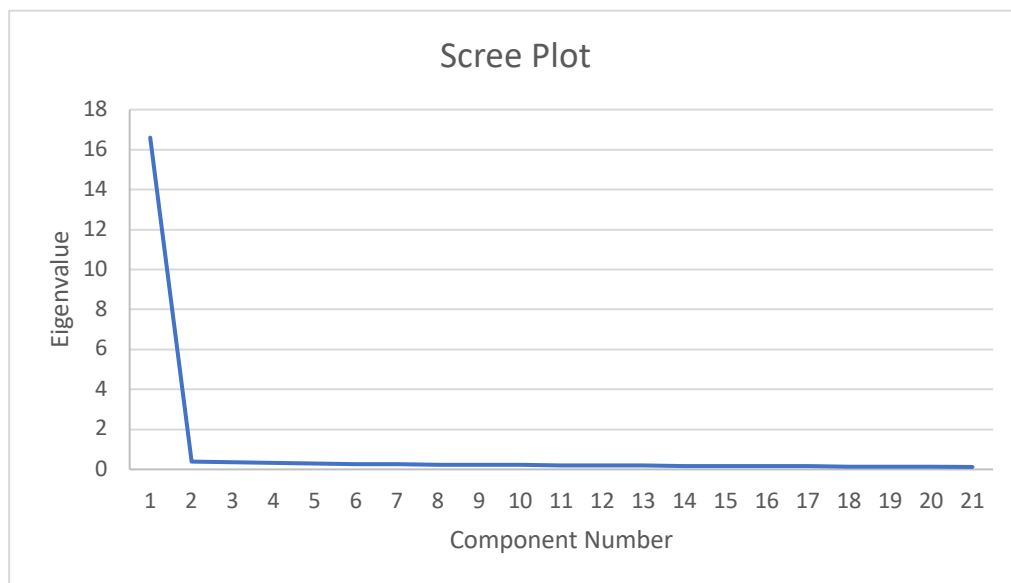


Table 22 - Factor Loadings for Transformational Leadership Items

	Factor Loadings (TFL)
The CEO encourages me to think I can do very well in my work.	.899
The CEO increases my optimism for the future.	.893
The CEO provides me with reasons to change the way I think about problems.	.878
The CEO inspires me to get a lot more done than I could have if the CEO was not around.	.869
The CEO provides a vision to our organization.	.872
The CEO arouses in me the effort to work harder and better.	.874
The CEO provides me with new ways of looking at things which used to be a puzzle.	.870
I am ready to trust the CEO to overcome any obstacle.	.880
The CEO motivates me to do more than I originally expected I would do.	.891
The CEO provides a clear vision of who and what we are.	.893
The CEO encourages me to expect high performance from myself.	.875

The CEO makes me enthusiastic about assignments.	.902
The CEO provides a clear vision of where we are going.	.900
Because of the CEO, I do more than expected I could do.	.886
The CEO enables me to think about old problems in new ways.	.886
There is no doubt that the CEO is very visionary.	.887
The CEO's ideas have forced me to rethink some of my own ideas which I had never before.	.893
The CEO makes me feel good to be around him/her.	.901
The CEO stimulates my efforts to excel.	.898
The CEO heightens my motivation to succeed.	.902
The CEO provides his/her vision of our organization to me	.917

The factor loadings in this case are the correlations between the survey responses and the determined variables through factor analysis. Factor analysis is a statistical method for identifying the underlying patterns or factors in a set of variables. Then, these variables can be used to explain the correlations between variables in the sample.

Principal component analysis is a method of factor analysis that discovers a set of underlying factors based on the correlations between the variables and the survey responses. The primary components are the factors identified during analysis, and they are ordinarily ranked by their contribution to the overall variance in the data.

The factor loadings reveal the level of correlation between each response and each of the identified factors. A high factor loading suggests a strong relationship between the response and the factor, whereas a low factor loading indicates a weak relationship. The factor loadings for each answer range between 0.877 and 0.917%, with the majority of loadings over 0.890%. This suggests that the responses have a strong correlation with the indicated component.

The factor discovered by principal component analysis might be understood as the overall perception of the CEO among the survey respondents. The high factor loadings for the majority

of responses show that the majority of respondents have a favorable opinion of the CEO and the leadership provided by that individual. This indicates that the factor found by factor analysis captures the underlying patterns of the survey results.

5.2.4.2 Factor Analysis of Transactional Leadership

A KMO rating of 0.957 indicates that the data lend themselves well to factor analysis.

The approximate chi-square value in the table you gave is 3888.648, the degrees of freedom (df) is 28, and the significance level (Sig.) is less than 0.001. This implies that the intercorrelations among the variables in the data are significantly different from zero and that the data are appropriate for factor analysis.

Factor loadings indicate the strength of the association between a specific item (in this case, a statement regarding the CEO's role in performance goals and compensation) and the overall factor (in this case, the CEO's influence on these parts of the individual's work). All of the factor loadings are relatively high in the analysis you presented, showing a strong association between the assertions and the overall factor. This indicates that the CEO has a substantial impact on the employee's performance goals and compensation, and that the individual has faith in the CEO's ability to make sound judgments in these areas.

Table 23 - KMO & Bartlett's Test Results for Transactional Leadership Items

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.957
Bartlett's Test of Sphericity	Approx. Chi-Square	3888.648
	df	28
	Sig.	<.001

Figure 18 - Scree Plot for Transactional Leadership Items

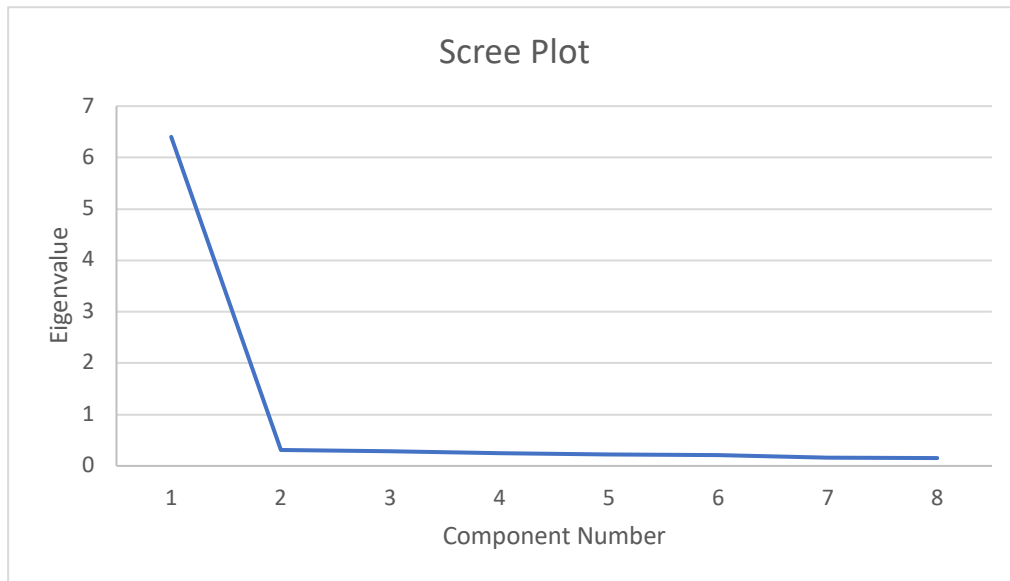


Table 24 - Factor Loadings for Transactional Leadership Items

	Factor Loadings (TXL)
The CEO establishes my performance goals.	.868
The CEO will make sure I'm compensated more if I perform well.	.889
The CEO sets goals for my performance.	.900
The CEO makes my compensation contingent upon my performance.	.897
The CEO makes decisions about my compensation mainly on performance.	.906
The CEO establishes the goals for my work	.894
The CEO determines my compensation based on my performance.	.902
I am ready to trust the CEO to overcome any obstacle.	.899

5.2.4.3 Factor Analysis of Laissez-Faire Leadership

The fact that the KMO statistic was calculated to have a value of 0.768 suggests that the data can be used for factor analysis.

In this instance, the estimated value of the chi-square statistic is 1229.479, and the p-value is less than 0.001, which indicates that we can conclude that the variables are connected

and that the null hypothesis can be rejected. This provides support for the hypothesis that the data can be utilized for factor analysis.

In this particular instance, the factor loadings have values that are very close to 1, indicating that they are quite high. This suggests that the three variables are connected to the same underlying component in an extremely close and significant way.

Table 25 - KMO & Bartlett's Test Results for Laissez-Faire Leadership Items

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.768
Bartlett's Test of Sphericity	Approx. Chi-Square	1229.479
	df	3
	Sig.	<.001

Figure 19 - Scree Plot for Laissez-Faire Leadership Items

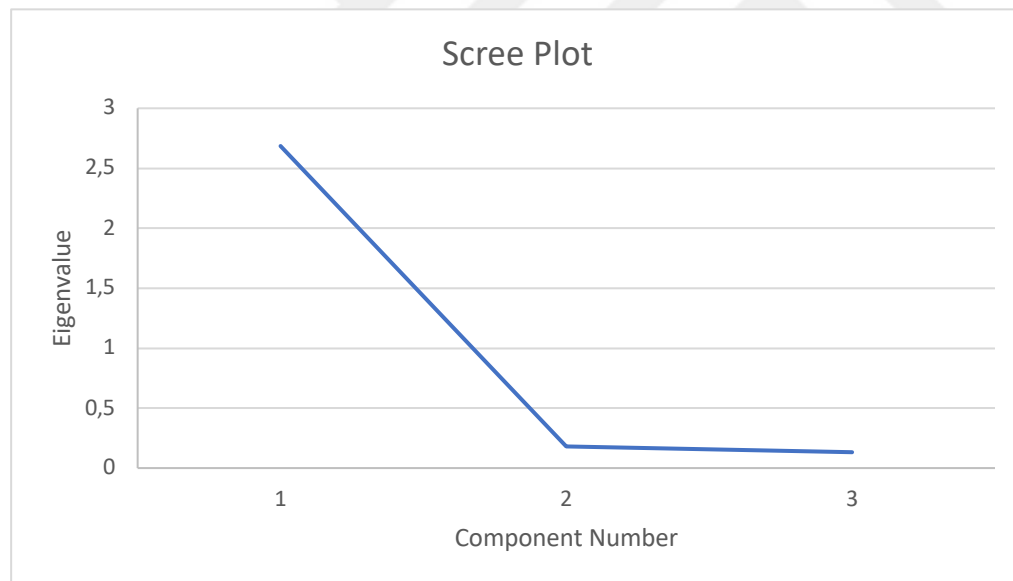


Table 26 - Factor Loadings for Laissez-Faire Leadership Items

	Factor Loadings (LF)
No-one, including myself, is solving the problems of my job.	.949
No-one, including myself, expects much of me in terms of performance	.937
No-one, including myself, is providing any vision for our organization.	.953

5.2.4.4 Factor Analysis of External Advice Seeking Behavior

With a value of 0.763, the KMO statistic demonstrates that the data can be utilized for factor analysis and suggests that it should be. Even if it is not quite as high as the value shown in the preceding illustration, this is still seen as a very good value.

A p-value that is less than 0.001 according to the Bartlett's test of sphericity suggests that the variables are connected to one another. This indicates that the data can be used for factor analysis, and the factors that are retrieved from the data will most likely be able to represent the underlying relationships that exist between the variables.

These three variables all have factor loadings that are quite high, with values that are relatively close to 1. This suggests that the variables are connected to the same underlying factor in a very close and significant way.

These three factors are all associated to requesting advice from managers of other organizations, which shows that the underlying component covered by these variables may be related to working together with people from other organizations and getting their opinions. When formulating their strategy and settling on courses of action, businesses might want to give this aspect of the situation some thought.

Table 27 - KMO & Bartlett's Test Results for External Advice Seeking Items

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.763
Bartlett's Test of Sphericity	Approx. Chi-Square	1212.839
	df	3
	Sig.	<.001

Figure 20 – Scree Plot for External Advice Seeking Items

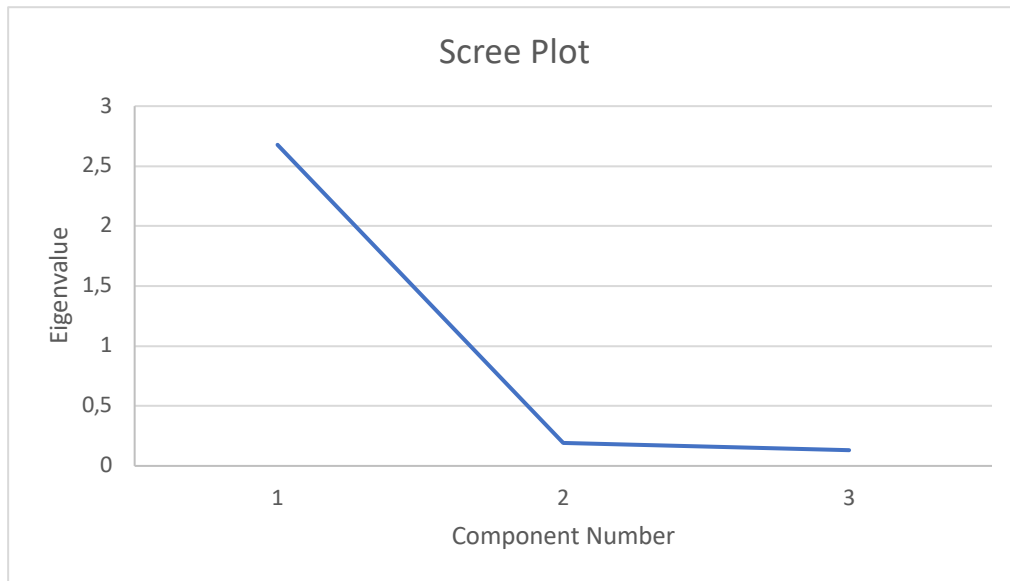


Table 28 - Factor Loadings for External Advice Seeking Items

Factor Loadings (EXTAD)	
...frequently use advisers from other organizations	.939
...ask for advice from managers of other organizations about the current strategy	.939
...ask for advice from managers of other organizations about the future strategy	.956

5.2.4.5 Factor Analysis of Internal Advice Seeking Behavior

With a value of 0.767, the KMO statistic demonstrates that the data can be utilized for factor analysis and suggests that it should be. Even though it is not quite as high as the values in the instances that came before it, this is still considered to be a very good value.

A p-value that is less than 0.001 according to the Bartlett's test of sphericity suggests that the variables are connected to one another. This indicates that the data can be used for factor analysis, and the factors that are retrieved from the data will most likely be able to represent the underlying relationships that exist between the variables.

In general, these findings suggest that the data can be used for a factor analysis, and that the factors that can be derived from the data will most likely be able to capture meaningful correlations between the variables.

These three variables all have factor loadings that are quite high, with values that are relatively close to 1. This suggests that the variables are connected to the same underlying factor in an extremely close and significant way.

These three variables are all connected to the practice of seeking advice from managers within the same organization. This suggests that the underlying factor that is being captured by these variables may be connected to working together with other employees within the organization and soliciting their input. When formulating their strategy and settling on courses of action, businesses might want to give this aspect of the situation some thought.

It is also important to note that the factor loadings for these variables are greater than the factor loadings for the previous group of variables, which were related to getting advice from managers of other organizations. This is something that should be taken into consideration. This would imply that the organization in question places a larger focus on receiving advice from those working within the organization, as opposed to seeking advice from individuals or organizations located outside of the company.

Table 29 - KMO & Bartlett's Test Results for Internal Advice Seeking Items

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.767
Bartlett's Test of Sphericity	Approx. Chi-Square	1351.022
	df	3
	Sig.	<.001

Figure 21 - Scree Plot for Internal Advice Seeking Items

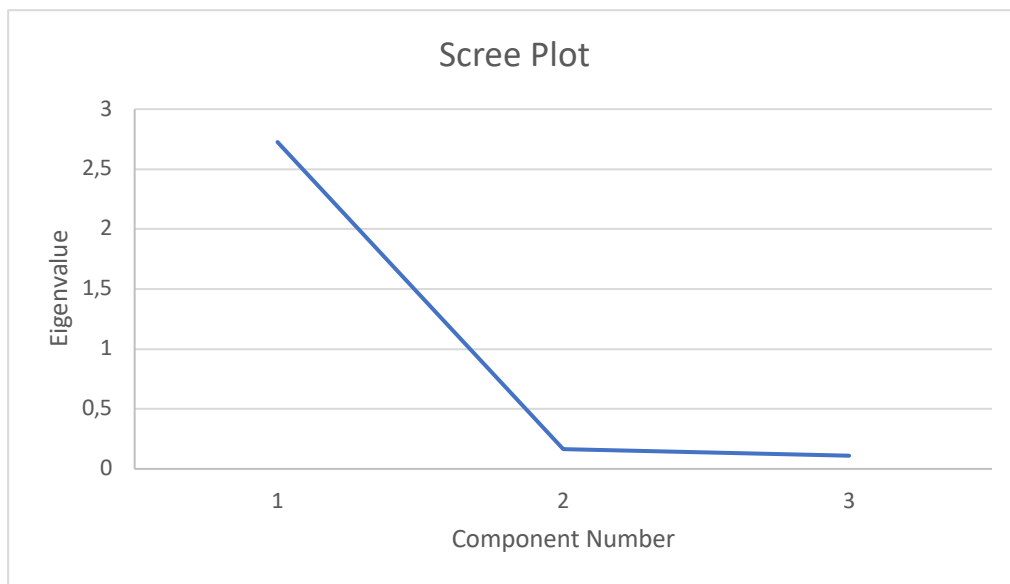


Table 30 - Factor Loadings for Internal Advice Seeking Items

	Factor Loadings (INTAD)
... frequently use advisers from your own organization	.947
... ask for advice from managers of your own organization about the current strategy	.950
... ask for advice from managers of your own organization about the future strategy	.963

5.2.4.6 Factor Analysis of Decision Speed

With a value of 0.758, the KMO statistic demonstrates that the data can be utilized for factor analysis and suggests that it should be. Even though it is not quite as high as the values in the instances that came before it, this is still considered to be a very good value.

A p-value that is less than 0.001 according to the Bartlett's test of sphericity suggests that the variables are connected to one another. This indicates that the data can be used for factor analysis, and the factors that are retrieved from the data will most likely be able to represent the underlying relationships that exist between the variables.

In general, these findings suggest that the data can be used for a factor analysis, and that the factors that can be derived from the data will most likely be able to capture meaningful correlations between the variables.

These three variables all have factor loadings that are quite high, with values that are relatively close to 1. This suggests that the variables are connected to the same underlying factor in an extremely close and significant way.

These three factors are all connected to the rate at which a business can react to incoming opportunities and hurdles. This leads one to believe that the underlying component that is being captured by these variables may be connected to the organization's capacity to be flexible and responsive. When firms are competing in fast-paced markets, this might be a crucial consideration for them to take into account.

It is important to take into consideration the fact that the factor loading for the first variable is marginally greater than the factor loadings for the other two variables. This would imply that this variable is tied to the underlying component in a more direct and intimate manner than the other two variables are. It's possible that this is an indication that the company places a larger focus on its capacity to move fast when possibilities present themselves.

Table 31 - KMO & Bartlett's Test Results for Decision Speed Items

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.758
Bartlett's Test of Sphericity	Approx. Chi-Square	982.056
	df	3
	Sig.	<.001

Figure 22 - Scree Plot for Decision Speed Items

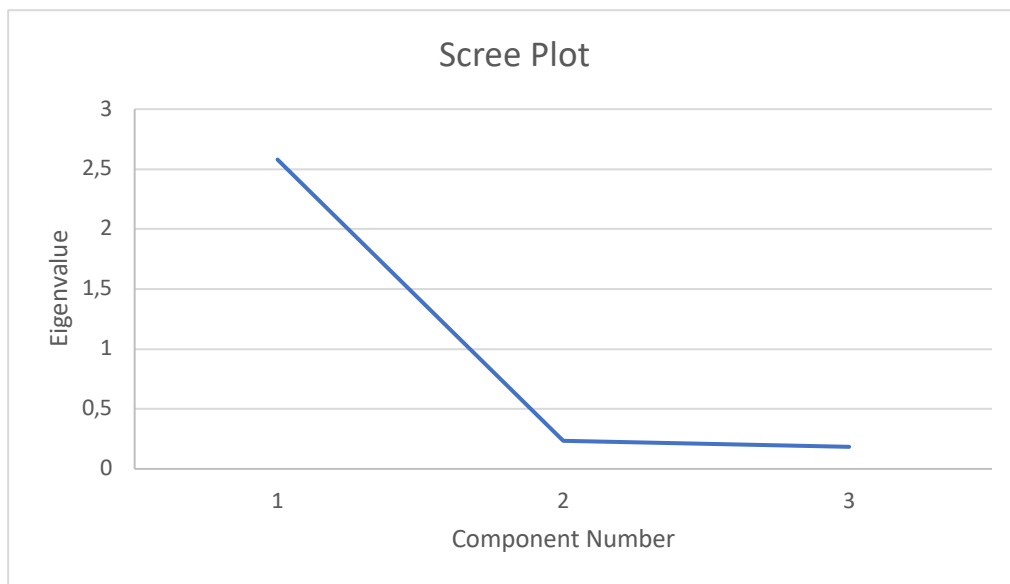


Table 32 - Factor Loadings for Decision Speed Items

	Factor Loadings (SPEED)
When this company sees an opportunity, it can move faster than its competitors	.935
Our competitors consider us fast in responding to their actions.	.917
From start to finish we respond faster than our competitors to problems	.929

5.2.4.7 Factor Analysis of Decision Quality

With a value of 0.726, the KMO statistic demonstrates that the data may be utilized for factor analysis and suggests that it should be. Even though it is not quite as high as the values in the instances that came before it, this is still considered to be a very good value.

A p-value that is less than 0.001 according to the Bartlett's test of sphericity suggests that the variables are connected to one another. This indicates that the data can be used for factor analysis, and the factors that are retrieved from the data will most likely be able to represent the underlying relationships that exist between the variables.

In general, these findings suggest that the data can be used for a factor analysis, and that the factors that can be derived from the data will most likely be able to capture meaningful correlations between the variables.

The factor loadings for these three variables are all near to 1, indicating that they have relatively high values. This suggests that the variables are connected to the same underlying factor in an extremely close and significant way.

These three factors are all connected in some way to the caliber of decisions that are made within the firm. This leads one to believe that the underlying component that is being captured by these variables may be connected to the organization's capacity to make good decisions. When companies and organizations are working toward the improvement of their performance and the accomplishment of their objectives, this could be a significant consideration to take into account.

It is important to point out that the factor loading for the third variable is a little bit greater than the factor loadings for the other two variables. This is something that should be taken into consideration. This would imply that this variable is tied to the underlying component in a more direct and intimate manner than the other two variables are. This might be interpreted as a sign that the organization places a larger emphasis on the effect that decisions have on the performance of the organization.

Table 33 - KMO & Bartlett's Test for Decision Quality Items

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.726
Bartlett's Test of Sphericity	Approx. Chi-Square	620.413
	df	3
	Sig.	<.001

Figure 23 - Scree Plot for Decision Quality Items

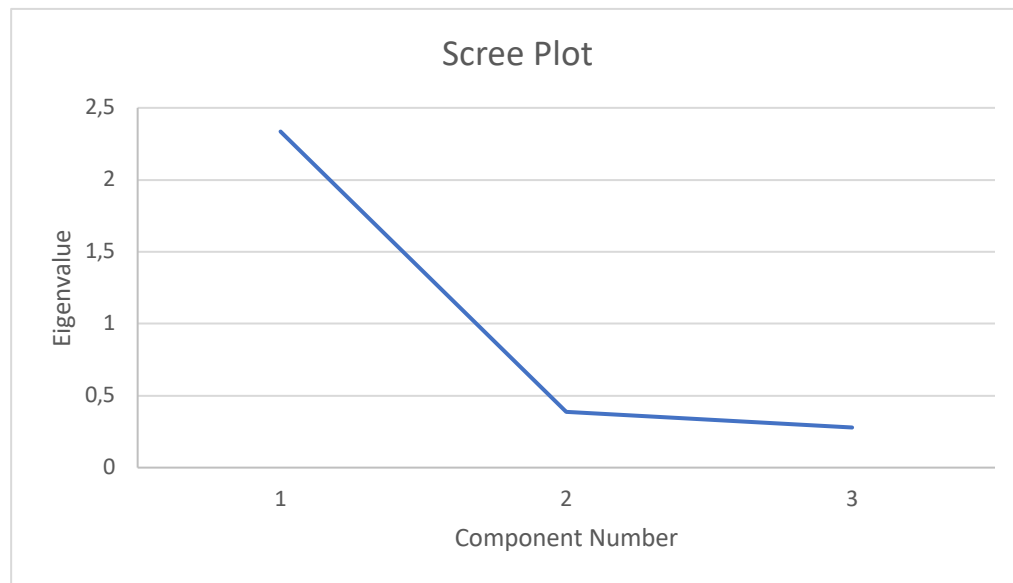


Table 34 - Factor Loadings for Decision Quality Items

	Factor Loadings (QUALITY)
The overall quality of the decision	.885
The quality of the decision relative to its original intent	.860
The quality of the decision given its effect on organizational performance	.901

5.2.5 Correlation Analysis of Variables

The following table illustrates the relationships that exist between the various leadership styles and the components that go into decision-making. The data presented in the table reveals that there are robustly positive connections between the three types of leadership:

transformational leadership, transactional leadership, and laissez-faire leadership. According to this, businesses that have leaders who demonstrate certain leadership styles are likely to have more success when it comes to making decisions.

The table also reveals significant positive associations between getting external counsel, seeking guidance from within an organization, making decisions quickly, and making decisions of a high quality. This shows that businesses that seek information from external sources and make judgments fast are likely to have greater success in terms of their decision-making.

Transformational leadership is a style of leadership in which the leader collaborates with their followers to identify necessary change, creates a vision to guide the change through inspiration, and then executes the change in conjunction with members of the group who are dedicated to the change. This method of leading is frequently linked to high levels of motivation and morale among followers, and it can result in favorable outcomes in terms of decision-making.

A form of leadership known as transactional leadership is one in which the leader inspires and instructs followers by elaborating on the needs for certain roles and responsibilities. The goals that are set for this kind of leadership are crystal clear, and the followers are either rewarded or punished according to whether or not they achieve those goals. This method of leadership is frequently linked to high levels of predictability and stability, and it has the potential to provide favorable results in terms of decision-making.

Laissez-faire leadership is a form of leadership in which the leader gives little to no direction to the followers and allows them to make decisions of their own accord. This style of

leadership is also known as servant leadership. This method of leading is frequently associated with high levels of creativity and autonomy on the part of followers, and it can result in favorable outcomes in terms of decision-making.

The quality of the decisions made by an organization can be improved by seeking input from outside sources because this can supply the organization with new perspectives and ideas. Making decisions in a timely manner enables companies to respond to opportunities and difficulties in a timely manner, which can also lead to positive outcomes if the decisions are made fast.

Overall, the data presented in the table suggests that organizations with leaders who exhibit transformational, transactional, and laissez-faire leadership styles, as well as organizations that seek advice from outside sources and make decisions quickly, are likely to have greater success in terms of the decisions they make.

Table 35 - Correlation Matrix of Research Variables

	TFL	TXL	LF	EXTAD	INTAD	SPEED	QUALITY
Transformational Leadership (TFL)	--						
Transactional Leadership (TXL)	-.026	--					
Laissez-Faire Leadership (LF)	-.639**	-.556**	--				
External Advice Seeking (EXTAD)	.491**	.577**	-.770**	--			
Internal Advice Seeking (INTAD)	.702**	.345**	-.817**	.708**	--		
Decision Speed (SPEED)	.529**	.588**	-.775**	.721**	.729**	--	
Decision Quality (QUALITY)	.656**	.477**	-.828**	.737**	.816**	.823**	--

5.2.6 Regression Analyses

Regression analysis is a statistical technique that is used to model the relationship between a dependent variable and one or more independent variables. In this research paper, several regression analyses were conducted to examine the relationship between several independent variables and a dependent variable of interest. The results of this analysis provide valuable insights into the factors that influence the dependent variable and allow the researchers to make predictions about its value based on the values of the independent variables. In the following sections, the results of the regression analyses will be presented and their implications for understanding the relationship between the variables under study will be discussed.

5.2.6.1 *Regression Analysis on the Relationship between Leadership Styles and Decision*

Speed

H1a: Transformational leadership style negatively affects the speed of a strategic decision

It is commonly held that transformational leadership, which entails inspiring and encouraging followers to attain their full potential and contribute to the organization's mission, may be effective in a number of contexts. This is one of the key components of transformational leadership. However, it is feasible that a transformational leadership style could slow down the rate at which strategic decisions are made under certain conditions. This is something that should be considered.

One of the reasons that this may be the case is that transformational leaders frequently promote open communication and collaboration among members of the team. This can result in a more comprehensive consideration of all of the choices that are available and more input from a more diverse group of people. This can be a beneficial component of transformative leadership, but it may also lead to lengthier decision-making processes as more time is spent discussing and considering choices. Although this can be a positive aspect of transformational leadership, it may also lead to longer decision-making processes.

Additionally, transformational leaders are likely to be more inclined to involve their team members in the decision-making process, which can lead to a sense of shared ownership and commitment to the decision that has been made. However, this can also lead to longer decision-making procedures because team members may need to be brought up to speed on the topic and may need to be consulted before a final choice is reached. Before a decision is taken, it may be necessary to consult team members.

In conclusion, although transformational leadership can be useful in a variety of contexts, there is a possibility that it could slow down the rate at which strategic decisions are made. This is because transformational leadership places an emphasis on open communication, collaboration, and shared ownership among members of the team.

This hypothesis states that the transformational leadership style is negatively associated with the speed of a strategic decision. In other words, the hypothesis predicts that organizations with leaders who exhibit a transformational leadership style will take longer to make strategic decisions compared to organizations with leaders who exhibit a different leadership style. This hypothesis will be tested using regression analysis by examining the relationship between the

transformational leadership style of an organization's leader and the speed at which the organization makes strategic decisions. The results of the regression analysis can be used to either support or refute this hypothesis and provide insight into the influence of leadership style on the speed of strategic decision-making.

Table 36 - Regression Results of the relationship between transformational leadership and decision speed

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.529 ^a	.279	.278	.86144

a. Predictors: (Constant), TFL

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	129.514	1	129.514	174.530	<.001 ^b
	Residual	333.933	450	.742		
	Total	463.446	451			

a. Dependent Variable: SPEED

b. Predictors: (Constant), TFL

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.991	.126		15.844	<.001
	TFL	.494	.037	.529	13.211	<.001

a. Dependent Variable: SPEED

This table presents a summary of a regression model that was used to predict a dependent variable (R) based on a predictor variable. The model was used to anticipate a relationship between the two variables Transformational Leadership (TFL). The R-squared value, which reflects the proportion of the variance in the dependent variable that can be explained by the predictor variable, is presented in the table. This value can be interpreted as follows:

The value of R squared in this instance is 0.279, which implies that the predictor variable is responsible for explaining 27.9% of the variance in the variable that is being predicted. This is a relatively low value, which shows that the predictor variable is not a very powerful predictor of the dependent variable. The dependent variable is the one that is being studied.

The adjusted R-squared value, which is a modified version of the R-squared value that accounts for the number of predictors in the model, is also displayed in the table. This value can be compared to the original R-squared value. In this example, the value of adjusted R-squared is 0.278, which is a fraction of a point below the value of R-squared. Even after taking into account the total number of predictors in the model, this suggests that the predictor variable is not a very good predictor of the dependent variable.

The table also includes the standard error of the estimate, which is a measurement of the average distance that the predicted values for the dependent variable fall from the actual values. This distance is measured in terms of the average distance between the actual values and the anticipated values. In this case, the estimate has a standard error of 0.86144, which is a figure that is considered to be on the higher end. This indicates that the model's predictions are not very accurate and may contain a significant amount of inaccuracy due to the fact that they are not very accurate.

The analysis of variance (ANOVA) is a statistical technique that can be applied to compare the means of two or more groups. In this particular instance, the ANOVA table is utilized to conduct a comparison of the means of the dependent variable (SPEED) among the several groups that are determined by the predictor variable Transformational Leadership (TFL).

The table provides information regarding the significance level, sum of squares, mean square, degrees of freedom, and F-value for the regression model. The sum of squares provides a measurement of the entire variance in the variable that is being reliant upon, with bigger values indicating a greater variance. The number of observations that have some leeway to change within the context of the model is represented by the degrees of freedom. The mean square can be thought of as the sum of squares that are typical for a certain term in the model. The F-value is a measurement that indicates how well a model fits the data by comparing the amount of variance that can be explained versus the amount of variance that cannot be explained. The significance level gives an indication of the probability that the observed F-value may have been the result of random occurrences.

In this instance, the regression model possesses a sum of squares that is equal to 129.514, a degree of freedom that is equal to 1, a mean square that is equal to 129.514, an F-value that is equal to 174.530, and a significance level that is less than 0.001. This suggests that there is a substantial association between the predictor variable and the dependent variable, and that the model gives a good fit to the data as a result of this.

Additionally, the sum of squares, degrees of freedom, and mean square for the residuals are displayed in the table below (i.e., the differences between the observed values and the predicted values). The sum of squares for the residuals is 333.933, they have 450 degrees of freedom, and the mean square for them is 0.742. This suggests that there is a sizeable amount of variance in the model that cannot be explained, and that the model's predictions may not be particularly accurate in practice.

Overall, the ANOVA table gives the impression that there is a substantial association between the predictor variable and the dependent variable; yet the model still contains a considerable amount of variance that isn't explained. This leads one to believe that the model's ability to predict the dependent variable with high accuracy is limited.

The estimated coefficients for the predictor variable Transformational Leadership (TFL) as well as the constant term in the regression model are displayed in the table with the coefficients. In the table are included not only the unstandardized coefficients (B), but also the standard errors of the coefficients, the standardized coefficients (Beta), the t-values, and the significance levels for each coefficient.

In this instance, the table reveals that the estimated coefficient for the predictor variable is 0.494, with a standard error of 0.037 and a t-value of 13.211. Furthermore, the table also shows that the t-value is 13.211. With a p-value that is lower than 0.001, this coefficient can be considered statistically significant. This suggests that there is a substantial association between the predictor variable and the dependent variable, and that the model gives a good fit to the data as a result of this.

The estimated coefficient for the constant term comes in at 1.991, with a standard error of 0.126 and a t-value of 15.844, as shown in the table. The p-value for this coefficient is lower than 0.001, making it another statistically significant variable. This suggests that the model has a non-zero intercept, and that the anticipated values for the dependent variable are not all equal to zero. Additionally, this suggests that the expected values for the independent variable are not all equal to zero.

Overall, the coefficients table gives the impression that the predictor variable is a substantial predictor of the dependent variable, and that the model is a good fit to the data. This conclusion may be drawn from the fact that the model is supported by the findings. It can be deduced from the fact that both the estimated coefficients for the predictor variable and the estimated coefficients for the constant term are statistically significant from the fact that the model is able to reliably predict the dependent variable.

H1b: Transactional leadership style positively affects the speed of a strategic decision outcome

This hypothesis states that the transactional leadership style is positively associated with the speed of a strategic decision outcome. In other words, the hypothesis predicts that organizations with leaders who exhibit a transactional leadership style will make strategic decisions more quickly compared to organizations with leaders who exhibit a different leadership style.

Table 37 - Regression Analysis Results of the relationship between transactional leadership and decision speed

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.588 ^a	.346	.344	.82081

a. Predictors: (Constant), TXL

ANOVA^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	160.265	1	160.265	237.876	<.001 ^b
	Residual	303.181	450	.674		
	Total	463.446	451			

a. Dependent Variable: SPEED

b. Predictors: (Constant), TXL

		Coefficients ^a				
		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	1.602	.133		12.064	<.001
	TXL	.561	.036	.588	15.423	<.001

a. Dependent Variable: SPEED

The model summary and ANOVA table provide information about the performance of a linear regression model. The model has a single predictor variable, Transactional Leadership (TXL), and a dependent variable, SPEED.

The R value of 0.588 indicates a moderate positive relationship between the predictor and dependent variables. The R square value of 0.346 indicates that about 35% of the variation in the dependent variable is explained by the predictor variable. The adjusted R square value of 0.344 is similar, indicating that the model accounts for about 34% of the variation in the dependent variable.

The ANOVA table shows that the regression model is significant, with a p-value less than 0.001. This indicates that the model is a good fit for the data and that the predictor variable has a significant effect on the dependent variable.

The coefficients table shows the unstandardized and standardized coefficients for the predictor variable. The unstandardized coefficient of 0.561 indicates that for every one unit increase in the predictor variable, the dependent variable increases by 0.561 units on average. The standardized coefficient of 0.588 indicates that the predictor variable has a moderate positive relationship with the dependent variable. The p-value for the predictor variable is also less than 0.001, indicating that it has a significant effect on the dependent variable. Overall, these results

suggest that the linear regression model is a good fit for the data and that the predictor variable has a significant effect on the dependent variable.

H1c: Laissez-faire leadership style negatively affects the speed of a strategic decision outcome

This hypothesis states that the laissez-faire leadership style is negatively associated with the speed of a strategic decision outcome. In other words, the hypothesis predicts that organizations with leaders who exhibit a laissez-faire leadership style will take longer to make strategic decisions compared to organizations with leaders who exhibit a different leadership style.

Table 38 - Regression Results of the relationship between Laissez-Faire Leadership and Decision Speed

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.775 ^a	.600	.599	.64161

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	278.198	1	278.198	675.791	<.001 ^b
	Residual	185.248	450	.412		
	Total	463.446	451			

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	4.958	.062		80.528	<.001
	LF	-.660	.025	-.775	-25.996	<.001

a. Dependent Variable: SPEED

The coefficients table shows the relationship between the independent variable, Laissez-Faire Leadership (LF), and the dependent variable, Decision Speed. The unstandardized coefficient for LF is -0.660, which indicates that for every unit increase in Laissez-Faire Leadership (LF), there is a corresponding decrease in SPEED by 0.660 units. The standardized coefficient for LF is -0.775, which indicates that LF is a strong predictor of SPEED.

The ANOVA table shows the results of a statistical test used to determine whether there is a significant relationship between the predictor and the dependent variable. The F-statistic is 675.791, which is significant at $p < 0.001$. This indicates that there is a significant relationship between Laissez-Faire Leadership and Decision Speed.

The R-squared value of 0.600 indicates that 60% of the variance in decision speed can be explained by the relationship with Laissez-Faire Leadership. The adjusted R-squared value is also 0.599, which is very close to the R-squared value and suggests that the model is a good fit for the data. The standard error of the estimate is 0.64161, which indicates the average amount that the dependent variable is expected to differ from the predicted value.

5.2.6.2 Regression Analysis on the Relationship between Leadership Styles and Decision

Quality

H2a: Transformational leadership style positively affects the quality of a strategic decision outcome

This hypothesis states that the transformational leadership style is positively associated with the quality of a strategic decision outcome. In other words, the hypothesis predicts that organizations with leaders who exhibit a transformational leadership style will make higher

quality strategic decisions compared to organizations with leaders who exhibit a different leadership style. This hypothesis is tested using linear regression analysis by examining the relationship between the transformational leadership style of an organization's leader and the quality of the organization's strategic decisions. The results of the regression analysis are used to either support or refute this hypothesis and provide insight into the influence of leadership style on the quality of strategic decision-making.

Table 39 - Regression Results of the relationship between Transformational Leadership and Decision Quality

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.656 ^a	.430	.429	.59288

a. Predictors: (Constant), TFL

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	119.447	1	119.447	339.810	<.001 ^b
	Residual	158.180	450	.352		
	Total	277.626	451			

a. Dependent Variable: QUALITY

b. Predictors: (Constant), TFL

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	1.388	.086		16.042	<.001
	TFL	.474	.026	.656	18.434	<.001

a. Dependent Variable: QUALITY

The model used was a simple linear regression model with one predictor variable, transformational leadership (TFL), and one dependent variable, decision quality (QUALITY). The model had a coefficient of determination, or R-squared, value of 0.430, which indicates that

about 43% of the variance in the QUALITY variable is explained by the TFL variable. The model had a relatively low standard error of the estimate, at 0.59288, which suggests that the predictions made by the model are relatively accurate. Overall, the model appears to be a good fit for the data.

The model appears to be a linear regression model with the dependent variable QUALITY and the independent variable TFL. The R value of .656 suggests that there is a strong positive relationship between the two variables. This is supported by the high F value of 339.810 and the low p value of $< .001$ in the ANOVA table, which indicates that the model is a good fit for the data. The unstandardized coefficient for TFL is .474, which means that for every unit increase in TFL, there is a corresponding .474 unit increase in the predicted value of QUALITY.

H2b: Transactional leadership style positively affects the quality of a strategic decision outcome

This hypothesis states that the transactional leadership style is positively associated with the quality of a strategic decision outcome. In other words, the hypothesis predicts that organizations with leaders who exhibit a transactional leadership style will make higher quality strategic decisions compared to organizations with leaders who exhibit a different leadership style. This hypothesis is also tested using regression analysis by examining the relationship between the transactional leadership style of an organization's leader and the quality of the organization's strategic decisions.

Table 40 - Regression Results of the relationship between Transactional Leadership and Decision Quality

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.477 ^a	.228	.226	.69035

a. Predictors: (Constant), TXL

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	63.161	1	63.161	132.527	<.001 ^b
	Residual	214.465	450	.477		
	Total	277.626	451			

a. Dependent Variable: QUALITY

b. Predictors: (Constant), TXL

Coefficients ^a						
		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	1.666	.112		14.914	<.001
	TXL	.352	.031	.477	11.512	<.001

a. Dependent Variable: QUALITY

The dependent variable is decision quality (QUALITY), and the predictor variable is transformational leadership (TXL). The regression analysis found that there is a significant relationship between the two variables, with a higher value of TXL corresponding to a higher value of QUALITY. The model has an R value of 0.477, which indicates a moderate strength of the relationship. The R² value of 0.228 indicates that 22.8% of the variation in the QUALITY variable can be explained by the TXL variable.

The model summary and ANOVA table indicate that the model has a good fit for the data, as indicated by the high R squared and F values, respectively. The standardized coefficient

for the predictor variable, TXL, is also significant, as indicated by the low p-value. This suggests that the variable TXL is a strong predictor for the dependent variable, QUALITY.

H2c: Laissez-faire leadership style negatively affects the quality of a strategic decision outcome.

This hypothesis states that the laissez-faire leadership style is negatively associated with the quality of a strategic decision outcome. In other words, the hypothesis predicts that organizations with leaders who exhibit a laissez-faire leadership style will make lower quality strategic decisions compared to organizations with leaders who exhibit a different leadership style.

Table 41 - Regression Results of the relationship between Laissez-Faire Leadership and Decision Quality

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.828 ^a	.685	.684	.44087

a. Predictors: (Constant), LF

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	190.160	1	190.160	978.342	<.001 ^b
	Residual	87.466	450	.194		
	Total	277.626	451			

a. Dependent Variable: QUALITY

b. Predictors: (Constant), LF

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	4.050	.042		95.739	<.001
	LF	-.545	.017	-.828	-31.278	<.001

The summary and ANOVA table show the results of a regression analysis that was conducted to evaluate the relationship between the dependent variable Decision Quality (QUALITY) and the independent variable Laissez-Faire Leadership (LF). The R and R squared values indicate that there is a strong relationship between the two variables, with a coefficient of determination (R squared) of .685. This means that about 68.5% of the variation in the quality of the data can be explained by the independent variable “LF.”

The standardized coefficients, also known as beta values, indicate the strength and direction of the relationship between the independent and dependent variables. In this case, the beta value for the “LF” variable is $-.828$, indicating a strong negative relationship. This means that as the value of “LF” increases, the quality of the data decreases.

The p-value in the ANOVA table is less than 0.001, indicating that the relationship between the dependent and independent variables is statistically significant. This means that it is very unlikely that the observed relationship between the two variables is due to random chance.

5.2.6.3 Regression Analysis on the Relationship between Transformational Leadership and Advice Seeking Behavior

H3: The more transformational the CEO’s leadership style, the more likely the CEO seek advice from internal sources when making a strategic decision.

This hypothesis states that there is a positive relationship between the transformational leadership style of an organization's CEO and the likelihood that the CEO will seek advice from external sources when making a strategic decision. In other words, the hypothesis predicts that CEOs who exhibit a transformational leadership style are more likely to seek advice from

external sources compared to CEOs who exhibit a different leadership style. This hypothesis is tested using regression analysis by examining the relationship between the transformational leadership style of the CEO and the likelihood that the CEO will seek advice from external sources when making a strategic decision.

Table 42 - Regression Analysis of the relationship between Transformational Leadership and Advice Seeking Behavior

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.702 ^a	.492	.490	.77453

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	261.197	2	130.598	217.704	<.001 ^b
	Residual	269.350	449	.600		
	Total	530.547	451			

a. Dependent Variable: TFL

b. Predictors: (Constant), INTAD, EXTAD

Coefficients ^a						
		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	.967	.138		7.028	<.001
	EXTAD	-.009	.036	-.012	-.243	.808
	INTAD	.516	.035	.710	14.899	<.001

a. Dependent Variable: TFL

Based on the given summary of the model, it appears that the model is a linear regression model with transformational leadership (TFL) as the dependent variable and Internal Advice Seeking (INTAD) and External Advice Seeking (EXTAD) as the predictor variables. The R-squared value of the model is 0.492, which indicates that about 49.2% of the variation in TFL

can be explained by the model. The p-value for the F-statistic is less than 0.001, indicating that the model is statistically significant.

In terms of the coefficients, the constant term is 0.967, the coefficient for INTAD is 0.516, and the coefficient for EXTAD is -0.009. This suggests that all other things being equal, a unit increase in INTAD is associated with a 0.516 unit increase in TFL, while a unit increase in EXTAD is associated with a 0.009 unit decrease in TFL. However, given that the p-value for the EXTAD coefficient is 0.808, it is not statistically significant and therefore may not have a meaningful effect on TFL.

5.2.6.4 Regression Analysis on the Relationship between Transactional Leadership and Advice Seeking Behavior

H4: The more transactional the CEO's leadership style, the more likely the CEO seek advice from external sources when making a strategic decision.

This hypothesis suggests that a CEO who has a transactional leadership style, which is characterized by a focus on reward and punishment in order to motivate and manage employees, is more likely to seek advice from external sources when making strategic decisions.

A transactional leadership style may be more inclined to seek external advice because it is focused on achieving specific goals and objectives, and external sources may be seen as a way to help the CEO achieve these goals more efficiently or effectively. Additionally, a transactional leadership style may be more open to seeking advice from external sources because it is willing to consider a range of options and perspectives in order to make the best possible decision.

Table 43 - Regression Analysis of the relationship between Transactional Leadership and Advice Seeking Behavior

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.584 ^a	.341	.338	.86497

a. Predictors: (Constant), INTAD, EXTAD

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	174.151	2	87.075	116.383	<.001 ^b
	Residual	335.932	449	.748		
	Total	510.082	451			

a. Dependent Variable: TXL

b. Predictors: (Constant), INTAD, EXTAD

Coefficients^a

Model		Unstandardized Coefficients	Std. Error	Standardized Coefficients	t	Sig.
1	(Constant)	1.342	.154		8.728	<.001
	EXTAD	.498	.040	.669	12.322	<.001
	INTAD	-.092	.039	-.129	-2.380	.018

a. Dependent Variable: TXL

The model summary and ANOVA table describe the results of a linear regression analysis. The dependent variable in this model is Transactional Leadership (TXL) and the independent variables are Internal Advice Seeking (INTAD) and External Advice Seeking (EXTAD). The R value of .584 indicates that there is a strong positive relationship between the dependent and independent variables.

The R squared value of .341 indicates that about 34.1% of the variance in the dependent variable is explained by the independent variables. This means that the model explains a

significant portion of the variance in the dependent variable, but there may be other factors not included in the model that could also explain the variance.

The adjusted R squared value takes into account the number of variables in the model and adjusts the R squared value accordingly. In this case, the adjusted R squared value is .338, which is slightly lower than the R squared value. This suggests that while the model explains a significant portion of the variance in the dependent variable, adding additional independent variables to the model may not significantly improve the model's ability to explain the variance.

The standard error of the estimate is a measure of the average distance that the observed values fall from the regression line. In this case, the standard error of the estimate is .865, which indicates that the observed values are, on average, about .865 units away from the regression line.

The ANOVA table shows the results of a statistical test that assesses whether the model as a whole is a significant predictor of the dependent variable. The F value of 116.383 and the corresponding p-value of less than .001 indicate that the model is a significant predictor of the dependent variable.

The coefficients table shows the estimated effect of each independent variable on the dependent variable. In this case, the constant term (the intercept) is 1.342 and the coefficient for "EXTAD" is .498. This means that when "INTAD" and "EXTAD" are equal to zero, the predicted value of "TXL" is 1.342. Additionally, for every one unit increase in "EXTAD", the predicted value of "TXL" increases by .498 units. The coefficient for "INTAD" is -.092, which indicates that for every one unit increase in "INTAD", the predicted value of "TXL" decreases by

.092 units. The t-values and corresponding p-values indicate the statistical significance of each independent variable. In this case, both "EXTAD" and "INTAD" are significant predictors of "TXL" at the .001 level.

5.2.6.5 Regression Analysis on the Relationship between Laissez-Faire Leadership and Advice Seeking Behavior

H5: The more laissez-faire the CEO's leadership style, the less likely the CEO will seek advice from both internal and external sources when making a strategic decision.

This hypothesis suggests that a CEO who has a laissez-faire leadership style, which is characterized by a hands-off approach and a focus on empowering employees to make their own decisions, is less likely to seek advice from both internal and external sources when making strategic decisions.

A laissez-faire leadership style may be less inclined to seek advice from either internal or external sources because it values individual autonomy and trusts employees to make their own decisions. Additionally, a laissez-faire leader may view seeking advice as unnecessary or a sign of lack of confidence in their team's ability to make good decisions.

Table 44 - Regression Analysis of the relationship between Laissez-Faire Leadership and Advice Seeking Behavior

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.861 ^a	.741	.740	.60710

a. Predictors: (Constant), INTAD, EXTAD

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	474.088	2	237.044	643.155	<.001 ^b
	Residual	165.485	449	.369		
	Total	639.573	451			

a. Dependent Variable: LF

b. Predictors: (Constant), INTAD, EXTAD

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	5.666	.108		52.521	<.001
	EXTAD	-.321	.028	-.385	-11.313	<.001
	INTAD	-.435	.027	-.544	-16.008	<.001

a. Dependent Variable: LF

This model is used to predict a dependent variable called Laissez-Faire Leadership (LF) based on two predictor variables: Internal Advice Seeking (INTAD) and External Advice Seeking (EXTAD). The model has a high R value of .861, which indicates that there is a strong relationship between the predictor variables and the dependent variable. The R Square value of .741 suggests that the predictor variables explain approximately 74% of the variance in the dependent variable.

The ANOVA table shows the results of a statistical test that is used to determine whether there is a significant relationship between the predictor variables and the dependent variable. The p-value of <.001 indicates that there is a statistically significant relationship between the predictor variables and the dependent variable.

The coefficients table shows the results of the regression analysis, which estimates the strength and direction of the relationship between each predictor variable and the dependent

variable. The unstandardized coefficients indicate the amount of change in the dependent variable for each unit of change in the predictor variable, while the standardized coefficients indicate the strength of the relationship between each predictor variable and the dependent variable, with values ranging from -1 to 1. The t-values and p-values in the table indicate the statistical significance of each predictor variable.

Based on the coefficients table, it appears that both the INTAD and EXTAD predictor variables have a negative relationship with the dependent variable LF. This suggests that as the values of INTAD and EXTAD increase, the value of LF decreases. Both predictor variables are also statistically significant, as indicated by the p-values of $<.001$.

5.2.6.6 Regression Analysis on the Moderating Effect of Advice Seeking Behavior on the Relationship between Leadership Styles and Decision Outcomes (Speed and Quality)

H6a: Seeking more advice from internal sources will moderate the relationship between the speed of the strategic decision outcomes and transformational leaders

The hypothesis specifically suggests that seeking more advice from internal sources will moderate the relationship between the speed of strategic decision outcomes and transformational leadership. In this context, "moderate" means that the presence or absence of internal advice-seeking may influence the strength or direction of the relationship between the speed of strategic decision outcomes and transformational leadership.

Table 45 - Regression Results of the Analysis for the Moderating Role of Advice Seeking Behavior

Model Summary									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change
1	.775 ^a	.601	.599	.64227	.601	225.155	3	448	<.001

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	278.640	3	92.880	225.155	<.001 ^b
	Residual	184.807	448	.413		
	Total	463.446	451			

Coefficients ^a						
Model		Unstandardized Coefficients B	Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	-.771	.263		-2.928	.004
	TFL	.927	.109	.992	8.482	<.001
	INTAD	.959	.062	1.411	15.584	<.001
	MODTFLINT	-.187	.021	-1.560	-8.780	<.001

a. Dependent Variable: SPEED

This model is used to predict a dependent variable called Decision Speed (SPEED) based on three predictor variables: Moderating Variable (MODTFLINT), Internal Advice Seeking (INTAD), and Transformational Leadership (TFL). The model has a moderate R value of .775, which indicates that there is a strong relationship between the predictor variables and the dependent variable. The R Square value of .601 suggests that the predictor variables explain approximately 60% of the variance in the dependent variable.

The ANOVA table shows the results of a statistical test that is used to determine whether there is a significant relationship between the predictor variables and the dependent variable. The p-value of $<.001$ indicates that there is a statistically significant relationship between the predictor variables and the dependent variable.

The coefficients table shows the results of the regression analysis, which estimates the strength and direction of the relationship between each predictor variable and the dependent variable. The unstandardized coefficients indicate the amount of change in the dependent variable for each unit of change in the predictor variable, while the standardized coefficients indicate the strength of the relationship between each predictor variable and the dependent variable, with values ranging from -1 to 1. The t-values and p-values in the table indicate the statistical significance of each predictor variable.

Based on the coefficients table, it appears that all three predictor variables have a positive relationship with the dependent variable SPEED. This suggests that as the values of MODTFLINT, INTAD, and TFL increase, the value of SPEED also increases. All three predictor variables are also statistically significant, as indicated by the p-values of $<.001$.

Hayes Process (a module extension to SPSS) was also executed to predict the moderating relationship between Transformational Leadership, Internal Advice Seeking and Decision Speed. The model has a strong R value of .7754, which indicates that there is a strong relationship between the predictor variables and the dependent variable. The R Square value of .6012 suggests that the predictor variables explain approximately 60% of the variance in the dependent variable.

The summary table shows the results of the regression analysis, which estimates the strength and direction of the relationship between each predictor variable and the dependent variable. The coefficients indicate the amount of change in the dependent variable for each unit of change in the predictor variable, while the standard errors, t-values, and p-values indicate the statistical significance of each predictor variable.

Based on the summary table, it appears that both the TFL and INTAD predictor variables have a positive relationship with the dependent variable SPEED. This suggests that as the values of TFL and INTAD increase, the value of SPEED also increases. The summary table also shows that there is an interaction between TFL and INTAD, as indicated by the "Int_1" term in the table. The interaction term is statistically significant, as indicated by the p-value of .0000.

The conditional effects table shows the relationship between TFL and SPEED at different levels of INTAD. The table shows that as INTAD increases, the effect of TFL on SPEED decreases. This suggests that the relationship between TFL and SPEED is moderated by INTAD, which is consistent with the hypothesis that INTAD moderates the relationship between TFL and SPEED.

Table 46 – Results for Hayes Process Macro for the Moderating Role of Advice Seeking Behavior

```
*****
Model   : 1
  Y     : SPEED
  X     : TFL
  W     : INTAD

Sample
Size:  452

*****
OUTCOME VARIABLE:
  SPEED

Model Summary
      R      R-sq      MSE      F      df1      df2      p
```

	.7754	.6012	.4125	225.1554	3.0000	448.0000	.0000
Model							
	coeff	se	t	p	LLCI	ULCI	
constant	-.7707	.2632	-2.9282	.0036	-1.2879	-.2534	
TFL	.9272	.1093	8.4817	.0000	.7123	1.1420	
INTAD	.9587	.0615	15.5841	.0000	.8378	1.0796	
Int_1	-.1868	.0213	-8.7795	.0000	-.2286	-.1450	
Product terms key:							
Int_1	:	TFL	x	INTAD			
Test(s) of highest order unconditional interaction(s):							
	R2-chng	F	df1	df2	p		
X*W	.0686	77.0798	1.0000	448.0000	.0000		

Focal predict:	TFL	(X)					
Mod var:	INTAD	(W)					
Conditional effects of the focal predictor at values of the moderator(s):							
INTAD	Effect	se	t	p	LLCI	ULCI	
2.3333	.4914	.0654	7.5105	.0000	.3628	.6200	
4.6667	.0556	.0392	1.4173	.1571	-.0215	.1327	
5.6667	-.1312	.0433	-3.0309	.0026	-.2162	-.0461	

H6b: Seeking more advice from internal sources will moderate the relationship between the speed of the strategic decision outcomes transactional leaders

The hypothesis specifically suggests that seeking more advice from internal sources will moderate the relationship between the speed of strategic decision outcomes and transactional leadership. In this context, "moderate" means that the presence or absence of internal advice-seeking may influence the strength or direction of the relationship between the speed of strategic decision outcomes and transactional leadership.

Regression analysis was run to predict a dependent variable called Decision Speed (SPEED) based on three predictor variables: Moderating Variable (MODTXLINT), Transactional Leadership (TXL), and Internal Advice Seeking (INTAD). The model has a strong R value of .816, which indicates that there is a strong relationship between the predictor

variables and the dependent variable. The R Square value of .667 suggests that the predictor variables explain approximately 67% of the variance in the dependent variable.

The ANOVA table shows the results of a statistical test that is used to determine whether there is a significant relationship between the predictor variables and the dependent variable. The p-value of $<.001$ indicates that there is a statistically significant relationship between the predictor variables and the dependent variable.

The coefficients table shows the results of the regression analysis, which estimates the strength and direction of the relationship between each predictor variable and the dependent variable. The unstandardized coefficients indicate the amount of change in the dependent variable for each unit of change in the predictor variable, while the standardized coefficients indicate the strength of the relationship between each predictor variable and the dependent variable, with values ranging from -1 to 1. The t-values and p-values in the table indicate the statistical significance of each predictor variable.

Based on the coefficients table, it appears that both the INTAD and TXL predictor variables have a positive relationship with the dependent variable SPEED. This suggests that as the values of INTAD and TXL increase, the value of SPEED also increases. The MODTXLINT predictor variable has a negative relationship with SPEED, which suggests that as the value of MODTXLINT increases, the value of SPEED decreases. All three predictor variables are statistically significant, as indicated by the p-values of $<.001$. This suggests that all three variables have a meaningful impact on the dependent variable.

Table 47 - Regression Results of the Analysis for the Moderating Role of Advice Seeking Behavior

Model Summary									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change
1	.816 ^a	.667	.664	.58731	.667	298.532	3	448	<.001

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	308.918	3	102.973	298.532	<.001 ^b
	Residual	154.529	448	.345		
	Total	463.446	451			

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	.819	.155		5.292	<.001
	INTAD	.364	.025	.536	14.729	<.001
	TXL	.338	.029	.354	11.520	<.001
	MODTXLINT	-.093	.033	-.108	-2.799	.005

a. Dependent Variable: SPEED

In addition, Hayes's Process was also used to predict the dependent variable called Decision Speed (SPEED) based on three predictor variables: Transactional Leadership (TXL), Internal Advice Seeking (INTAD), and an interaction term between the two variables. The model has a strong R value of .8164, which indicates that there is a strong relationship between the predictor variables and the dependent variable. The R Square value of .6666 suggests that the predictor variables explain approximately 66% of the variance in the dependent variable.

The summary table shows the results of the regression analysis, which estimates the strength and direction of the relationship between each predictor variable and the dependent

variable. The coefficients indicate the amount of change in the dependent variable for each unit of change in the predictor variable, while the standard errors, t-values, and p-values indicate the statistical significance of each predictor variable.

Based on the summary table, it appears that both the TXL and INTAD predictor variables have a positive relationship with the dependent variable SPEED. This suggests that as the values of TXL and INTAD increase, the value of SPEED also increases. The summary table also shows that there is an interaction between TXL and INTAD, as indicated by the "Int_1" term in the table. The interaction term is statistically significant, as indicated by the p-value of .0053.

The conditional effects table shows the relationship between TXL and SPEED at different levels of INTAD. The table shows that as INTAD increases, the effect of TXL on SPEED also increases. This suggests that the relationship between TXL and SPEED is moderated by INTAD, which is consistent with the hypothesis that INTAD moderates the relationship between TXL and SPEED.

Table 48 - Results for Hayes Process Macro for the Moderating Role of Advice Seeking Behavior

```
*****
Model   : 1
  Y     : SPEED
  X     : TXL
  W     : INTAD

Sample
Size:   452

*****
OUTCOME VARIABLE:
  SPEED

Model Summary
      R      R-sq      MSE      F      df1      df2      p
      .8164      .6666      .3449    298.5320    3.0000    448.0000    .0000

Model
      coeff      se      t      p      LLCI      ULCI
```

constant	-.0783	.2371	-.3303	.7413	-.5442	.3876
TXL	.5941	.0867	6.8533	.0000	.4238	.7645
INTAD	.5695	.0616	9.2453	.0000	.4485	.6906
Int_1	-.0586	.0209	-2.7989	.0053	-.0998	-.0175

Product terms key:

Int_1 : TXL x INTAD

Test(s) of highest order unconditional interaction(s):

	R2-chng	F	df1	df2	p
X*W	.0058	7.8338	1.0000	448.0000	.0053

Focal predict: TXL (X)

Mod var: INTAD (W)

Conditional effects of the focal predictor at values of the moderator(s):

INTAD	Effect	se	t	p	LLCI	ULCI
2.3333	.4573	.0433	10.5640	.0000	.3723	.5424
4.6667	.3205	.0318	10.0802	.0000	.2580	.3830
5.6667	.2619	.0459	5.7093	.0000	.1717	.3520

H6c: Seeking more advice from internal sources will moderate the relationship between the speed of the strategic decision outcomes laissez-faire leaders

The hypothesis specifically suggests that seeking more advice from internal sources will moderate the relationship between the speed of strategic decision outcomes and laissez-faire leadership. In this context, "moderate" means that the presence or absence of internal advice-seeking may influence the strength or direction of the relationship between the speed of strategic decision outcomes and laissez-faire leadership.

Table 49 - Results of the Regression Analysis for the Moderating Role of Advice Seeking

Model Summary									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	Change Statistics			Sig. F Change
						F Change	df1	df2	
1	.799 ^a	.638	.636	.61170	.638	263.519	3	448	<.001

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	295.812	3	98.604	263.519	<.001 ^b
	Residual	167.634	448	.374		
	Total	463.446	451			

Coefficients ^a						
Model		Unstandardized Coefficients B	Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	3.374	.242		13.959	<.001
	INTAD	.217	.034	.320	6.394	<.001
	LF	-.309	.059	-.363	-5.205	<.001
	MODLFINT	.132	.037	.181	3.527	<.001

a. Dependent Variable: SPEED

A regression analysis was conducted to predict the moderating relationship between three variables: Laissez-Faire Leadership, Internal Advice Seeking and Decision Speed. The model has a strong R value of .799, which indicates that there is a strong relationship between the predictor variables and the dependent variable. The R Square value of .638 suggests that the predictor variables explain approximately 64% of the variance in the dependent variable.

The summary table shows the results of the regression analysis, which estimates the strength and direction of the relationship between each predictor variable and the dependent variable. The coefficients indicate the amount of change in the dependent variable for each unit of change in the predictor variable, while the standard errors, t-values, and p-values indicate the statistical significance of each predictor variable.

Based on the summary table, it appears that both the INTAD and LF predictor variables have a positive relationship with the dependent variable SPEED. This suggests that as the values of INTAD and LF increase, the value of SPEED also increases. The summary table also shows

that there is an interaction between INTAD and LF, as indicated by the "MODLFINT" term in the table. The interaction term is statistically significant, as indicated by the p-value of .0000.

In addition, Hayes Process was again run to predict the moderating relationship between variables. This appears to be the output from a statistical analysis examining the relationship between the dependent variable "SPEED" and three predictor variables: "LF," "INTAD," and "Int_1." The "Int_1" predictor variable is an interaction term that represents the product of "LF" and "INTAD."

The first table, "Model Summary," provides information about the overall fit of the model. The R value of .7989 indicates a strong positive relationship between the predictor variables and the dependent variable. The R-sq value of .6383 indicates that about 64% of the variance in the dependent variable is explained by the predictor variables. The MSE value, or mean squared error, is a measure of the average distance that the predicted values fall from the actual values. The F value of 263.5187 and the corresponding p-value of .0000 indicate that the model is statistically significant, meaning that the predictor variables are able to significantly predict the dependent variable.

The second table, "Model," provides information about the individual predictor variables in the model. The "coeff" column represents the strength and direction of the relationship between each predictor variable and the dependent variable. The "se" column represents the standard error of the coefficient estimate. The "t" and "p" values indicate the statistical significance of each predictor variable. In this case, all predictor variables are significant at the .0000 level.

The third table, "Product terms key," indicates that the "Int_1" predictor variable is an interaction term representing the product of "LF" and "INTAD."

The fourth table provides information about the statistical significance of the interaction term "Int_1." The R2-chng value of .0100 indicates that the interaction term contributes an additional 1% to the explained variance in the dependent variable compared to the main effects model. The F value of 12.4378 and the corresponding p-value of .0005 indicate that the interaction term is statistically significant.

The fifth table provides information about the conditional effects of the "LF" predictor variable at different values of the "INTAD" moderator variable. The "Effect" column represents the estimated change in the dependent variable for a one unit change in the "LF" predictor variable at each level of the "INTAD" moderator variable. The "se," "t," and "p" values indicate the statistical significance of the effects.

Table 50 - Results for Hayes Process Macro for the Moderating Role of Advice Seeking Behavior

```
*****
Model   : 1
      Y   : SPEED
      X   : LF
      W   : INTAD

Sample
Size:   452

*****

OUTCOME VARIABLE:
      SPEED

Model Summary

      R      R-sq      MSE      F      df1      df2      p
      .7989      .6383      .3742    263.5187      3.0000    448.0000      .0000

Model

      coeff      se      t      p      LLCI      ULCI
constant    4.0592    .2524   16.0833    .0000    3.5632    4.5553
LF          -.6335    .0651   -9.7284    .0000   -.7615   -.5055
INTAD       .0605    .0512    1.1827    .2375   -.0401    .1611
```

Int_1	.0741	.0210	3.5267	.0005	.0328	.1153

Product terms key:

Int_1	:	LF	x	INTAD

Test(s) of highest order unconditional interaction(s):

	R2-chng	F	df1	df2	p
X*W	.0100	12.4378	1.0000	448.0000	.0005

Focal predict:	LF	(X)
Mod var:	INTAD	(W)

Conditional effects of the focal predictor at values of the moderator(s):

INTAD	Effect	se	t	p	LLCI	ULCI
2.3333	-.4607	.0420	-10.9804	.0000	-.5431	-.3782
4.6667	-.2879	.0639	-4.5059	.0000	-.4134	-.1623
5.6667	-.2138	.0809	-2.6426	.0085	-.3728	-.0548

H7a: Seeking more advice from external sources will moderate the relationship between the quality of the strategic decision outcomes and transformational leaders

This hypothesis suggests that seeking more advice from external sources, such as consultants or industry experts, will have a moderating effect on the relationship between the quality of strategic decision outcomes and transformational leadership style.

Transformational leadership is a leadership style in which the leader inspires and motivates followers to achieve their full potential and achieve organizational goals. This style can lead to high-quality decision outcomes because the leader is able to engage and empower team members, promoting creativity and innovation.

However, seeking more advice from external sources may affect the quality of decision outcomes because the external sources may not fully understand the context and goals of the organization, leading to advice that is not fully aligned with the organization's needs. Therefore, the hypothesis suggests that seeking more advice from external sources will moderate the

relationship between the quality of strategic decision outcomes and transformational leadership style, potentially affecting the quality of the decision outcomes.

Tables below are a summary of the results from the regression analysis examining the relationship between the dependent variable decision quality (QUALITY) and three predictor variables: "MODTFLEXT," "TFL," and "EXTAD."

The first table, "Model Summary," provides information about the overall fit of the model. The R value of .819 indicates a strong positive relationship between the predictor variables and the dependent variable. The R Square value of .670 indicates that about 67% of the variance in the dependent variable is explained by the predictor variables. The Adjusted R Square value is similar to R Square, but it adjusts for the number of predictor variables in the model. The Std. Error of the Estimate is a measure of the average distance that the predicted values fall from the actual values.

The second table, "ANOVA," stands for analysis of variance and provides information about the statistical significance of the model. The F value of 303.591 and the corresponding p-value of <.001 indicate that the model is statistically significant, meaning that the predictor variables are able to significantly predict the dependent variable.

The third table, "Coefficients," provides information about the individual predictor variables in the model. The unstandardized coefficients (B) and standardized coefficients (Beta) represent the strength and direction of the relationship between each predictor variable and the dependent variable. The t-values and corresponding p-values indicate the statistical significance of each predictor variable. In this case, all predictor variables are significant at the .001 level.

Table 51 - Results of the Regression Analysis for the Moderating Role of Advice Seeking

Model Summary									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change
1	.819 ^a	.670	.668	.45202	.670	303.591	3	448	<.001

a. Predictors: (Constant), MODTFLEXT, TFL, EXTAD

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	186.090	3	62.030	303.591	<.001 ^b
	Residual	91.536	448	.204		
	Total	277.626	451			

a. Dependent Variable: QUALITY

b. Predictors: (Constant), MODTFLEXT, TFL, EXTAD

Coefficients ^a						
		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	.817	.119		6.843	<.001
	EXTAD	.232	.024	.423	9.870	<.001
	TFL	.296	.023	.409	12.957	<.001
	MODTFLEXT	-.115	.027	-.162	-4.209	<.001

a. Dependent Variable: QUALITY

Table below is an output from the Hayes Process in SPSS examining the relationship between the dependent variable Decision Quality (QUALITY) and three predictor variables: Transformational Leadership (TFL), External Advice (EXTAD) and "Int_1." The "Int_1" predictor variable is an interaction term that represents the product of "TFL" and "EXTAD."

The first table, "Model Summary," provides information about the overall fit of the model. The R value of .8187 indicates a strong positive relationship between the predictor

variables and the dependent variable. The R-sq value of .6703 indicates that about 67% of the variance in the dependent variable is explained by the predictor variables. The MSE value, or mean squared error, is a measure of the average distance that the predicted values fall from the actual values. The F value of 303.5911 and the corresponding p-value of .0000 indicate that the model is statistically significant, meaning that the predictor variables are able to significantly predict the dependent variable.

The second table, "Model," provides information about the individual predictor variables in the model. The "coeff" column represents the strength and direction of the relationship between each predictor variable and the dependent variable. The "se" column represents the standard error of the coefficient estimate. The "t" and "p" values indicate the statistical significance of each predictor variable. In this case, all predictor variables are significant at the .0000 level.

The third table, "Product terms key," indicates that the "Int_1" predictor variable is an interaction term representing the product of "TFL" and "EXTAD."

The fourth table provides information about the statistical significance of the interaction term "Int_1." The R2-chng value of .0130 indicates that the interaction term contributes an additional 1.3% to the explained variance in the dependent variable compared to the main effects model. The F value of 17.7192 and the corresponding p-value of .0000 indicate that the interaction term is statistically significant.

The fifth table provides information about the conditional effects of the "TFL" predictor variable at different values of the "EXTAD" moderator variable. The "Effect" column represents

the estimated change in the dependent variable for a one unit change in the "TFL" predictor variable at each level of the "EXTAD" moderator variable. The "se," "t," and "p" values indicate the statistical significance of the effects.

Table 52 - Results for Hayes Process Macro for the Moderating Role of Advice Seeking Behavior

```

*****
****
Model   : 1
      Y   : QUALITY
      X   : TFL
      W   : EXTAD

Sample
Size:   452

*****
****
OUTCOME VARIABLE:
  QUALITY

Model Summary
      R      R-sq      MSE      F      df1      df2
p      .8187      .6703      .2043      303.5911      3.0000      448.0000
.0000

Model
      coeff      se      t      p      LLCI
ULCI
constant      -.3953      .2204      -1.7935      .0736      -.8284
.0379
TFL      .6772      .0970      6.9820      .0000      .4866
.8679
EXTAD      .4684      .0434      10.7923      .0000      .3831
.5537
Int_1      -.0742      .0176      -4.2094      .0000      -.1088      -
.0396

Product terms key:
  Int_1      :      TFL      x      EXTAD

Test(s) of highest order unconditional interaction(s):
      R2-chng      F      df1      df2      p
X*W      .0130      17.7192      1.0000      448.0000      .0000
-----
      Focal predict: TFL      (X)

```


Mod var: EXTAD (W)

Conditional effects of the focal predictor at values of the moderator(s) :

	EXTAD	Effect	se	t	p	LLCI
ULCI						
	3.3333	.4299	.0421	10.2060	.0000	.3471
	.5127					
	5.6667	.2568	.0232	11.0696	.0000	.2112
	.3024					
	6.3333	.2074	.0284	7.3023	.0000	.1515
	.2632					

H7b: Seeking more advice from external sources will moderate the relationship between the quality of the strategic decision outcomes and transactional leaders

The hypothesis H7b suggests that seeking more advice from external sources (such as consultants or industry experts) can moderate or weaken the relationship between the quality of strategic decision outcomes and transactional leaders. In other words, the hypothesis suggests that when transactional leaders seek more advice from external sources, the quality of their strategic decision outcomes may not be as closely tied to their leadership style as it would be otherwise.

A transactional leader is a type of leader who focuses on achieving specific goals and objectives through a clear system of rewards and punishments. They may rely on a top-down approach to decision-making and may prioritize efficiency and productivity over creativity and innovation.

Seeking more advice from external sources can potentially bring a more diverse range of perspectives and ideas to the decision-making process, which may lead to better quality outcomes. Therefore, the hypothesis H7b suggests that seeking more advice from external

sources may moderate or weaken the relationship between the quality of strategic decision outcomes and transactional leaders.

Below is a summary of the regression analysis to predict the moderating relationship between external advice seeking, transactional leadership and decision quality.

The R-squared value of 0.602 indicates that about 60% of the variation in the dependent variable QUALITY can be explained by the predictor variables in the model. The adjusted R-squared value of 0.600 is similar but takes into account the number of predictor variables in the model. The standard error of the estimate (Std. Error of the Estimate) is 0.49641, which is a measure of the amount of error or uncertainty in the model's predictions.

The ANOVA (Analysis of Variance) table shows the sums of squares for the regression and the residuals, as well as the mean squares and the F-statistic, which is a measure of the strength of the relationship between the predictor variables and the dependent variable. The p-value (Sig.) for the F-statistic is less than 0.001, indicating that the relationship is statistically significant.

The coefficients table shows the estimated coefficients (B) for each predictor variable, as well as the standard errors of the coefficients and the t-values, which are used to test the statistical significance of the coefficients. The p-values (Sig.) for the coefficients indicate whether each predictor variable is significantly related to the dependent variable. In this case, all of the predictor variables are significantly related to QUALITY.

Table 53 - Results of the Regression Analysis for the Moderating Role of Advice Seeking

Model Summary									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	Change Statistics F Change	df1	df2	Sig. F Change
1	.776 ^a	.602	.600	.49641	.602	226.210	3	448	<.001

a. Predictors: (Constant), MODTXLEXT, TXL, EXTAD

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	167.229	3	55.743	226.210	<.001 ^b
	Residual	110.397	448	.246		
	Total	277.626	451			

a. Dependent Variable: QUALITY

b. Predictors: (Constant), MODTXLEXT, TXL, EXTAD

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	1.617	.146		11.106	<.001
	EXTAD	.235	.027	.427	8.601	<.001
	TXL	.058	.027	.079	2.156	.032
	MODTXLEXT	-.226	.029	-.353	-7.863	<.001

a. Dependent Variable: QUALITY

Below is a summary of the output from the Hayes Process in SPSS which examines the moderating relationship between Decision Quality, External Advice Seeking and Transactional Leadership.

The model was fit to predict the quality of a product based on three predictor variables: TXL, EXTAD, and the interaction between TXL and EXTAD (Int_1). The output provides the

coefficients of the predictors, their standard errors, t-values, p-values, and confidence intervals for the coefficients.

The R-squared value of .6024 indicates that about 60% of the variation in the quality of the product can be explained by the model. The mean squared error (MSE) of .2464 is a measure of the average difference between the predicted values and the observed values. The F-value of 226.2103 and the p-value of .0000 indicate that the model is significant.

The output also includes a summary of the test of the highest order unconditional interaction, which in this case is the interaction between TXL and EXTAD. The R2-change of .0549 indicates that the interaction term improves the model's fit by about 5.5%. The F-value of 61.8249 and the p-value of .0000 indicate that the interaction is significant.

Finally, the output includes the conditional effects of the focal predictor (TXL) at different levels of the moderator (EXTAD). This shows how the effect of TXL on quality changes as the level of EXTAD changes. At a level of 3.3333, the effect of TXL on quality is .3265, with a t-value of 7.4911 and a p-value of .0000. This indicates that TXL has a significant positive effect on quality at this level of EXTAD. At higher levels of EXTAD, the effect of TXL becomes negative and is not statistically significant.

Table 54 - Results for Hayes Process Macro for the Moderating Role of Advice Seeking Behavior

Model : 1
Y : QUALITY
X : TXL
W : EXTAD

Sample
Size: 452

OUTCOME VARIABLE:
QUALITY

Model Summary

R	R-sq	MSE	F	df1	df2	p
.7761	.6024	.2464	226.2103	3.0000	448.0000	.0000

Model

	coeff	se	t	p	LLCI	ULCI
constant	-1.0548	.2471	-4.2688	.0000	-1.5404	-.5692
TXL	.8222	.1010	8.1424	.0000	.6237	1.0206
EXTAD	.7548	.0516	14.6140	.0000	.6533	.8563
Int_1	-.1487	.0189	-7.8629	.0000	-.1859	-.1115

Product terms key:

Int_1 : TXL x EXTAD

Test(s) of highest order unconditional interaction(s):

	R2-chng	F	df1	df2	p
X*W	.0549	61.8249	1.0000	448.0000	.0000

Focal predict: TXL (X)
Mod var: EXTAD (W)

Conditional effects of the focal predictor at values of the moderator(s):

EXTAD	Effect	se	t	p	LLCI	ULCI
3.3333	.3265	.0436	7.4911	.0000	.2408	.4121
5.6667	-.0205	.0287	-.7149	.4750	-.0768	.0358
6.3333	-.1196	.0351	-3.4128	.0007	-.1885	-.0507

H7c: Seeking more advice from external sources will moderate the relationship between the quality of the strategic decision outcomes and laissez-faire leaders.

The hypothesis H7c suggests that seeking more advice from external sources (such as consultants or industry experts) can moderate or weaken the relationship between the quality of strategic decision outcomes and laissez-faire leaders. In other words, the hypothesis suggests that when laissez-faire leaders seek more advice from external sources, the quality of their strategic decision outcomes may not be as closely tied to their leadership style as it would be otherwise.

A laissez-faire leader is a type of leader who takes a hands-off approach to decision-making and gives their team members a high degree of autonomy and freedom to make decisions. They may prioritize creativity and innovation over efficiency and productivity.

Seeking more advice from external sources can potentially bring a more diverse range of perspectives and ideas to the decision-making process, which may lead to better quality outcomes. Therefore, the hypothesis H7c suggests that seeking more advice from external sources may moderate or weaken the relationship between the quality of strategic decision outcomes and laissez-faire leaders.

The tables below are a summary of the regression analysis that was conducted to study the moderating relationship between external advice seeking, laissez-faire leadership and decision quality.

The R-squared value of 0.710 indicates that about 71% of the variation in the dependent variable QUALITY can be explained by the predictor variables in the model. The adjusted R-squared value of 0.708 is similar but takes into account the number of predictor variables in the

model. The standard error of the estimate (Std. Error of the Estimate) is 0.42424, which is a measure of the amount of error or uncertainty in the model's predictions.

The ANOVA (Analysis of Variance) table shows the sums of squares for the regression and the residuals, as well as the mean squares and the F-statistic, which is a measure of the strength of the relationship between the predictor variables and the dependent variable. The p-value (Sig.) for the F-statistic is less than 0.001, indicating that the relationship is statistically significant.

The coefficients table shows the estimated coefficients (B) for each predictor variable, as well as the standard errors of the coefficients and the t-values, which are used to test the statistical significance of the coefficients. The p-values (Sig.) for the coefficients indicate whether each predictor variable is significantly related to the dependent variable. In this case, the predictor variables EXTAD and LF are significantly related to QUALITY, but the predictor variable MODLFEXT is not significantly related.

Table 55 - Results of the Regression Analysis for the Moderating Role of Advice Seeking

Model Summary									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	Change Statistics F Change	df1	df2	Sig. F Change
1	.842 ^a	.710	.708	.42424	.710	364.836	3	448	<.001

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	196.994	3	65.665	364.836	<.001 ^b
	Residual	80.633	448	.180		
	Total	277.626	451			

a. Dependent Variable: QUALITY

b. Predictors: (Constant), MODLFEXT, EXTAD, LF

Coefficients ^a					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1	(Constant)	3.078		18.819	<.001
	EXTAD	.140	.254	5.892	<.001
	LF	-.430	-.653	-13.928	<.001
	MODLFEXT	-.013	-.026	-.568	.570

a. Dependent Variable: QUALITY

Finally, Hayes Process was again conducted on SPSS software to predict the moderating relationship and below is a summary of the output from the software.

The R-squared value of 0.7096 indicates that about 71% of the variation in the dependent variable QUALITY can be explained by the predictor variables in the model. The MSE (mean squared error) is 0.1800, which is a measure of the average squared difference between the predicted values and the observed values in the data. The F-statistic is 364.8359, which is a measure of the strength of the relationship between the predictor variables and the dependent variable. The p-value for the F-statistic is 0.0000, indicating that the relationship is statistically significant.

The coefficients table shows the estimated coefficients (coeff) for each predictor variable, as well as the standard errors of the coefficients (se) and the t-values, which are used to test the statistical significance of the coefficients. The p-values (p) for the coefficients indicate whether each predictor variable is significantly related to the dependent variable. The LLCI (lower limit of the confidence interval) and ULCI (upper limit of the confidence interval) show the range of values within which the true value of the coefficient is likely to fall, with a certain level of confidence.

The product terms key indicates that there is an interaction between the variables LF and EXTAD. The test of the highest order unconditional interaction indicates that this interaction is not statistically significant.

Table 56 - Results for Hayes Process Macro for the Moderating Role of Advice Seeking Behavior

```

*****
Model   : 1
  Y     : QUALITY
  X     : LF
  W     : EXTAD

Sample
Size:   452

*****
OUTCOME VARIABLE:
  QUALITY

Model Summary
      R      R-sq      MSE      F      df1      df2      p
    .8424    .7096    .1800   364.8359    3.0000   448.0000    .0000

Model
      coeff      se      t      p      LLCI      ULCI
constant    2.9953    .2382   12.5740    .0000    2.5272    3.4635
LF          -.3908    .0591   -6.6169    .0000   -.5069   -.2747
EXTAD        .1559    .0434    3.5935    .0004    .0706    .2411
Int_1       -.0076    .0134   -.5685    .5700   -.0340    .0188

Product terms key:
  Int_1      :      LF      x      EXTAD

Test(s) of highest order unconditional interaction(s):
      R2-chng      F      df1      df2      p
X*W      .0002      .3232      1.0000   448.0000    .5700

```

5.2.7 Hypotheses Test Results

Based on the results of the regression analyses, it appears that transformational, transactional, and laissez-faire leadership styles are all significantly related to decision speed and decision quality. Transformational, transactional, and laissez-faire leadership styles are also significantly related to advice seeking.

The strength of the relationship between leadership style and the outcomes being measured is represented by the R^2 values. Higher R^2 values indicate a stronger relationship. For example, H1a (transformational leadership and decision speed) has an R^2 value of 0.494, indicating that transformational leadership is significantly related to decision speed and that transformational leadership accounts for approximately 49% of the variance in decision speed.

The slope of the relationship between leadership style and the outcomes being measured is represented by the β values. Positive β values indicate that as leadership style increases, the outcome also increases. For example, H1c (laissez-faire leadership and decision speed) has a β value of 0.600, indicating that as laissez-faire leadership increases, decision speed also increases. Negative β values indicate that as leadership style increases, the outcome decreases. For example, H1c (laissez-faire leadership and decision speed) also has a negative β value of -0.660, indicating that as laissez-faire leadership increases, decision quality decreases.

The hypothesis tests also included moderation analyses, which tested whether the relationship between leadership style and the outcomes being measured was moderated by another variable. For example, H6a (moderation: transformational leadership, advice seeking, decision speed) tested whether the relationship between transformational leadership and decision

speed was moderated by advice seeking. The R^2 value of 0.599 and the β value of -0.187 for this hypothesis suggest that there is a significant moderation effect, with the relationship between transformational leadership and decision speed being stronger when advice seeking is low.

The results of the hypothesis testing offer some interesting insights into the relationship between leadership style, advice seeking, and strategic decision outcomes.

First, it appears that transformational leadership has a positive effect on the quality of a strategic decision outcome. This aligns with previous research on transformational leadership, which suggests that this style of leadership is characterized by a focus on inspiring and motivating followers, as well as encouraging innovation and creativity. In the context of strategic decision-making, this may lead to better quality decisions as leaders are able to tap into the potential of their team and consider a wider range of options.

Transactional leadership also had a positive effect on the speed of a strategic decision outcome. This is not surprising, as transactional leadership is typically associated with a focus on clear goals and expectations, as well as a focus on rewards and punishments for performance. In the context of strategic decision-making, this may lead to quicker decision-making as leaders are able to clearly communicate their expectations and motivate their team to achieve them.

In contrast, laissez-faire leadership had a negative effect on both the speed and quality of strategic decision outcomes. Laissez-faire leadership is characterized by a hands-off approach, in which leaders allow their team to make decisions on their own without much guidance or direction. In the context of strategic decision-making, this may lead to slower decision-making as team members may struggle to make decisions without clear guidance and may also lead to

lower quality decisions as team members may not have the necessary expertise or resources to make informed choices.

The results also suggest that transformational and transactional leaders are more likely to seek advice from internal and external sources, respectively, when making strategic decisions. This aligns with the characteristics of these leadership styles, as transformational leaders tend to focus on building strong relationships within their team and creating a collaborative work environment, while transactional leaders are more focused on achieving specific goals and may be more likely to seek outside expertise to help them achieve those goals. Laissez-faire leaders, on the other hand, were found to be less likely to seek advice from either internal or external sources, potentially leading to a lack of input and expertise in the decision-making process.

Finally, the moderation results suggest that seeking more advice from internal sources moderates the relationship between the speed of strategic decision outcomes and both transformational and transactional leaders. This suggests that leaders who seek more advice from internal sources may be more successful in making quicker decisions, particularly if they are transformational or transactional leaders. Similarly, seeking more advice from external sources moderates the relationship between the quality of strategic decision outcomes and both transformational and transactional leaders, suggesting that leaders who seek more advice from external sources may be more successful in making higher quality decisions, particularly if they are transformational or transactional leaders.

Overall, these results highlight the importance of considering leadership style and advice seeking in the strategic decision-making process. By understanding the impact of these factors,

leaders can better optimize their decision-making processes and improve the outcomes of their strategic decisions.

	Description	R ²	B	p-value	Result
H1a	Transformational Leadership -> Decision Speed	.494	.279	<.001	Rejected
H1b	Transactional Leadership -> Decision Speed	.346	.562	<.001	Accepted
H1c	Laissez-Faire Leadership -> Decision Speed	.600	-.660	<.001	Accepted
H2a	Transformational Leadership -> Decision Quality	.430	.474	<.001	Accepted
H2b	Transactional Leadership -> Decision Quality	.228	.352	<.001	Accepted
H2c	Laissez-Faire Leadership -> Decision Quality	.685	-.545	<.001	Accepted
H3	Transformational Leadership -> Advice Seeking	.492	.516	<.001	Accepted
H4	Transactional Leadership -> Advice Seeking	.341	.498	<.001	Accepted
H5	Laissez-Faire Leadership -> Advice Seeking	.741	-.435	<.001	Accepted
H6a	Moderation: Transformational Leadership, Advice Seeking, Decision Speed	.599	-.187	<.001	Accepted
H6b	Moderation: Transactional Leadership, Advice Seeking, Decision Speed	.667	-.093	<.001	Accepted
H6c	Moderation: Laissez-Faire Leadership, Advice Seeking, Decision Speed	.638	.132	<.005	Accepted
H7a	Moderation: Transactional Leadership, Advice Seeking, Decision Quality	.670	-.115	<.001	Accepted
H7b	Moderation: Transactional Leadership, Advice Seeking, Decision Quality	.602	-.226	<.001	Accepted
H7c	Moderation: Transformational Leadership, Advice Seeking, Decision Quality	.710	-.013	<.570	Rejected

5.2.8 Data Analyses of Demographic Variables

5.2.8.1 Firm Size and Decision Speed

Initially, an analysis comparing the mean "SPEED" scores for different groups of firms based on their size, as measured by the number of employees was executed on SPSS. The analysis includes a one-way ANOVA test to determine whether there is a significant difference in the mean SPEED scores between the different groups of firms, and multiple comparisons using the Scheffe method to identify which specific pairs of groups have significantly different mean SPEED scores.

The "N" column indicates the number of observations in each group, and the "Mean" column shows the mean SPEED score for each group. The "Std. Deviation" column shows the standard deviation of the SPEED scores within each group, and the "Std. Error" column shows the standard error of the mean SPEED score for each group. The "95% Confidence Interval for Mean" column provides a range of values within which the true mean SPEED score for each group is likely to fall, with a confidence level of 95%. The "Minimum" and "Maximum" columns show the minimum and maximum SPEED scores in each group.

The ANOVA results show that there is a statistically significant difference in the mean SPEED scores between the different groups of firms ($p < .001$). The effect sizes (eta-squared, epsilon-squared, and omega-squared) indicate the proportion of the variance in SPEED scores that can be attributed to the difference between the groups. The robust tests of equality of means (Brown-Forsythe) confirm the statistical significance of the difference between the groups.

The multiple comparisons using the Scheffe method show the mean difference in SPEED scores between each pair of groups, along with the corresponding standard error, significance level, and confidence interval. A difference is considered statistically significant if the p-value is less than .05. The results indicate that the mean SPEED scores for firms with 1-10 employees, 11-1000 employees, and 101-1000 employees are significantly higher than the mean SPEED scores for firms with 5000+ employees. The mean SPEED scores for firms with 1-10 employees and 11-1000 employees are not significantly different from each other.

The mean SPEED scores for firms with 1-10 employees, 11-1000 employees, and 101-1000 employees are all significantly higher than the mean SPEED scores for firms with 5000+ employees. This suggests that, on average, firms with smaller numbers of employees tend to have higher SPEED scores than firms with larger numbers of employees.

The standard deviations of the SPEED scores within each group are generally larger than the standard errors of the mean SPEED scores. This suggests that there is a relatively large amount of variation in the SPEED scores within each group.

The confidence intervals for the mean SPEED scores show that the true mean SPEED scores for each group are likely to fall within a certain range, with a confidence level of 95%. For example, the confidence interval for the mean SPEED score for firms with 1-10 employees is 4.0087 to 4.3038, meaning that the true mean SPEED score for this group is likely to fall within this range with 95% confidence.

Overall, these results suggest that there are significant differences in the mean SPEED scores between firms of different sizes, with smaller firms generally having higher mean SPEED

scores than larger firms. However, there is also a significant amount of variation in the SPEED scores within each group, meaning that not all firms within a given size group will necessarily have the same SPEED score.

Table 57 - One-Way ANOVA Analysis Results of the Relationship Between Firm Size and Decision Speed

Descriptives								
SPEED								
	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
1-10 çalışan (employees)	64	4.1563	.59084	.07386	4.0087	4.3038	1.67	5.00
11-1000 çalışan (employees)	77	3.7749	.88925	.10134	3.5731	3.9767	1.33	5.00
101-1000 çalışan (employees)	92	3.6558	.96514	.10062	3.4559	3.8557	1.00	5.00
1001-5000 çalışan (employees)	91	3.4103	1.07391	.11258	3.1866	3.6339	1.00	5.00
5000+ çalışan (employees)	128	3.1797	1.06885	.09447	2.9927	3.3666	1.00	5.00
Total	452	3.5627	1.01370	.04768	3.4690	3.6564	1.00	5.00

ANOVA					
SPEED					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	47.704	4	11.926	12.823	<.001
Within Groups	415.742	447	.930		
Total	463.446	451			

ANOVA Effect Sizes^a

		Point Estimate	95% Confidence Interval	
			Lower	Upper
SPEED	Eta-squared	.103	.050	.152
	Epsilon-squared	.095	.042	.144
	Omega-squared Fixed-effect	.095	.042	.144
	Omega-squared Random-effect	.025	.011	.040

a. Eta-squared and Epsilon-squared are estimated based on the fixed-effect model.

Robust Tests of Equality of Means

SPEED

	Statistic ^a	df1	df2	Sig.
Brown-Forsythe	13.877	4	424.404	<.001

a. Asymptotically F distributed.

Multiple Comparisons

Dependent Variable: SPEED

Scheffe

		Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
(I) Firm Size	(J) Firm Size				Lower Bound	Upper Bound
1-10 çalışan (employees)	11-1000 çalışan (employees)	.38136	.16313	.245	-.1232	.8859
	101-1000 çalışan (employees)	.50045*	.15698	.039	.0149	.9860
	1001-5000 çalışan (employees)	.74599*	.15733	<.001	.2593	1.2326
	5000+ çalışan (employees)	.97656*	.14764	<.001	.5199	1.4332
11-1000 çalışan (employees)	1-10 çalışan (employees)	-.38136	.16313	.245	-.8859	.1232
	101-1000 çalışan (employees)	.11909	.14896	.958	-.3417	.5798
	1001-5000 çalışan (employees)	.36464	.14933	.204	-.0973	.8265
	5000+ çalışan (employees)	.59520*	.13909	.001	.1650	1.0254

101-1000 çalışan (employees)	1-10 çalışan (employees)	-.50045*	.15698	.039	-.9860	-.0149
	11-1000 çalışan (employees)	-.11909	.14896	.958	-.5798	.3417
	1001-5000 çalışan (employees)	.24554	.14258	.564	-.1955	.6866
	5000+ çalışan (employees)	.47611*	.13182	.012	.0684	.8838
1001-5000 çalışan (employees)	1-10 çalışan (employees)	-.74599*	.15733	<.001	-1.2326	-.2593
	11-1000 çalışan (employees)	-.36464	.14933	.204	-.8265	.0973
	101-1000 çalışan (employees)	-.24554	.14258	.564	-.6866	.1955
	5000+ çalışan (employees)	.23057	.13224	.552	-.1785	.6396
5000+ çalışan (employees)	1-10 çalışan (employees)	-.97656*	.14764	<.001	-1.4332	-.5199
	11-1000 çalışan (employees)	-.59520*	.13909	.001	-1.0254	-.1650
	101-1000 çalışan (employees)	-.47611*	.13182	.012	-.8838	-.0684
	1001-5000 çalışan (employees)	-.23057	.13224	.552	-.6396	.1785

*. The mean difference is significant at the 0.05 level.

5.2.8.2 Firm Size and Decision Quality

A one-way ANOVA test was conducted to determine whether there is a significant difference in the mean QUALITY scores between the different groups of firms, and multiple comparisons using the Scheffe method to identify which specific pairs of groups have significantly different mean QUALITY scores.

The "N" column indicates the number of observations in each group, and the "Mean" column shows the mean QUALITY score for each group. The "Std. Deviation" column shows

the standard deviation of the QUALITY scores within each group, and the "Std. Error" column shows the standard error of the mean QUALITY score for each group. The "95% Confidence Interval for Mean" column provides a range of values within which the true mean QUALITY score for each group is likely to fall, with a confidence level of 95%. The "Minimum" and "Maximum" columns show the minimum and maximum QUALITY scores in each group.

The ANOVA results show that there is a statistically significant difference in the mean QUALITY scores between the different groups of firms ($p < .001$). The effect sizes (eta-squared, epsilon-squared, and omega-squared) indicate the proportion of the variance in QUALITY scores that can be attributed to the difference between the groups. The robust tests of equality of means (Brown-Forsythe) confirm the statistical significance of the difference between the groups.

The multiple comparisons using the Scheffe method show the mean difference in QUALITY scores between each pair of groups, along with the corresponding standard error, significance level, and confidence interval. A difference is considered statistically significant if the p-value is less than .05. The results indicate that the mean QUALITY scores for firms with 1-10 employees and 101-1000 employees are significantly higher than the mean QUALITY scores for firms with 5000+ employees. The mean QUALITY scores for firms with 1-10 employees, 11-1000 employees, and 101-1000 employees are not significantly different from each other.

Overall, these results suggest that there are significant differences in the mean QUALITY scores between firms of different sizes, with smaller firms generally having higher mean QUALITY scores than larger firms. However, there is also a significant amount of variation in the QUALITY scores within each group, meaning that not all firms within a given size group will necessarily have the same QUALITY score.

The mean QUALITY scores for firms with 1-10 employees and 101-1000 employees are significantly higher than the mean QUALITY scores for firms with 5000+ employees. This suggests that, on average, firms with smaller numbers of employees tend to have higher QUALITY scores than firms with larger numbers of employees.

The standard deviations of the QUALITY scores within each group are generally larger than the standard errors of the mean QUALITY scores. This suggests that there is a relatively large amount of variation in the QUALITY scores within each group.

The confidence intervals for the mean QUALITY scores show that the true mean QUALITY scores for each group are likely to fall within a certain range, with a confidence level of 95%. For example, the confidence interval for the mean QUALITY score for firms with 1-10 employees is 3.1458 to 3.4271, meaning that the true mean QUALITY score for this group is likely to fall within this range with 95% confidence.

Overall, these results suggest that there are significant differences in the mean QUALITY scores between firms of different sizes, with smaller firms generally having higher mean QUALITY scores than larger firms. However, there is also a significant amount of variation in the QUALITY scores within each group, meaning that not all firms within a given size group will necessarily have the same QUALITY score.

Table 58 - One-Way ANOVA Analysis Results of the Relationship Between Firm Size and Decision Quality

Descriptives

QUALITY

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
1-10 çalışan (employees)	64	3.2865	.56302	.07038	3.1458	3.4271	1.00	4.00
11-1000 çalışan (employees)	77	2.9177	.73778	.08408	2.7503	3.0852	1.00	4.00
101-1000 çalışan (employees)	92	2.8986	.79026	.08239	2.7349	3.0622	1.00	3.67
1001-5000 çalışan (employees)	91	2.8608	.83897	.08795	2.6861	3.0355	1.00	4.00
5000+ çalışan (employees)	128	2.7135	.80325	.07100	2.5731	2.8540	1.00	4.00
Total	452	2.8968	.78459	.03690	2.8242	2.9693	1.00	4.00

ANOVA

QUALITY

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	14.168	4	3.542	6.010	<.001
Within Groups	263.458	447	.589		
Total	277.626	451			

ANOVA Effect Sizes^a

		Point Estimate	95% Confidence Interval	
			Lower	Upper
QUALITY	Eta-squared	.051	.013	.088
	Epsilon-squared	.043	.005	.080
	Omega-squared Fixed-effect	.042	.005	.080
	Omega-squared Random-effect	.011	.001	.021

a. Eta-squared and Epsilon-squared are estimated based on the fixed-effect model.

Robust Tests of Equality of Means

QUALITY

	Statistic ^a	df1	df2	Sig.
Brown-Forsythe	6.309	4	428.387	<.001

a. Asymptotically F distributed.

Multiple Comparisons

Dependent Variable: QUALITY

Scheffe

(I) Firm Size	(J) Firm Size	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
1-10 çalışan (employees)	11-1000 çalışan (employees)	.36871	.12986	.091	-.0330	.7704
	101-1000 çalışan (employees)	.38791*	.12496	.049	.0014	.7744
	1001-5000 çalışan (employees)	.42565*	.12524	.022	.0383	.8131
	5000+ çalışan (employees)	.57292*	.11753	<.001	.2094	.9365
11-1000 çalışan (employees)	1-10 çalışan (employees)	-.36871	.12986	.091	-.7704	.0330
	101-1000 çalışan (employees)	.01920	.11858	1.000	-.3476	.3860
	1001-5000 çalışan (employees)	.05694	.11888	.994	-.3108	.4246
	5000+ çalışan (employees)	.20421	.11072	.494	-.1383	.5467
101-1000 çalışan (employees)	1-10 çalışan (employees)	-.38791*	.12496	.049	-.7744	-.0014
	11-1000 çalışan (employees)	-.01920	.11858	1.000	-.3860	.3476
	1001-5000 çalışan (employees)	.03774	.11350	.999	-.3133	.3888
	5000+ çalışan (employees)	.18501	.10493	.540	-.1396	.5096

1001-5000 çalışan (employees)	1-10 çalışan (employees)	-.42565*	.12524	.022	-.8131	-.0383
	11-1000 çalışan (employees)	-.05694	.11888	.994	-.4246	.3108
	101-1000 çalışan (employees)	-.03774	.11350	.999	-.3888	.3133
	5000+ çalışan (employees)	.14726	.10527	.744	-.1783	.4729
5000+ çalışan (employees)	1-10 çalışan (employees)	-.57292*	.11753	<.001	-.9365	-.2094
	11-1000 çalışan (employees)	-.20421	.11072	.494	-.5467	.1383
	101-1000 çalışan (employees)	-.18501	.10493	.540	-.5096	.1396
	1001-5000 çalışan (employees)	-.14726	.10527	.744	-.4729	.1783

*. The mean difference is significant at the 0.05 level.

5.2.8.3 Firm Age and Decision Speed

These results suggest that there are significant differences in the mean decision speed scores between firms of different ages. Specifically, firms with an age of less than 1 year and firms with an age between 1 and 3 years tend to have higher mean SPEED scores than firms with an age of 7+ years. There is not a statistically significant difference in the mean SPEED scores between firms with an age of less than 1 year and firms with an age between 1 and 3 years.

The standard deviations of the SPEED scores within each group are generally larger than the standard errors of the mean SPEED scores, indicating that there is a relatively large amount of variation in the SPEED scores within each group.

The confidence intervals for the mean SPEED scores show that the true mean SPEED scores for each group are likely to fall within a certain range, with a confidence level of 95%. For

example, the confidence interval for the mean SPEED score for firms with an age of less than 1 year is 4.1354 to 4.3909, meaning that the true mean SPEED score for this group is likely to fall within this range with 95% confidence.

The ANOVA results show that there is a statistically significant difference in the mean SPEED scores between firms of different ages, with an F-value of 23.259 and a p-value of less than 0.001. This indicates that the differences in mean SPEED scores between the groups are unlikely to be due to chance.

The ANOVA effect sizes show that the variance in the SPEED scores between the different age groups accounts for 13.5% of the total variance in the data. This is a moderate effect size.

The robust tests of equality of means also support the conclusion that there are significant differences in the mean SPEED scores between the different age groups. The Brown-Forsythe test has a p-value of less than 0.001, indicating that the differences in mean SPEED scores between the groups are statistically significant.

The multiple comparisons results show that there are statistically significant differences in the mean SPEED scores between firms with an age of less than 1 year and firms with an age of 3-7 years and firms with an age of 7+ years. There is also a statistically significant difference in the mean SPEED scores between firms with an age of 1-3 years and firms with an age of 7+ years. However, there is not a statistically significant difference in the mean SPEED scores between firms with an age of less than 1 year and firms with an age of 1-3 years.

Overall, these results suggest that there are significant differences in the mean SPEED scores between firms of different ages, with younger firms generally having higher mean SPEED scores than older firms. However, there is also a significant amount of variation in the SPEED scores within each group, meaning that not all firms within a given age group will necessarily have the same SPEED score.

Table 59 - One-Way ANOVA Analysis Results of the Relationship Between Firm Age and Decision Speed

Descriptives								
SPEED								
	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
<1 yıl (year)	38	4.2632	.38871	.06306	4.1354	4.3909	3.33	5.00
1-3 yıl (years)	67	4.0597	.66900	.08173	3.8965	4.2229	1.67	5.00
3-7 yıl (years)	129	3.6770	.90036	.07927	3.5201	3.8339	1.33	5.00
7+ yıl (years)	218	3.2202	1.09901	.07443	3.0735	3.3669	1.00	5.00
Total	452	3.5627	1.01370	.04768	3.4690	3.6564	1.00	5.00

ANOVA					
SPEED					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	62.455	3	20.818	23.259	<.001
Within Groups	400.991	448	.895		
Total	463.446	451			

ANOVA Effect Sizes^a

Point Estimate	95% Confidence Interval	
	Lower	Upper

SPEED	Eta-squared	.135	.078	.189
	Epsilon-squared	.129	.072	.184
	Omega-squared Fixed-effect	.129	.071	.184
	Omega-squared Random-effect	.047	.025	.070

a. Eta-squared and Epsilon-squared are estimated based on the fixed-effect model.

Robust Tests of Equality of Means

SPEED

	Statistic ^a	df1	df2	Sig.
Brown-Forsythe	36.222	3	416.186	<.001

a. Asymptotically F distributed.

Multiple Comparisons

Dependent Variable: SPEED

Scheffe

		Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
(I) Firm Age	(J) Firm Age				Lower Bound	Upper Bound
<1 yıl (year)	1-3 yıl (years)	.20346	.19213	.772	-.3357	.7426
	3-7 yıl (years)	.58616*	.17462	.011	.0961	1.0762
	7+ yıl (years)	1.04297*	.16631	<.001	.5763	1.5097
1-3 yıl (years)	<1 yıl (year)	-.20346	.19213	.772	-.7426	.3357
	3-7 yıl (years)	.38270	.14247	.067	-.0171	.7825
	7+ yıl (years)	.83952*	.13216	<.001	.4687	1.2104
3-7 yıl (years)	<1 yıl (year)	-.58616*	.17462	.011	-1.0762	-.0961
	1-3 yıl (years)	-.38270	.14247	.067	-.7825	.0171
	7+ yıl (years)	.45682*	.10509	<.001	.1619	.7517
7+ yıl (years)	<1 yıl (year)	-1.04297*	.16631	<.001	-1.5097	-.5763
	1-3 yıl (years)	-.83952*	.13216	<.001	-1.2104	-.4687
	3-7 yıl (years)	-.45682*	.10509	<.001	-.7517	-.1619

*. The mean difference is significant at the 0.05 level.

5.2.8.4 Firm Age and Decision Quality

One-way ANOVA was again conducted to compare the mean scores of a dependent variable Decision Quality (QUALITY) among different levels of an independent variable (FirmAge). The independent variable has four levels, representing four different age categories of firms: <1 year, 1-3 years, 3-7 years, and 7+ years.

The descriptives table shows the number of observations (N), mean, standard deviation, and other descriptive statistics for each level of the independent variable.

The ANOVA table shows the sum of squares and degrees of freedom for the between-groups and within-groups variations, as well as the mean squares and F-ratio. The p-value (Sig.) indicates the statistical significance of the F-ratio. In this case, the p-value is less than .001, indicating that there are significant differences in the mean scores of decision quality among the different levels of Firm Age.

The ANOVA Effect Sizes table shows estimates of effect sizes for the statistical analysis. Eta-squared and Epsilon-squared are measures of the proportion of variance in the dependent variable that can be attributed to the independent variable. Omega-squared is another measure of effect size that takes into account the sample size and the number of groups.

The Robust Tests of Equality of Means table shows the results of a Brown-Forsythe test, which is a non-parametric test that is robust to departures from normality. The p-value in this table also indicates the statistical significance of the test.

The Multiple Comparisons table shows the results of post-hoc tests that were conducted to identify which specific pairs of levels of the independent variable differ significantly from each other. In this case, the Scheffe test was used. The mean difference (I-J) is the difference in means between the two levels being compared, and the p-value indicates the statistical significance of the difference. The 95% Confidence Interval for the mean difference gives a range of values within which the true mean difference is likely to fall, based on the sample data.

In summary, the results show that there are significant differences in the mean scores of decision quality among the different levels of Firm Age, with firms in the <1 year, 1-3 years, and 3-7 years categories having higher mean scores than firms in the 7+ years category. The post-hoc tests identified significant differences between the 7+ years category and the other three categories but did not find significant differences between the <1 year and 1-3 years categories, or between the 1-3 years and 3-7 years categories.

Table 60 - One-Way ANOVA Analysis Results of the Relationship Between Firm Age and Decision Quality

Descriptives								
QUALITY								
	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
<1 yıl (year)	38	3.3947	.43740	.07096	3.2510	3.5385	2.33	4.00
1-3 yıl (years)	67	3.1940	.59783	.07304	3.0482	3.3399	1.00	4.00
3-7 yıl (years)	129	2.9302	.74264	.06539	2.8009	3.0596	1.00	4.00
7+ yıl (years)	218	2.6988	.83785	.05675	2.5869	2.8106	1.00	4.00
Total	452	2.8968	.78459	.03690	2.8242	2.9693	1.00	4.00

ANOVA

QUALITY

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	24.034	3	8.011	14.153	<.001
Within Groups	253.593	448	.566		
Total	277.626	451			

ANOVA Effect Sizes^a

		Point Estimate	95% Confidence Interval	
			Lower	Upper
QUALITY	Eta-squared	.087	.040	.135
	Epsilon-squared	.080	.033	.129
	Omega-squared Fixed-effect	.080	.033	.129
	Omega-squared Random-effect	.028	.011	.047

a. Eta-squared and Epsilon-squared are estimated based on the fixed-effect model.

Robust Tests of Equality of Means

QUALITY

	Statistic ^a	df1	df2	Sig.
Brown-Forsythe	19.426	3	377.358	<.001

a. Asymptotically F distributed.

Multiple Comparisons

Dependent Variable: QUALITY

Scheffe

		Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
(I) Firm Age	(J) Firm Age				Lower Bound	Upper Bound
<1 yil (year)	1-3 yil (years)	.20071	.15279	.632	-.2280	.6295
	3-7 yil (years)	.46450*	.13887	.011	.0748	.8542
	7+ yil (years)	.69596*	.13226	<.001	.3248	1.0671
1-3 yil (years)	<1 yil (year)	-.20071	.15279	.632	-.6295	.2280
	3-7 yil (years)	.26380	.11330	.145	-.0541	.5817
	7+ yil (years)	.49525*	.10510	<.001	.2003	.7902
3-7 yil (years)	<1 yil (year)	-.46450*	.13887	.011	-.8542	-.0748
	1-3 yil (years)	-.26380	.11330	.145	-.5817	.0541

	7+ yıl (years)	.23146	.08357	.055	-.0031	.4660
7+ yıl (years)	<1 yıl (year)	-.69596*	.13226	<.001	-1.0671	-.3248
	1-3 yıl (years)	-.49525*	.10510	<.001	-.7902	-.2003
	3-7 yıl (years)	-.23146	.08357	.055	-.4660	.0031

*. The mean difference is significant at the 0.05 level.

5.2.8.5 CEO Tenure and Decision Speed

The following analysis looks at the relationship between CEO tenure (in years) and a dependent variable decision speed (speed). The results show that the mean "speed" score for each category of CEO tenure (less than 1 year, 1-3 years, 3-7 years, and 7+ years) and the standard deviation for each category.

The ANOVA table shows the results of a statistical test used to determine whether there is a significant difference in the mean "speed" scores between the different categories of CEO tenure. The test found that the difference in means was not statistically significant ($p = .718$). The ANOVA effect sizes table provides estimates of the size of the relationship between CEO tenure and "speed," with all estimates indicating a very small relationship.

The robust tests of equality of means table shows the results of a Brown-Forsythe test, which is a statistical test that is robust to departures from normality and can be used when the data are not normally distributed. The test found that the difference in means was not statistically significant ($p = .697$).

The multiple comparisons table shows the results of pairwise comparisons between the different categories of CEO tenure. These comparisons indicate that there were no statistically significant differences in mean "speed" scores between any of the pairs of categories.

The results of the statistical analysis suggest that there is no significant difference in the mean "speed" scores between the different categories of CEO tenure. This means that, according to the data analyzed in this study, the length of time a CEO has been in their position does not appear to have a significant effect on "speed."

It's important to note that these results should be interpreted with caution, as they are based on the specific sample of data analyzed in this study and may not generalize to a larger population. Additionally, the lack of a significant difference in means between the categories of CEO tenure does not necessarily mean that there is no relationship between CEO tenure and "speed" at all – it could be that the relationship is present but too small to be detected with the sample size used in this study.

It's also worth noting that the results of the ANOVA effect sizes table indicate that the relationship between CEO tenure and "speed" is very small, with all estimates of effect size (eta-squared, epsilon-squared, omega-squared fixed-effect, and omega-squared random-effect) being close to zero. This further supports the conclusion that CEO tenure has a minimal, if any, effect on "speed."

Table 61 - One-Way ANOVA Analysis Results of the Relationship Between CEO Tenure and Decision Speed

Descriptives								
SPEED								
	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
<1 yil (year)	98	3.5884	1.07006	.10809	3.3739	3.8030	1.33	5.00
1-3 yil (years)	197	3.6024	1.04726	.07461	3.4552	3.7495	1.00	5.00

3-7 yıl (years)	108	3.5278	.96687	.09304	3.3433	3.7122	1.00	5.00
7+ yıl (years)	49	3.4286	.86603	.12372	3.1798	3.6773	1.00	5.00
Total	452	3.5627	1.01370	.04768	3.4690	3.6564	1.00	5.00

ANOVA

SPEED

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1.388	3	.463	.449	.718
Within Groups	462.058	448	1.031		
Total	463.446	451			

ANOVA Effect Sizes^{a,b}

		Point Estimate	95% Confidence Interval	
			Lower	Upper
SPEED	Eta-squared	.003	.000	.014
	Epsilon-squared	-.004	-.007	.007
	Omega-squared Fixed-effect	-.004	-.007	.007
	Omega-squared Random-effect	-.001	-.002	.002

a. Eta-squared and Epsilon-squared are estimated based on the fixed-effect model.

b. Negative but less biased estimates are retained, not rounded to zero.

Robust Tests of Equality of Means

SPEED

	Statistic ^a	df1	df2	Sig.
Brown-Forsythe	.479	3	345.196	.697

a. Asymptotically F distributed.

Multiple Comparisons

Dependent Variable: SPEED

Scheffe

(I) CEO Tenure	(J) CEO Tenure	Mean Difference (I- J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
<1 yıl (year)	1-3 yıl (years)	-.01393	.12554	1.000	-.3662	.3383

	3-7 yıl (years)	.06066	.14168	.980	-.3369	.4582
	7+ yıl (years)	.15986	.17769	.847	-.3388	.6585
1-3 yıl (years)	<1 yıl (year)	.01393	.12554	1.000	-.3383	.3662
	3-7 yıl (years)	.07459	.12159	.945	-.2666	.4158
	7+ yıl (years)	.17380	.16212	.765	-.2811	.6287
3-7 yıl (years)	<1 yıl (year)	-.06066	.14168	.980	-.4582	.3369
	1-3 yıl (years)	-.07459	.12159	.945	-.4158	.2666
	7+ yıl (years)	.09921	.17492	.956	-.3917	.5901
7+ yıl (years)	<1 yıl (year)	-.15986	.17769	.847	-.6585	.3388
	1-3 yıl (years)	-.17380	.16212	.765	-.6287	.2811
	3-7 yıl (years)	-.09921	.17492	.956	-.5901	.3917

5.2.8.6 CEO Tenure and Decision Quality

These results appear to be from a study that analyzed the relationship between CEO tenure and decision quality. The first table shows the mean, standard deviation, and other statistical measures for the decision quality scores for four different groups of CEOs based on their tenure: less than 1 year, 1-3 years, 3-7 years, and 7 or more years. The second table shows the results of an analysis of variance (ANOVA), which is a statistical test used to determine whether there are significant differences between the means of two or more groups. The third table shows effect sizes for the ANOVA, which give an indication of the strength of the relationship between CEO tenure and decision quality. The fourth table shows the results of a robust test of equality of means, which is another statistical test used to determine whether there are significant differences between the means of the groups. The final table shows multiple comparisons between the means of the different groups, with the differences in means and their associated p-values (a measure of statistical significance).

Based on these results, it does not appear that there is a significant difference in decision quality between the four groups of CEOs based on their tenure. The p-value for the ANOVA is .893, which is greater than .05, indicating that the differences between the means are not statistically significant. Similarly, the p-value for the robust test of equality of means is .884, which is also greater than .05. Additionally, the 95% confidence intervals for the mean differences between the groups in the multiple comparisons table all include zero, indicating that there is not sufficient evidence to conclude that there are significant differences between the means.

Table 62 - One-Way ANOVA Analysis Results of the Relationship Between CEO Tenure and Decision Quality

Descriptives

QUALITY

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
<1 yil (year)	98	2.8980	.87528	.08842	2.7225	3.0734	1.00	4.00
1-3 yil (years)	197	2.8748	.79689	.05678	2.7628	2.9868	1.00	4.00
3-7 yil (years)	108	2.9012	.73942	.07115	2.7602	3.0423	1.00	4.00
7+ yil (years)	49	2.9728	.64491	.09213	2.7875	3.1580	1.33	4.00
Total	452	2.8968	.78459	.03690	2.8242	2.9693	1.00	4.00

ANOVA

QUALITY

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.381	3	.127	.205	.893
Within Groups	277.246	448	.619		
Total	277.626	451			

ANOVA Effect Sizes^{a,b}

		Point Estimate	95% Confidence Interval	
			Lower	Upper
QUALITY	Eta-squared	.001	.000	.007
	Epsilon-squared	-.005	-.007	.001
	Omega-squared Fixed-effect	-.005	-.007	.001
	Omega-squared Random-effect	-.002	-.002	.000

a. Eta-squared and Epsilon-squared are estimated based on the fixed-effect model.

b. Negative but less biased estimates are retained, not rounded to zero.

Robust Tests of Equality of Means

QUALITY

	Statistic ^a	df1	df2	Sig.
Brown-Forsythe	.218	3	344.178	.884

a. Asymptotically F distributed.

Multiple Comparisons

Dependent Variable: QUALITY

Scheffe

(I) CEO Tenure	(J) CEO Tenure	Mean Difference (I- J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
<1 yil (year)	1-3 yil (years)	.02317	.09724	.996	-.2497	.2960
	3-7 yil (years)	-.00328	.10975	1.000	-.3112	.3047
	7+ yil (years)	-.07483	.13764	.961	-.4611	.3114
1-3 yil (years)	<1 yil (year)	-.02317	.09724	.996	-.2960	.2497
	3-7 yil (years)	-.02645	.09419	.994	-.2908	.2379
	7+ yil (years)	-.09800	.12558	.894	-.4504	.2544
3-7 yil (years)	<1 yil (year)	.00328	.10975	1.000	-.3047	.3112
	1-3 yil (years)	.02645	.09419	.994	-.2379	.2908
	7+ yil (years)	-.07155	.13550	.964	-.4518	.3087
7+ yil (years)	<1 yil (year)	.07483	.13764	.961	-.3114	.4611
	1-3 yil (years)	.09800	.12558	.894	-.2544	.4504
	3-7 yil (years)	.07155	.13550	.964	-.3087	.4518

5.2.8.7 TMT Size and Decision Speed

The following results investigate the relationship between top management team size and decision speed. The first table shows the mean, standard deviation, and other statistical measures for the decision speed scores for four different groups of teams based on their size: 1 person, 2-4 people, 4-8 people, and 8 or more people. The second table shows the results of an analysis of variance (ANOVA), which is a statistical test used to determine whether there are significant differences between the means of two or more groups. The third table shows effect sizes for the ANOVA, which give an indication of the strength of the relationship between team size and decision speed. The fourth table shows the results of a robust test of equality of means, which is another statistical test used to determine whether there are significant differences between the means of the groups. The final table shows multiple comparisons between the means of the different groups, with the differences in means and their associated p-values (a measure of statistical significance).

Based on these results, it appears that there is a significant difference in decision speed between the four groups of teams based on their size. The p-value for the ANOVA is .001, which is less than .05, indicating that the differences between the means are statistically significant. Similarly, the p-value for the robust test of equality of means is .001, which is also less than .05. The multiple comparisons table shows that there are statistically significant differences between the means of all pairs of groups, as indicated by the asterisks next to the mean differences. In particular, the mean decision speed for teams with 1 person is significantly higher than the mean decision speed for teams with 2-4 people, 4-8 people, and 8 or more people. The mean decision speed for teams with 2-4 people is also significantly higher than the mean decision speed for

teams with 4-8 people and 8 or more people. Finally, the mean decision speed for teams with 4-8 people is significantly higher than the mean decision speed for teams with 8 or more people.

Table 63 - One-Way ANOVA Analysis Results of the Relationship Between TMT Size and Decision Speed

Descriptives

SPEED

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
1 kişi (person)	24	4.0972	.57718	.11782	3.8535	4.3409	2.00	4.67
2-4 kişi (people)	173	3.7977	.89906	.06835	3.6628	3.9326	1.33	5.00
4-8 kişi (people)	191	3.4538	1.05965	.07667	3.3025	3.6050	1.00	5.00
8+ kişi (people)	64	3.0521	1.03930	.12991	2.7925	3.3117	1.00	4.67
Total	452	3.5627	1.01370	.04768	3.4690	3.6564	1.00	5.00

ANOVA

SPEED

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	35.364	3	11.788	12.336	<.001
Within Groups	428.082	448	.956		
Total	463.446	451			

ANOVA Effect Sizes^a

		Point Estimate	95% Confidence Interval	
			Lower	Upper
SPEED	Eta-squared	.076	.032	.122
	Epsilon-squared	.070	.026	.116
	Omega-squared Fixed-effect	.070	.026	.116
	Omega-squared Random-effect	.024	.009	.042

Robust Tests of Equality of Means

SPEED

	Statistic ^a	df1	df2	Sig.
Brown-Forsythe	14.797	3	264.045	<.001

a. Asymptotically F distributed.

Multiple Comparisons

Dependent Variable: SPEED

Scheffe

(I) TMT Size	(J) TMT Size	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
1 kişi (person)	2-4 kişi (people)	.29953	.21293	.577	-.2980	.8970
	4-8 kişi (people)	.64347*	.21170	.027	.0494	1.2375
	8+ kişi (people)	1.04514*	.23398	<.001	.3886	1.7017
2-4 kişi (people)	1 kişi (person)	-.29953	.21293	.577	-.8970	.2980
	4-8 kişi (people)	.34394*	.10260	.011	.0560	.6318
	8+ kişi (people)	.74560*	.14302	<.001	.3443	1.1469
4-8 kişi (people)	1 kişi (person)	-.64347*	.21170	.027	-1.2375	-.0494
	2-4 kişi (people)	-.34394*	.10260	.011	-.6318	-.0560
	8+ kişi (people)	.40167*	.14118	.045	.0055	.7979
8+ kişi (people)	1 kişi (person)	-1.04514*	.23398	<.001	-1.7017	-.3886
	2-4 kişi (people)	-.74560*	.14302	<.001	-1.1469	-.3443
	4-8 kişi (people)	-.40167*	.14118	.045	-.7979	-.0055

*. The mean difference is significant at the 0.05 level.

5.2.8.8 TMT Size and Quality

Similar analyses have been conducted on a dependent variable called Decision Quality (Quality) and an independent variable called "TMTSize.". The analyses include descriptive statistics, an analysis of variance (ANOVA), and multiple comparisons using the Scheffe method.

The descriptive statistics show the mean, standard deviation, and other measures for the dependent variable "DECISION QUALITY" at each level of the independent variable "TMTSize". The ANOVA tests the hypothesis that the means of "DECISION QUALITY" are equal across the levels of "TMTSize". The multiple comparisons using the Scheffe method are used to determine which pairs of means are significantly different from each other.

From the results, it appears that the mean of "DECISION QUALITY" differs significantly across the levels of "TMTSize". The multiple comparisons show that the mean of "DECISION QUALITY" is significantly higher for the level "1 kişi (person)" compared to the level "8+ kişi (people)". It is also significantly higher for the level "2-4 kişi (people)" compared to the level "8+ kişi (people)". However, the means of "DECISION QUALITY" do not differ significantly between the other pairs of levels.

It is worth noting that the ANOVA results include measures of effect size, which can provide additional information about the strength of the relationship between "DECISION QUALITY" and "TMTSize". The "Eta-squared" and "Omega-squared" measures indicate a small to medium effect size.

Table 64 - One-Way ANOVA Analysis Results of the Relationship Between TMT Size and Decision Quality

Descriptives

QUALITY

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
1 kişi (person)	24	3.1944	.57245	.11685	2.9527	3.4362	1.33	4.00
2-4 kişi (people)	173	2.9923	.74705	.05680	2.8802	3.1044	1.00	4.00
4-8 kişi (people)	191	2.8429	.81778	.05917	2.7262	2.9597	1.00	4.00
8+ kişi (people)	64	2.6875	.79654	.09957	2.4885	2.8865	1.00	4.00
Total	452	2.8968	.78459	.03690	2.8242	2.9693	1.00	4.00

ANOVA

QUALITY

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	7.062	3	2.354	3.898	.009
Within Groups	270.565	448	.604		
Total	277.626	451			

ANOVA Effect Sizes^{a,b}

		Point Estimate	95% Confidence Interval	
			Lower	Upper
QUALITY	Eta-squared	.025	.002	.055
	Epsilon-squared	.019	-.005	.049
	Omega-squared Fixed-effect	.019	-.005	.049
	Omega-squared Random-effect	.006	-.002	.017

a. Eta-squared and Epsilon-squared are estimated based on the fixed-effect model.

b. Negative but less biased estimates are retained, not rounded to zero.

Robust Tests of Equality of Means

QUALITY

	Statistic ^a	df1	df2	Sig.
Brown-Forsythe	4.454	3	242.448	.005

a. Asymptotically F distributed.

Multiple Comparisons

Dependent Variable: QUALITY

Scheffe

		Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
(I) TMT Size	(J) TMT Size				Lower Bound	Upper Bound
1 kişi (person)	2-4 kişi (people)	.20215	.16928	.700	-.2729	.6772
	4-8 kişi (people)	.35151	.16830	.226	-.1208	.8238
	8+ kişi (people)	.50694	.18601	.061	-.0150	1.0289
2-4 kişi (people)	1 kişi (person)	-.20215	.16928	.700	-.6772	.2729
	4-8 kişi (people)	.14936	.08157	.342	-.0795	.3782
	8+ kişi (people)	.30479	.11370	.068	-.0143	.6238
4-8 kişi (people)	1 kişi (person)	-.35151	.16830	.226	-.8238	.1208
	2-4 kişi (people)	-.14936	.08157	.342	-.3782	.0795
	8+ kişi (people)	.15543	.11224	.590	-.1595	.4704
8+ kişi (people)	1 kişi (person)	-.50694	.18601	.061	-1.0289	.0150
	2-4 kişi (people)	-.30479	.11370	.068	-.6238	.0143
	4-8 kişi (people)	-.15543	.11224	.590	-.4704	.1595

5.2.8.9 Formal Decision Process and Decision Speed and Quality

Independent T-Test was run on SPSS to compare two groups (one labeled "Yes" and one labeled "No") on two different variables: decision speed and quality. The mean and standard deviation are given for each group on each variable.

The independent samples test is used to determine whether there is a significant difference between the two groups on each variable. The Levene's test is used to determine whether the variance (spread) of the data is equal between the two groups. If the variances are not equal, the t-test for equality of means is run with a different denominator (degrees of freedom) to account for this.

The t-test results show the t-value, degrees of freedom, and p-value for each variable. The p-value is the probability of observing the difference between the groups by chance if there is no actual difference. If the p-value is less than .05, it can be concluded that there is a statistically significant difference between the two groups.

For the speed variable, the Levene's test shows that the variances are not equal between the two groups ($p = .012$). Therefore, the t-test for equality of means is run with unequal variances assumed, and the results show that there is a statistically significant difference between the two groups ($t(354.961) = -2.928, p = .002$). The mean difference between the groups is .004, with a standard error of .09864. This means that the "Yes" group had a mean speed that was .004 units lower than the "No" group, with a 95% confidence interval ranging from -.48281 to -.09481.

For the quality variable, the Levene's test shows that the variances are equal between the two groups ($p = .203$). Therefore, the t-test for equality of means is run with equal variances assumed, and the results show that there is a statistically significant difference between the two groups ($t(450) = -2.100, p = .018$). The mean difference between the groups is .036, with a standard error of .07510. This means that the "Yes" group had a mean quality that was .036 units lower than the "No" group, with a 95% confidence interval ranging from -.30530 to -.01011.

The independent samples effect sizes give additional information about the magnitude of the difference between the groups. The three different measures (Cohen's d, Hedges' correction, and Glass's delta) all show that the effect size is moderate-large for both the speed and quality variables. This means that the difference between the two groups on these variables is relatively large in magnitude.

In this case, the results show that there is a statistically significant difference between the two groups on both the speed and quality variables. The independent samples effect sizes give additional information about the magnitude of the difference between the groups. The point estimate is the estimated effect size, and the 95% confidence interval gives a range in which the true effect size is likely to fall. A larger effect size indicates a larger difference between the groups.

Table 65 - Independent T-Test Results of the relationship between Formal Decision-Making Process and Decision Speed & Quality

		Group Statistics			
	Formed Decision	N	Mean	Std. Deviation	Std. Error Mean
SPEED	Evet (Yes)	180	3.3889	1.06784	.07959
	Hayır (No)	272	3.6777	.96105	.05827
QUALITY	Evet (Yes)	180	2.8019	.79391	.05917
	Hayır (No)	272	2.9596	.77343	.04690

Independent Samples Test

		Levene's Test for Equality of Variances				Significance		Mean Difference	Std. Error Difference
		F	Sig.	t	df	One-Sided p	Two-Sided p		
SPEED	Equal variances assumed	6.295	.012	-2.991	450	.001	.003	-.28881	.09655
	Equal variances not assumed			-2.928	354.961	.002	.004	-.28881	.09864
QUALITY	Equal variances assumed	1.627	.203	-2.100	450	.018	.036	-.15771	.07510
	Equal variances not assumed			-2.089	376.389	.019	.037	-.15771	.07550

Independent Samples Effect Sizes

			95% Confidence Interval		
		Standardizer ^a	Point Estimate	Lower	Upper
SPEED	Cohen's d	1.00489	-.287	-.476	-.098
	Hedges' correction	1.00657	-.287	-.476	-.098
	Glass's delta	.96105	-.301	-.490	-.110
QUALITY	Cohen's d	.78164	-.202	-.390	-.013
	Hedges' correction	.78295	-.201	-.390	-.013
	Glass's delta	.77343	-.204	-.393	-.015

5.3 Results of the Qualitative Study

For the qualitative portion of this study, phenomenological research was adopted as an approach to explain the quantitative findings. The phenomenological research approach enabled the researcher to gain a "comprehension of meaningful, concrete relations latent in the initial description of experience in the context of a particular scenario" (Moustakas, 1994). Typically, phenomenological interviews are unstructured, as phenomenological researchers rarely prepare interview questions in advance (Leedy & Ormrod, 2001; Singleton & Straits, 2010). Based on Singleton and Straits's (2010) argument that semi structured interviews might be employed in phenomenological investigations. Therefore, the qualitative data for this study was obtained through the use of semi structured interviews.

Participants for the qualitative phase of the study were recruited from a pool of respondents from the quantitative phase. The quantitative data collection stage respondents were asked if they were willing to engage in the qualitative data collection process. The qualitative data collection phase consisted of follow-up interviews to get additional insight into the phenomenon of the participants' perceived leadership style, advice seeking behavior and decision outcomes.

In total, 18 quantitative data participants were asked to see if they would like to partake in the qualitative survey process. A message on WhatsApp was sent to these eighteen individuals who would be volunteering for a follow-up interview. In the message, the potential participants were asked if they would be willing to participate in the qualitative interviews that would be in-depth, recorded and would include open ended questions. Twelve individuals answered to the inquiry regarding their participation in the qualitative phase.

All the interviews were conducted through Microsoft Teams platform via video calls. Each participant was asked again to see if they would allow if the interviews would be recorded.

5.3.1 Data Transcription

Following the completion of each interview, the audio files were analyzed, and transcription was started right after. Following the completion of each transcription, the audio file was played once more, but this time it was evaluated in light of the text that had been transcribed. A second hearing of the audio recording was performed, and its content was compared with the transcription. This was done so that the accuracy and validity of the transcripts could be verified. The participants were given the opportunity to evaluate the transcriptions of their interviews in order to guarantee that their ideas and words were properly recorded. The participants all believed that the transcription did a good job of correctly reflecting the perspectives that were shared, despite the fact that participation was voluntary.

According to (Leedy & Ormrod, 2001), horizontalization assures that every assertion has the same value by treating them all the same. Therefore, horizontalization was used to ensure that each participant's responses and comments were related to the research questions. This was accomplished by grouping the participants into horizontal categories. Following this step, each semi-structured interview transcript that was significant to the research study was created based on the responses. The horizontalization technique made it easier to cut down on and get rid of redundant, interchangeable, and unclear statements. During the course of the inquiry and interviewing, the responses that are uttered are recorded and then examined. Any comments or opinions that had more than one meaning or that were redundant or interchangeable were not

considered. Each expression underwent a thorough examination to determine whether or not it could be abstracted and placed into one of several categories.

Both the transcripts and the data that were collected were linked to the participants' respective contact information. The interview data were evaluated for additional comprehension as soon as they were gathered, which was immediately after the interview. A thorough comprehension of the material was guaranteed by doing an analysis on all of the transcribed data together. For the purpose of data collection, the transcription was broken down into its component parts and individually and collectively inspected.

As part of the study, 12 interview transcripts were read through and examined. In this study, transcribed interviews were imported into the qualitative research program MaxQDA 2022 for the purpose of validating the preliminary data analysis. Through the use of the qualitative technique and the MaxQDA 2022 software, themes that were connected to the research questions in the study were identified. Making certain that the data that had been collected and transcribed provided answers to the initial study questions was the topmost priority. Using the MaxQDA program, the data were first organized into classes, and then organized within those classes into descriptive units. As a result of the analysis of the interview data, the lived experiences, attitudes, beliefs, and opinions of the participants regarding leadership, strategic decision making, advice seeking, and decision outcomes were described from a variety of perspectives. These descriptions were based on the participants' perceptions of these issues.

The process of interpreting the qualitative interview data in order to generate meaning proceeded as the following step in the overall study of the data. This was accomplished by

arranging the findings of the data collection, providing an explanation of the data, and presenting a comprehensive analysis of how the data obtained addressed the research questions of the study. Clarifying and placing the transcriptions into their proper scientific context was the second step of the data analysis process. The textual data consisted of open responses to open-ended questions, which collectively generated a description of the participants' overall attitudes, beliefs, and opinions regarding the topic.

5.3.2 Data Coding

The first step in carrying out an analysis of qualitative data is coding. When conducting qualitative research, the information is analyzed in its current state before coding is performed. Throughout the course of human history, there is a precedent in the field of qualitative research for the development of codes from information that has been obtained (Linneberg & Korsgaard, 2019). In this investigation, the first stage of the coding process made use of in vivo coding in which the participants' own words and phrases were incorporated into the creation of the codes.

The procedure of coding consisted of reviewing and organizing the individual interviews and datasets that were collected. In order to annotate portions of the transcripts, the researcher needs to examine the data and data sets on an individual basis and make use of logic. The definition of codes is that they are illustrative descriptions that are assigned to various elements of transcripts (Green, et al., 2007). Coding, which is also a cognitive method to finding indications and patterns in the data, is dependent on the skills of the researcher and is performed by them (Morse, 1994).

Both the research questions and the interview questions were organized in a way that was congruent with the study's research questions. This theoretical construct offered some preliminary classifications for the data that were collected. Therefore, deductive coding was applied to the interview transcripts for the purpose of this study. In spite of the fact that deductive coding was used, categorical codes manifested themselves during the iterative analysis procedure.

5.3.3 Thematic Analysis Process

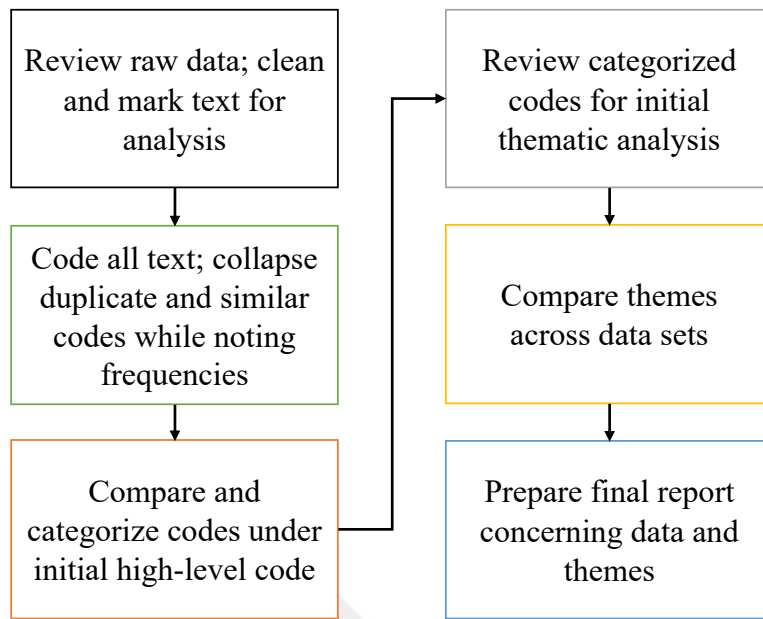
The transcripts from the 12 in-person interview sessions with Microsoft Teams served as the primary source of information for this study. Transcripts of these several sessions were revisited and re-evaluated. After that, the responses from the one-on-one interviews were examined using thematic analysis, which involved a logical reasoning process (Yi, 2018). During the initial phase of the research process, a preliminary codebook was established. The preliminary theme analysis procedure utilized this codebook in its rudimentary form as a guide.

According to Saldana (2016), the thematic analysis is a method that makes use of both coding and theming in a sequential process that molds the data by finding patterns and significance. In particular, for the purpose of this study, the six-step process for theme analysis that was established by Braun and Clarke (2017) was utilized. In a general sense, these six steps are given in the following order:

Reading over the interview raw data sources multiple times is the first step in the process of conducting a thematic analysis. This helps the analyst become familiar with the material. In the second step of the process, the initial coding of the interview transcripts begins with the

highlighting of terms and patterns that are relevant to the generation of codes (Braun & Clarke, 2017). This process of repeated coding will continue until all of the material has been evaluated and coded. After then, duplicate codes are combined into higher-level codes that repeat the same information or information that is very close to it. Codes that are used repeatedly are numbered. The third stage of Braun and Clarke's (2017) methodology entails conducting additional analysis on the codes by merging, sorting, and categorizing them in a variety of different ways. The data is organized and reorganized, and then charts, mind-map linkages, and other similar tools are utilized to observe what emerges from the process. During this procedure, several themes arise throughout the process to expose the primary narratives that are included within the data. The reexamination of these primary categories and themes across all of the data sets constitutes the fourth and last step in the process. The narrative that emerges from the analysis is subsequently strengthened or modified based on the results of this cross-checking of the wider data set. These themes are also compared to the research questions to determine whether or not the questions are answered by the themes. The identification of the topics and the development of a comprehensive study for each subject make up the fifth step. The sixth and last phase is writing up the analysis, which entails analyzing, comparing, and merging the themes with the online questions produced for each research question. This step is also the culmination of the process. This comprehensive procedure is depicted in figure below.

Figure 24 - Braun and Clarke's (2017) Thematic Data Analysis Process



5.3.4 Analysis of the Interview Data

The initial phase of the interview data analysis was performed with the assistance of the MaxQDA 2022 software. The researcher had an easier time with the coding and analysis process thanks to the software, which also made it possible to organize the data and examine it repeatedly. After that, the procedure of applied analysis consisting of these six steps was carried out for the study that is described further down below.

Step one: The first thing that was done was to generate the transcripts. In the beginning, the texts for these transcripts were reviewed for accuracy by comparing them to the tape, and then the process of checking the members was carried out. Following that, each and every piece of data was read, then reread a number of times. During this process, illegible text and misspelled words were made legible, and misspelled words were fixed. In the beginning, the text

was additionally color-coded so that researcher queries and participant responses could be distinguished from one another.

The second step: The data from the interviews were transcribed, and then they were hand-coded, which made it possible to derive in vivo codes from those interviews. The most essential aspect of the data that may be evaluated in a meaningful way in relation to the topic of interest is uncovered by the codes (Braun & Clarke, 2017). Iterative review passes of the data are used in this step to further identify portions of the participant response data based on patterns and similarities within the data.

The use of the software MaxQDA 2022 made it feasible to break the responses of the volunteers into cognitive parts that resembled subjects. This was accomplished by using the software. During this stage of the procedure, each transcript was reviewed all the way through from the beginning to the end once more. After reading and evaluating the transcripts, the researcher went through and made any required edits to them. After that, the data were formatted correctly and entered into a MaxQDA 2022, which served as a grid throughout the rest of the coding and analysis process.

The third step: During the third step of the process, further categories of code were able to arise thanks to an iterative process that involved reviewing, condensing, and grouping all 687 codes into categories. The MaxQDA 2022 software was utilized in order to successfully complete this task.

The fourth step: At the conclusion of the classification process, the final stage consisted of a reflective examination of the primary themes that had been generated. In the beginning of

this procedure, there was an iterative review of the categories and themes that were present throughout all of the interview data sets. This repeated evaluation led to the consolidation and reorganization of higher-level categories as a result of its findings. It became clear that there were further trends when additional subcategories emerged. The data that was organized and examined contained a total of 122 different categories. A cross-check was done using the research questions to see which themes were applicable during this process of further categorizing codes. Second, the purpose of this procedure was to derive conclusive themes from the integrated data in order to provide answers to the study questions.

The fifth step: The final part of the step five analysis process featured an overview of the data as well as the links from codes to categories to initial themes and final themes (Braun & Clarke, 2017). This phase served as preparation for step six of the thematic analysis process. After completing this phase, the thematic analysis of the interview data was considered complete. Following a comprehensive examination of the data, four recurring topics have become apparent. These themes were developed as a response to the overarching concerns of behavior relating to strategic decision making, leadership, advice seeking, and decision outcomes.

Step six: The production of the analysis's final report constitutes step six of the process. In the section devoted to the outcomes, these four themes and the ways in which they answer the study objectives are discussed. Table 4 contains a listing of these four remaining themes.

5.3.5 Demographic Results of the Qualitative Study

The table below presents the results of a qualitative survey that collected demographic data about a sample of firms. The variables in the table include firm size, firm age, CEO tenure, TMT size (TMT stands for "top management team"), and whether or not the firms have a formal decision-making process.

Firm Size: The majority of the firms in this sample are on the larger side, with 41.7% having 1001-5000 employees and 16.7% having 5000+ employees. Only 16.7% of the firms have 11-100 employees, and there are no firms with 1-10 employees.

Firm Age: The majority of the firms in this sample are relatively established, with 66.7% being 7+ years old. Only 8.3% are 1-3 years old, and 25% are 3-7 years old. There are no firms in the sample that are less than 1 year old.

CEO Tenure: The CEO tenure at the firms in this sample ranges from less than 1 year to 7+ years. 25% of the CEOs have been in their role for 1-3 years, 58.3% have been in their role for 3-7 years, and 16.7% have been in their role for 7+ years. There are no CEOs in the sample who have been in their role for less than 1 year.

TMT Size: The size of the top management teams (TMTs) at the firms in this sample ranges from 2-4 people to 8+ people. 16.7% of the firms have TMTs with 2-4 people, 66.7% have TMTs with 4-8 people, and 16.7% have TMTs with 8+ people. There are no firms in the sample with TMTs of 1 person.

Formal Decision Process: The firms in this sample vary in terms of whether or not they have a formal decision-making process. 41.7% of the firms have a formal decision process, while 58.3% do not.

Table 66 - Descriptive Analysis of the Qualitative Study

Variable	N(12)	%
Firm Size		
1-10 employees	0	0,0%
11-100 employees	2	16,7%
101-1000 employees	3	25,0%
1001-5000 employees	5	41,7%
5000+ employees	2	16,7%
Firm Age		
<1 year	0	0,0%
1-3 years	1	8,3%
3-7 years	3	25,0%
7+ years	8	66,7%
CEO Tenure		
<1 year	0	0,0%
1-3 years	3	25,0%
3-7 years	7	58,3%
7+ years	2	16,7%
TMT Size		
1 person	0	0,0%
2-4 people	2	16,7%
4-8 people	8	66,7%
8+ people	2	16,7%
Formal Decision Process		
Yes	5	41,7%
No	7	58,3%

5.3.6 Summary of the Interviews Transcripts and Code Analysis

The table below represents the 12 interviews that were conducted on different dates in December 2022. Each row in the table represents a different interview and contains the following information:

- Participant: The interviewee for each interview.
- Date: The date on which the interview was conducted.
- Duration (Mins, Seconds): The length of the interview, expressed in minutes and seconds.
- Pages of Transcript (Single-spaced): The number of pages in the transcript of the interview, when the transcript is single-spaced.
- of occurrences of a code: The number of times a particular code was mentioned or used during the interview.

Table 67 - Summary of Interview Transcripts

Participant	Date	Duration (Mins, Seconds)	Pages of Transcript (Single- spaced)	# of occurrences of a code	Sentences	Paragraphs	Words
Interviewee # 1	1.12.2022	44m42s	5	92	112	60	14723
Interviewee # 2	1.12.2022	22m27s	6	73	94	54	21321
Interviewee # 3	1.12.2022	19m31s	5	79	103	54	26370
Interviewee # 4	1.12.2022	26m2s	6	69	559	52	34642
Interviewee # 5	2.12.2022	23m37s	5	74	98	60	14409
Interviewee # 6	5.12.2022	27m35s	4	69	105	58	16265
Interviewee # 7	5.12.2022	22m52s	4	63	94	51	16491
Interviewee # 8	6.12.2022	16m45s	3	74	109	56	16512
Interviewee # 9	6.12.2022	13m30s	4	67	96	52	10638
Interviewee # 10	6.12.2022	27m3s	4	68	103	52	19304
Interviewee # 11	7.12.2022	36m22s	5	66	101	54	15988
Interviewee # 12	7.12.2022	18m55s	4	64	104	50	16253

5.3.7 Thematic Analysis Results

Thematic assessment is a tool for conducting qualitative data analysis with the purpose of locating, examining, and reporting on recurring topics or themes within the data. It is a technique that is frequently used in research to extract themes from transcripts of interviews, conversations in focus groups, or other types of qualitative data. Within the scope of this investigation, we will be utilizing theme analysis in order to investigate the connection that exists between the process of strategic decision making, the qualities of a good leader, the manner in which people seek counsel, and the results of decisions.

The process of analyzing and selecting the best possible course of action from a number of potential options in order to accomplish a goal or an objective is referred to as making strategic decisions. The ability to shape and direct others toward the accomplishment of a shared objective or vision is essential to effective leadership. Advice seeking behavior is the act of seeking out and gaining advice or direction from other people in order to inform one's own decision-making process. This can be done with the intention of improving one's own decision-making process. The results or repercussions of a certain decision are referred to as the decision's outcomes.

The goal of this research is to gain an understanding of the possible connections that exist between these components, as well as the possible effects that those connections have on decision-making. Through the use of thematic analysis, we will be able to recognize recurring themes and patterns within the data. We will then be able to make inferences, based on these recurring themes, regarding the connection between strategic decision making, leadership, advice seeking behavior, and decision outcomes. This information may be valuable not just for

companies that are interested in improving their procedures for making decisions but also for people who are interested in enhancing their own leadership and decision-making skills.

The participant's open-ended comments from the interviews served as the basis for the development of the theme codes. In addition, the cases provided by the respondents served as the basis for the themes that were discovered through qualitative research. In the analysis of the qualitative data collection, there were four key thematic codes that corresponded to open-ended survey questions. The following table is a representation of the high-level mapping of the themes emerged from the qualitative study and the research questions raised by the researcher.

Table 68 - Emerging Themes and Research Questions Mapping Table

Theme	Research Question
Theme 1: Strategic Decision Making	RQ1
Theme 2: Leadership	RQ2
Theme 3: Advice Seeking	RQ3
Theme 4: Decision Outcome	RQ4, RQ5, RQ6

5.3.7.1 Theme 1: Strategic Decision Making

The first major theme that emerged from the qualitative study was the strategic decision-making process. The participants were asked about their view and experience regarding strategic decision process in general, antecedents to strategic decision making, leaders' strategic mindset, etc. With further analysis some sub-codes were also identified such as strategic decision process management, effect of external factors, financial situation of the company, effect of employees and stakeholders/board members and CEO's strategic mindset. These sub-codes also generated another level of subcodes that were generated by identifying the most frequently used words or short phrases used by the participants to answer each question.

Strategic decision making refers to the process of identifying and choosing the best course of action to achieve the long-term goals of an organization. A strategic mindset is a way of thinking that focuses on long-term planning and the bigger picture rather than just short-term goals. The strategic decision-making process typically involves a number of steps, including defining the problem or opportunity, gathering, and analyzing information, generating potential solutions, evaluating, and comparing options, and choosing the best course of action. It is important for decision makers to be accountable for the consequences of their decisions and to involve other key stakeholders in the process.

External factors such as brand image, market conditions, and macroeconomics can all influence strategic decision making. Financial factors, such as regulations and opportunity seizing, can also be important considerations. Employees and stakeholders should be included in the decision-making process and their expectations should be taken into account. C-level executives, or top leaders in the organization, should be highly involved in the strategic decision-making process and should have a good understanding of the industry and the opportunities available to the organization.

The results of these survey questions provide insight into the strategic decision-making process within the organization and the various factors that are taken into consideration. One key finding is that the leader's decision-making process is largely analytical, with a focus on gathering and evaluating information in order to make informed decisions. This suggests that the organization places a strong emphasis on data-driven decision-making and on using rigorous analysis to inform its strategic planning.

However, the decision-making process is not purely objective, as it also involves considering a variety of other factors such as advice-seeking, accountability, determination, follow-up, delegating, coordination, team building, and planning. These factors suggest that the leader values input from multiple sources and is proactive in seeking out advice and expertise in order to inform their decision-making. This approach can help to ensure that all relevant perspectives and considerations are taken into account when making strategic decisions.

External factors, such as regulations, political factors, market conditions, brand image, macroeconomic factors, and high impact factors, are also important considerations in the decision-making process. This highlights the importance of staying attuned to the external environment in order to make informed decisions that take into account the broader context in which the organization operates.

The role of employees and stakeholders in the decision-making process is also varied, with some respondents indicating that the process is top-to-bottom, while others suggest that it involves balancing the needs and perspectives of employees and stakeholders or is democratic in nature. This suggests that the organization takes a multifaceted approach to considering the views and interests of different stakeholders when making strategic decisions.

Financial factors are also seen as being very important in the decision-making process, with opportunity size being a particularly significant factor. This is not surprising, given that strategic decisions often have significant financial implications for the participants.

Overall, the results suggest that the participants place a strong emphasis on analytical and data-driven decision-making, while also considering a wide range of internal and external factors

and seeking out advice and input from multiple sources. This approach can help to ensure that strategic decisions are well-informed and take into account the needs and perspectives of all relevant stakeholders.

Q5 - Leader's Strategic Decision Making:

- 7 responses (18% of the total) indicated that advice-seeking was a key factor in the leader's strategic decision-making process.
- 1 response (3% of the total) indicated that the leader's decision-making process was active.
- 2 responses (5% of the total) indicated that accountability was a key factor in the leader's strategic decision-making process.
- 1 response (3% of the total) indicated that the leader's decision-making process was based on resources.
- 14 responses (35% of the total) indicated that the leader's decision-making process was analytical.
- 4 responses (10% of the total) indicated that determination was a key factor in the leader's strategic decision-making process.
- 2 responses (5% of the total) indicated that follow-up was a key factor in the leader's strategic decision-making process.
- 1 response (3% of the total) indicated that timelines were a key factor in the leader's strategic decision-making process.
- 2 responses (5% of the total) indicated that delegating was a key factor in the leader's strategic decision-making process.

- 4 responses (10% of the total) indicated that coordination was a key factor in the leader's strategic decision-making process.
- 1 response (3% of the total) indicated that team building was a key factor in the leader's strategic decision-making process.
- 1 response (3% of the total) indicated that planning was a key factor in the leader's strategic decision-making process.

Q6 - External Factors:

- 1 response (3% of the total) indicated that regulations were a key external factor in decision-making.
- 4 responses (14% of the total) indicated that political factors were a key external factor in decision-making.
- 5 responses (17% of the total) indicated that market conditions were a key external factor in decision-making.
- 3 responses (10% of the total) indicated that brand image was a key external factor in decision-making.
- 5 responses (17% of the total) indicated that macroeconomic factors were a key external factor in decision-making.
- 11 responses (38% of the total) indicated that high impact factors were a key external factor in decision-making.

Q7 - Employees and Stakeholders:

- 5 responses (20% of the total) indicated that the decision-making process was top-to-bottom.

- 3 responses (12% of the total) indicated that expectation setting was a key factor in the decision-making process.
- 1 response (4% of the total) indicated that the decision-making process was inclusive.
- 4 responses (16% of the total) indicated that the decision-making process involved balancing the needs and perspectives of employees and stakeholders.
- 4 responses (16% of the total) indicated that the decision-making process was democratic.
- 1 response (4% of the total) indicated that the power of employees was a key factor in the decision-making process.
- 6 responses (24% of the total) indicated that the decision-making process involved deep analysis.
- 1 response (4% of the total) indicated that the decision-making process involved transparent reporting.

Q8 - Financial Factors:

- 2 responses (11% of the total) indicated that financial factors were somewhat important in the decision-making process.
- 9 responses (47% of the total) indicated that financial factors were very important in the decision-making process.
- 1 response (5% of the total) indicated that financial regulations were a key factor in the decision-making process.
- 5 responses (26% of the total) indicated that opportunity size was a key factor in the decision-making process.

- 2 responses (11% of the total) indicated that financial factors were not important in the decision-making process.

Q9 - C-Level Advice Seeking:

- 2 responses (9% of the total) indicated that C-level executives sought advice somewhat frequently.
- 4 responses (18% of the total) indicated that C-level executives were highly involved in seeking advice.
- 4 responses (18% of the total) indicated that C-level executives sought advice on opportunity assessment.
- 4 responses (18% of the total) indicated that C-level executives sought advice on industry knowledge.
- 8 responses (36% of the total) indicated that C-level executives sought advice to a great extent.

Q10 - Strategic Mindset:

- 6 responses (27% of the total) indicated that the strategic mindset was focused on both short-term and long-term goals.
- 11 responses (50% of the total) indicated that the strategic mindset was focused on short-term goals.
- 5 responses (23% of the total) indicated that the strategic mindset was focused on long-term goals.

Table 69 - Theme 1: Strategic Decision-Making Coding Table

1 st Level Code	2 nd Level Code	3rd Level Code
Strategic Decision Making	Strategic Mindset	Long-Term Short-Term Long-Term & Short-Term Accountability
	Strategic Decision-Making Process	Active involvement Advice Seeking Analytical Coordination Delegation Determination Following Up
	External Factors	Brand Image High Impact Macroeconomics Market Conditions Political
	Financial Factors	Not important Opportunity seizing Regulations Somewhat important Very important
	Employees and Stakeholders	Balancing Deep analysis Democratic Expectation setting Inclusive Top-to-bottom
	C-Level Involvement	Great extent Highly involved Industry knowledge Opportunity assessment Medium involvement

The "Strategic Decision-Making" coding table is a useful tool for understanding and analyzing the various dimensions of strategic decision-making in organizations. One interesting finding from this table is the importance of having a strategic mindset in the decision-making process. According to the table, organizations may have a long-term focus, a short-term focus, or a combination of both in their decision-making. This suggests that different organizations may

prioritize different time horizons in their decision-making, depending on their goals and circumstances.

Another interesting finding from the table is the range of steps or stages that organizations may go through in the strategic decision-making process. The table identifies several key stages, including accountability, active involvement, advice seeking, analytical thinking, coordination, delegation, determination, and following up. These stages reflect the complexity and multifaceted nature of strategic decision-making, and suggest that organizations need to be proactive, analytical, and coordinated in their approach.

The table also highlights the role of external factors in strategic decision-making. These factors may include the organization's brand image, the potential impact of external events, macroeconomic conditions, market conditions, and political forces. Understanding and taking these factors into account can be crucial for making informed and effective strategic decisions.

Financial factors are also an important consideration in strategic decision-making, according to the table. Organizations may prioritize financial considerations differently, depending on their goals and circumstances.

The table also emphasizes the importance of involving employees and other stakeholders in the strategic decision-making process. This can help to build support and buy-in for the decisions made and can also help to ensure that the perspectives and needs of different stakeholders are taken into account.

Finally, the table includes a category on the involvement of C-level executives in the strategic decision-making process. This is an important consideration, as the leadership of an

organization plays a key role in shaping its direction and strategy. Different levels of involvement may be appropriate in different situations, depending on the needs of the organization and the challenges it faces.

The following figures were generated on MaxQDA 2022 software to show the relationships between these top-level codes and sub-codes that emerged through the analysis. The first figure is a representation of the Code Theory Model and Hierarchical Code-Subcodes Model generated by the software which show the relationships between each code categories.

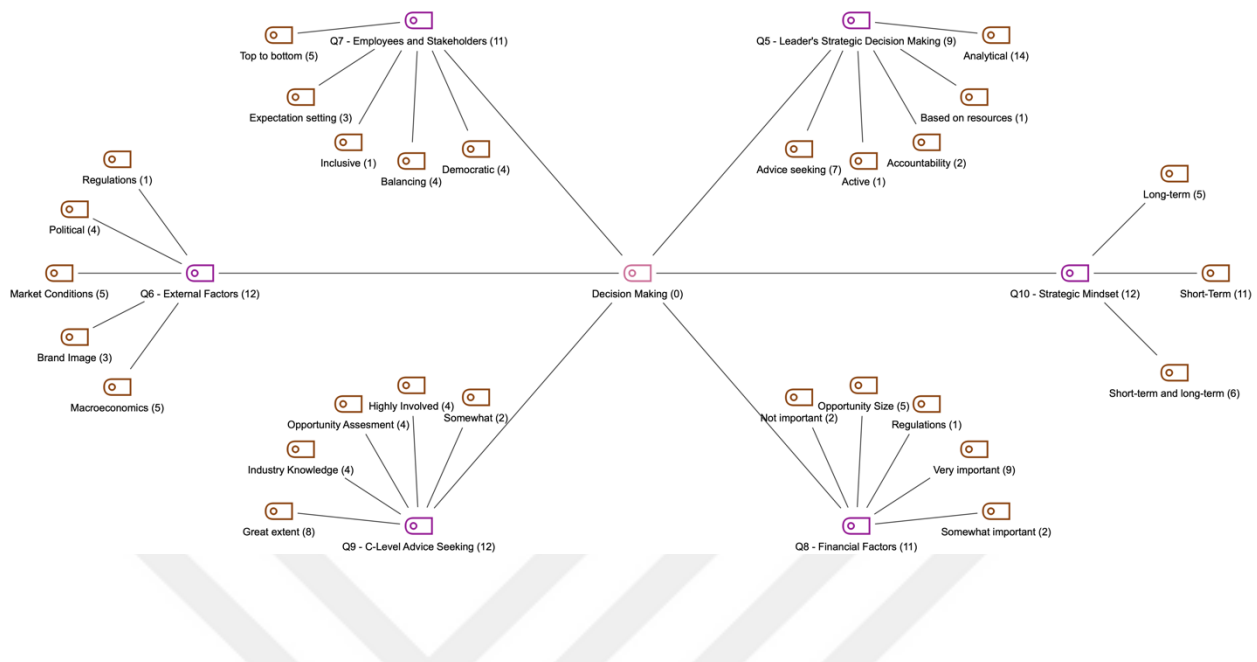
MAXQDA is a software program that is used for computer-assisted qualitative data analysis (CAQDAS). It is a tool that helps researchers analyze and interpret qualitative data, such as text, audio, and video.

The CODE THEORY model is a method of qualitative data analysis that is based on the idea that data can be analyzed by identifying patterns and themes within the data. This model is often used in conjunction with CAQDAS programs like MAXQDA to help researchers identify and analyze patterns and themes in their data.

To use the CODE THEORY model with MAXQDA, researchers first import their data into the program and then begin the process of coding the data. This involves identifying and labeling key themes, patterns, or ideas within the data. Researchers can then use the coding to create a structured overview of the data and to identify relationships between different codes.

Using the CODE THEORY model with MAXQDA can help researchers to efficiently and effectively analyze large amounts of qualitative data, and to identify key themes and patterns that might not be evident through traditional methods of analysis.

Figure 25 - Code Theory Model for Decision Making



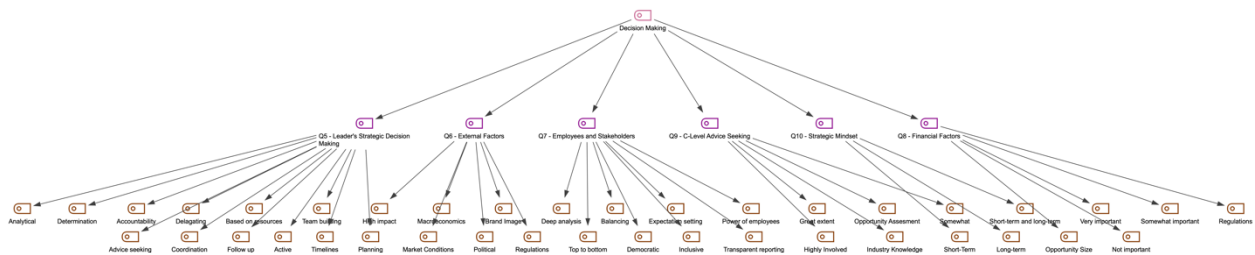
The HIERARCHICAL CODE-SUBMODES model is a method of qualitative data analysis that is used to identify patterns and themes within data, and to organize and structure the data in a hierarchical manner. This model is often used in conjunction with computer-assisted qualitative data analysis (CAQDAS) programs like MAXQDA.

To use the HIERARCHICAL CODE-SUBMODES model with MAXQDA, researchers first import their data into the program and then begin the process of coding the data. This involves identifying and labeling key themes, patterns, or ideas within the data. Researchers can then create a hierarchical structure by organizing the codes into broader categories (known as "supercodes") and subcategories (known as "subcodes"). This allows researchers to see the relationships between different codes and to understand how the data is organized and structured.

Using the HIERARCHICAL CODE-SUBMODES model with MAXQDA can help researchers to efficiently and effectively analyze large amounts of qualitative data, and to

identify key themes and patterns that might not be evident through traditional methods of analysis. It can also help researchers to better understand the relationships between different pieces of data and to see how the data is structured and organized.

Figure 26 - Hierarchical Code-Subcodes Model for Decision Making



5.3.7.2 Theme 2: Leadership

Leadership is the ability to guide and influence others towards a shared goal or vision. A leader can be anyone in a position of power or influence, whether they are a CEO, manager, or team leader.

Crisis management is an important aspect of leadership, as it involves the ability to make quick and decisive decisions in the face of unexpected or challenging situations. It requires a leader to have experience and competency in handling emergencies and to be able to focus on the most pressing issues at hand.

Effective leaders also have the ability to manage people, which includes things like setting goals, assigning tasks, and providing support and guidance to team members. They should be able to motivate and unite their team towards a common goal and have strong communication and listening skills.

There are several leadership styles that a leader can adopt, depending on their personality and the situation at hand. Autocratic leaders make decisions independently and expect their team to follow them blindly. Charismatic leaders inspire and motivate their team through their personal charm and enthusiasm. Democratic leaders involve their team in the decision-making process and encourage collaboration. Laissez-faire leaders give their team a lot of freedom and autonomy. Transactional leaders focus on rewards and punishments to motivate their team. Transformational leaders strive to bring about positive change and inspire their team to be the best they can be.

There are also certain traits that effective leaders tend to possess, such as analytical thinking, team spirit, trustworthiness, decisiveness, discipline, empathy, competency, and strong communication skills. A CEO, as the leader of an entire organization, may adopt a leadership style that is more autocratic, transactional, or transformational, depending on the needs of the company and their own personal leadership approach.

Leadership is a broad term that refers to the ability to inspire and guide a group of people towards a common goal. There are many different approaches to leadership, and different leaders may exhibit different styles and traits depending on the specific situation and the needs of their team.

The definition of leadership can vary, but according to the survey respondents some common characteristics of effective leaders include:

Experience and competency: Leaders often have a wealth of knowledge and experience in their field, which they can use to guide and mentor their team.

Focus: Leaders are able to stay focused on the goals and objectives of their team, even in the face of challenges or distractions.

Guidance: Leaders provide direction and support to their team, helping them to stay on track and achieve their goals.

Managing people: Leaders are skilled at managing and coordinating the efforts of their team and are able to delegate tasks and responsibilities effectively.

Motivation: Leaders are able to inspire and motivate their team to perform at their best and can help to create a positive and productive work environment.

Uniting: Leaders are able to bring people together and create a sense of unity and purpose among team members.

There are many different leadership styles that leaders may adopt, including autocratic, charismatic, democratic, laissez-faire, transactional, and transformational. Each style has its own strengths and weaknesses, and the best style for a given leader will depend on their personality, the needs of their team, and the specific situation they are facing.

Leaders may also exhibit certain traits that are characteristic of effective leaders. These can include analytical skills, team spirit, trustworthiness, decisiveness, discipline, empathy, competency, strong communication skills, good listening skills, the ability to observe and analyze situations, and the ability to inspire and motivate others.

CEO leadership style can vary depending on the specific needs of the organization and the leadership style of the CEO. Some common CEO leadership styles include autocratic,

transactional, and transformational. An autocratic CEO may make decisions independently and exercise a great deal of control over the organization. A transactional CEO may focus on rewards and consequences as a way of motivating and managing the team. A transformational CEO may focus on inspiring and motivating the team to achieve a shared vision for the organization.

The results of these survey questions provide insight into the leadership style and values of the organization. The data suggests that the CEO's leadership style is primarily transformational, which involves inspiring and guiding team members to achieve their full potential and work towards shared goals. This style of leadership is often characterized by a focus on developing the skills and capabilities of team members, and on creating a sense of purpose and vision that inspires and motivates others.

The responses also exhibit a range of leadership traits, including experience, empathy, being a good communicator, motivation, building team spirit, and building trust. These traits suggest that the organization values leaders who are able to effectively communicate with and engage their team members, and who are able to create a positive and collaborative work environment.

In addition, the data indicates that the leadership style of the respondents' leaders are largely transformational and autocratic, with a smaller percentage of respondents identifying the leadership style as charismatic, transactional, or democratic. This suggests that the participants value leaders who are able to inspire and motivate their team members, and who are able to take a proactive and directive approach to leading and managing others.

Overall, the results indicate that the respondents value leaders who are able to inspire and motivate their team members to work towards shared goals, and who are able to effectively communicate and build trust with their team. This leadership style and these traits may be particularly effective in fostering a collaborative and innovative work environment, and in helping the organization to achieve its strategic objectives.

Q4 - CEO Leadership Style:

- 0 responses (0% of the total) indicated that the CEO's leadership style was Laissez-Faire.
- 2 responses (11% of the total) indicated that the CEO's leadership style was autocratic.
- 6 responses (33% of the total) indicated that the CEO's leadership style was transactional.
- 10 responses (56% of the total) indicated that the CEO's leadership style was transformational.



Q1 - Definition of Leadership:

- 3 responses (11% of the total) indicated that the focus of leadership was a key factor in the definition of leadership.
- 2 responses (7% of the total) indicated that experience and competency were key factors in the definition of leadership.
- 7 responses (25% of the total) indicated that managing people was a key factor in the definition of leadership.
- 3 responses (11% of the total) indicated that guiding was a key factor in the definition of leadership.

- 1 response (4% of the total) indicated that crisis management was a key factor in the definition of leadership.
- 7 responses (25% of the total) indicated that motivation was a key factor in the definition of leadership.
- 5 responses (18% of the total) indicated that uniting people was a key factor in the definition of leadership.

Q3 - Leadership Traits:

- 3 responses (7% of the total) indicated that discipline was a key leadership trait.
- 5 responses (12% of the total) indicated that being visionary was a key leadership trait.
- 5 responses (12% of the total) indicated that experience was a key leadership trait.
- 4 responses (9% of the total) indicated that empathy was a key leadership trait.
- 3 responses (7% of the total) indicated that being analytical was a key leadership trait.
- 1 response (2% of the total) indicated that being a good observer was a key leadership trait.
- 2 responses (5% of the total) indicated that being a good listener was a key leadership trait.
- 6 responses (14% of the total) indicated that being a good communicator was a key leadership trait.
- 3 responses (7% of the total) indicated that decisiveness was a key leadership trait.
- 4 responses (9% of the total) indicated that motivation was a key leadership trait.
- 3 responses (7% of the total) indicated that building team spirit was a key leadership trait.
- 4 responses (9% of the total) indicated that building trust was a key leadership trait.

Q2 - Leadership Styles:

- 5 responses (13% of the total) indicated that the leadership style was Laissez-Faire.
- 6 responses (15% of the total) indicated that the leadership style was transactional.
- 10 responses (26% of the total) indicated that the leadership style was transformational.
- 6 responses (15% of the total) indicated that the leadership style was charismatic.
- 10 responses (26% of the total) indicated that the leadership style was autocratic.
- 2 responses (5% of the total) indicated that the leadership style was democratic.

Table 70 - Theme 2: Leadership Coding Table

1 st Level Code	2 nd Level Code	3 rd Level Code
Leadership	Definition of Leadership	Crisis Management
		Experience / Competency
		Focus
		Guidance
Leadership	Leadership Styles	Managing people
		Motivation
		Uniting
		Autocratic
Leadership	Leader Traits	Charismatic
		Democratic
		Laissez-Faire
		Transactional
Leadership	CEO Leadership Style	Transformational
		Analytical
		Team spirit
		Trust
Leadership	Leader Traits	Decisiveness
		Discipline
		Empathy
		Competency
Leadership	Leader Traits	Communication
		Listening
		Observing
		Motivation
Leadership	Leader Traits	Visionary
		Autocratic
		Transactional
		Transformational

The "Leadership" coding table is a helpful tool that may be used for learning and assessing the many different aspects of leadership. The great variety of skills and traits that are related with successful leadership is one of the most exciting discoveries that can be made using this table. The following are some of the ways that the table suggests that leadership might be defined: crisis management, experience and expertise, focus, direction, managing people, motivation, and uniting. This lends credence to the notion that leadership is a multidimensional and intricate function that calls for a diverse set of talents and capabilities.

The table reveals a number of intriguing findings, one of which is the variety of leadership styles that can be utilized by leaders. The following types of leadership are outlined in the table: autocratic, charismatic, democratic, laissez-faire, and transactional and transformational leadership. Every one of these approaches possesses a one-of-a-kind combination of traits, and depending on the circumstances, some of them may be more effective than others. For instance, an autocratic leadership style may be useful in a crisis situation where quick judgments are required, whereas a democratic leadership style may be more effective in promoting collaboration and innovation. Both styles of leadership have their place.

The following table highlights a variety of possible characteristics of effective leaders, including those that are listed in the table. These include the abilities of analysis, participation in a team, dependability, decisiveness, discipline, empathy, competence, communication, listening, observation, motivation, and vision. Again, the requirements of the organization and the obstacles it must overcome will determine which specific combinations of these characteristics will be most useful in a given circumstance and which will be least useful.

Last but not least, the CEO of an organization's leadership style is broken down into its own category in this table. This is a crucial point to keep in mind because the leadership style of the CEO can have a big influence on the organization's culture as a whole as well as the general path it chooses to pursue. It is essential for the CEO to be aware of this fact and to be able to modify their style of leadership appropriately depending on the circumstances. Different types of leadership may be more or less effective in specific circumstances.

In general, the "Leadership" coding table presents a detailed and nuanced picture of the numerous facets of leadership as well as the various ways that leaders may choose to implement. When businesses have a greater grasp of these patterns, they are better able to assess the success of their leadership strategies and find chances for development.

Figure 27 - Code Theory Model for Leadership

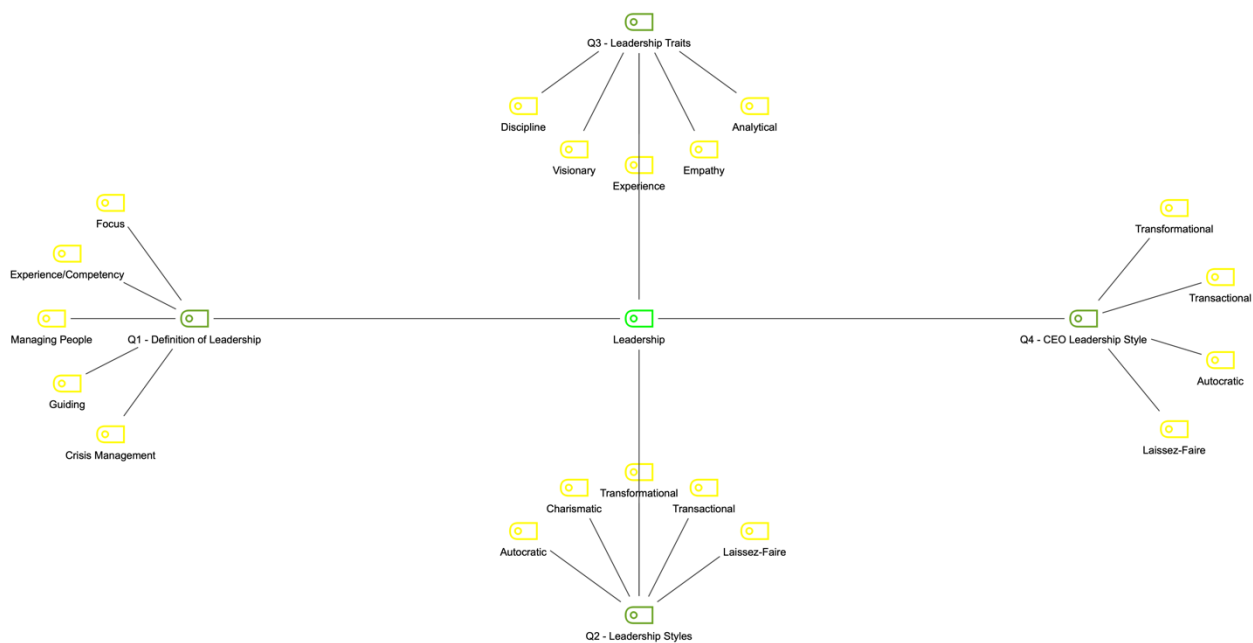
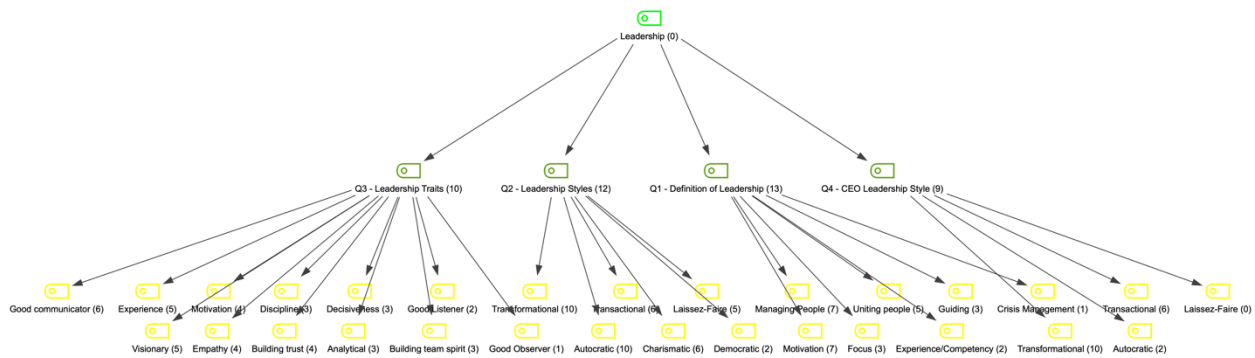


Figure 28 - Hierarchical Code-Subcodes Model for Leadership



5.3.7.3 Theme 3: Advice Seeking

Advice seeking refers to the process of seeking out and seeking guidance or recommendations from others in order to make a decision or solve a problem. There are many different approaches to advice seeking, and different people and organizations may adopt different approaches depending on their needs and preferences.

Internal advice seeking refers to seeking guidance or recommendations from within an organization, such as from colleagues or superiors. External advice seeking refers to seeking guidance or recommendations from sources outside the organization, such as from consultants or industry experts. Some people and organizations may seek both internal and external advice, while others may rely on one type of advice more than the other. It is also possible to seek no advice at all and make decisions independently.

There are many different reasons why people and organizations may seek external advice. One reason is to access expertise or specialized knowledge that may not be available within the organization. Another reason is to gain a market assessment or a better understanding of the competitive landscape, which may help inform decision-making and strategy.

The frequency of external advice seeking can vary and may depend on the specific needs and resources of the organization. Some organizations may seek external advice on a project-by-project basis, while others may seek external advice only rarely. Still others may seek external advice very often as a way of staying informed about industry trends and developments.

Internal advice seeking follows a similar pattern, with some organizations seeking internal advice frequently, while others may seek it rarely or not at all. The focus of internal advice can also vary, with some organizations seeking advice on current strategies, while others may be more focused on planning for the future.

Market assessment and competition benchmarking are important considerations for many organizations and can inform decision-making and strategy. Market assessment refers to the process of gathering and analyzing information about a specific market or industry in order to understand its size, growth, and competitive dynamics. Competition benchmarking refers to the process of comparing an organization's performance to that of its competitors in order to identify areas of strength and weakness.

The reason for seeking external advice can also vary. Some organizations may seek external advice as a way of getting a second opinion or as a way of making more integrated decisions that take into account a variety of perspectives and expertise.

Internal advice seeking refers to seeking guidance or recommendations from within an organization, such as from colleagues or superiors. This type of advice can be particularly useful for organizations that have a wealth of knowledge and expertise within their own ranks and may be able to tap into this resource to inform decision-making and strategy.

External advice seeking refers to seeking guidance or recommendations from sources outside the organization, such as from consultants or industry experts. This type of advice can be particularly useful for organizations that need access to specialized knowledge or expertise that may not be available within the organization. External advice can also be useful for gaining a market assessment or a better understanding of the competitive landscape, which can help inform decision-making and strategy.

Some organizations may choose to seek both internal and external advice in order to gain a well-rounded perspective on a particular issue or challenge. Other organizations may rely more heavily on one type of advice over the other, depending on their needs and resources.

There are many different reasons why organizations may seek external advice. One reason is to access expertise or specialized knowledge that may not be available within the organization. For example, an organization may seek external advice from a consultant with specialized knowledge in a particular area, such as marketing or finance.

Another reason for seeking external advice is to gain a market assessment or a better understanding of the competitive landscape. This can help organizations stay informed about industry trends and developments and can inform decision-making and strategy.

The frequency of external advice seeking can vary depending on the specific needs and resources of the organization. Some organizations may seek external advice on a project-by-project basis, while others may seek external advice only rarely. Still others may seek external advice very often as a way of staying informed about industry trends and developments.

The focus of external advice can also vary. Some organizations may seek external advice primarily to address current strategies or challenges, while others may be more focused on planning for the future. Some organizations may seek advice on both current and future strategies.

Like external advice seeking, the frequency of internal advice seeking can vary depending on the specific needs and resources of the organization. Some organizations may seek internal advice frequently, while others may seek it rarely or not at all.

The focus of internal advice can also vary, with some organizations seeking advice on current strategies, while others may be more focused on planning for the future.

Market assessment refers to the process of gathering and analyzing information about a specific market or industry in order to understand its size, growth, and competitive dynamics. This type of assessment can be useful for organizations looking to enter a new market, or for those that want to better understand the market in which they operate.

Competition benchmarking refers to the process of comparing an organization's performance to that of its competitors in order to identify areas of strength and weakness. This type of analysis can be useful for organizations looking to improve their performance and stay competitive in their market.

The reason for seeking external advice can vary depending on the specific needs and goals of the organization. Some organizations may seek external advice as a way of getting a second opinion or as a way of making more integrated decisions that take into account a variety

of perspectives and expertise. Other organizations may seek external advice as a way of tapping into specialized knowledge or expertise that is not available within the organization.

Table 71 - Theme 3: Advice Seeking Coding Table

1 st Level Code	2 nd Level Code	3rd Level Code
Advice Seeking	Internal vs External Advice Seeking	Internal advice External advice Both None
	Reasons for External Advice	Expertise Market Assessment
	Frequency of External Advice	None Project based Rarely Very often
	External Advice Focus (Current vs Future)	Current strategy Future strategy Both
	Frequency of Internal Advice	None Rarely Very often
	Internal Advice Focus (Current vs Future)	Current strategy Future strategy Both
	Market Assessment	External advice Internal advice
	Competition Benchmarking	Competitive Slow Somewhat competitive
	Reason for External Advice	Second opinion Integrated decision making

The results of these survey questions provide insight into the decision-making process within the organization and how external and internal advice is utilized in this process. One key finding is that external advice is not sought very frequently, with the majority of respondents indicating that no external advice is sought at all. This may suggest that the respondents are

confident in its ability to make decisions based on internal knowledge and expertise. However, it could also be a missed opportunity to bring in outside perspectives and insights that could potentially improve decision-making and performance.

Internal advice, on the other hand, appears to be sought more frequently, with the majority of respondents indicating that it is sought very often. This suggests that the participants place a strong emphasis on considering multiple viewpoints and perspectives when making decisions. However, it is worth noting that the focus of this internal advice is largely on current strategies, rather than future strategies. This may indicate that the organization is primarily focused on addressing immediate needs and challenges, rather than taking a long-term perspective.

Market research and competition analysis are also important considerations in the decision-making process. The results indicate that market research is predominantly conducted using internal teams, while the competition is perceived as being competitive by the majority of respondents. This suggests that the respondents are actively gathering information about its market and competitors in order to inform its decision-making.

Overall, the results suggest that the respondents place a strong emphasis on comprehensive and involved decision-making, utilizing internal advice as a key source of input. However, there may be opportunities to consider bringing in external advice more frequently and taking a longer-term perspective when making strategic decisions.

Q13 - Frequency of external advice:

- 13 responses were received for this question.

- 6 responses (46% of the total) indicated that no external advice was sought.
- 3 responses (23% of the total) indicated that external advice was sought on a project-based basis.
- 3 responses (23% of the total) indicated that external advice was sought very often.
- 1 response (8% of the total) indicated that external advice was rarely sought.
- Q14 - External Advice Focus (Current vs Future)
- 7 responses were received for this question.
- 5 responses (71% of the total) indicated that the focus of the external advice was on current strategies.
- 2 responses (29% of the total) indicated that the focus of the external advice was on future strategies.

Q15 - Frequency of Internal Advice:

- 11 responses were received for this question.
- 1 response (9% of the total) indicated that internal advice was rarely sought.
- 1 response (9% of the total) indicated that no internal advice was sought.
- 9 responses (82% of the total) indicated that internal advice was sought very often.
- Q16 - Nature of internal advice (current vs future)
- 11 responses were received for this question.
- 9 responses (82% of the total) indicated that the focus of the internal advice was on current strategies.
- 2 responses (18% of the total) indicated that the focus of the internal advice was on future strategies.

Q17 - Market Research:

- 17 responses were received for this question.
- 16 responses (94% of the total) indicated that market research was conducted using internal teams.
- 1 response (6% of the total) indicated that external support was used for market research.

Q18 - Competition Analysis:

- 2 responses (14% of the total) indicated that the competition was slower.
- 3 responses (21% of the total) indicated that the competition was somewhat competitive.
- 9 responses (64% of the total) indicated that the competition was competitive.

Q21 - Second opinion vs integrated decision making:

- 13 responses (68% of the total) indicated that the decision-making process was highly involved.
- 6 responses (32% of the total) indicated that the decision-making process involved seeking a second opinion.

The theme of advice seeking is an interesting and important one, as seeking advice is a common and effective way for organizations to improve their decision-making and problem-solving capabilities. According to the coding table provided, there are several different types of advice seeking behaviors that organizations engage in, including seeking advice from both internal and external sources, and focusing on either current or future strategies.

The "Advice Seeking" coding table is a valuable tool for understanding and analyzing the various ways in which organizations seek advice. One interesting finding from this table is the distinction between internal and external sources of advice. It appears that organizations may seek advice from either within their own ranks or from external experts, depending on their needs and goals.

One possible reason for seeking internal advice is to tap into the knowledge and expertise of colleagues within the organization. This can be particularly useful when dealing with complex issues or decisions that require a deep understanding of the organization's operations, culture, and history. Internal advice may also be sought to foster collaboration and build consensus within the organization.

On the other hand, external advice may be sought for a number of reasons, including access to expertise or market insights that may not be available within the organization. This could be especially useful for organizations that are facing new challenges or operating in rapidly changing industries. External advice may also be sought as a way to get a fresh perspective on a problem or to validate the organization's thinking.

Another interesting finding from the table is the frequency with which organizations seek internal and external advice. Some organizations may seek advice very frequently, while others may seek it only on a project-by-project basis or not at all. This could depend on the size and complexity of the organization, as well as its leadership style and culture.

Another interesting aspect of the coding table is the focus of the advice sought, both internal and external. Some organizations focus on seeking advice that is relevant to their current

strategy, while others focus on seeking advice that will help them plan for the future. This suggests that organizations may have different priorities and objectives when it comes to seeking advice and may tailor their advice-seeking behaviors accordingly.

Overall, the "Advice Seeking" coding table provides a rich and nuanced picture of the various ways in which organizations seek and use advice to inform their decision making and strategy. By understanding these patterns, organizations can better evaluate the effectiveness of their advice-seeking practices and identify opportunities for improvement.

Figure 29 - Code Theory Model for Advice Seeking

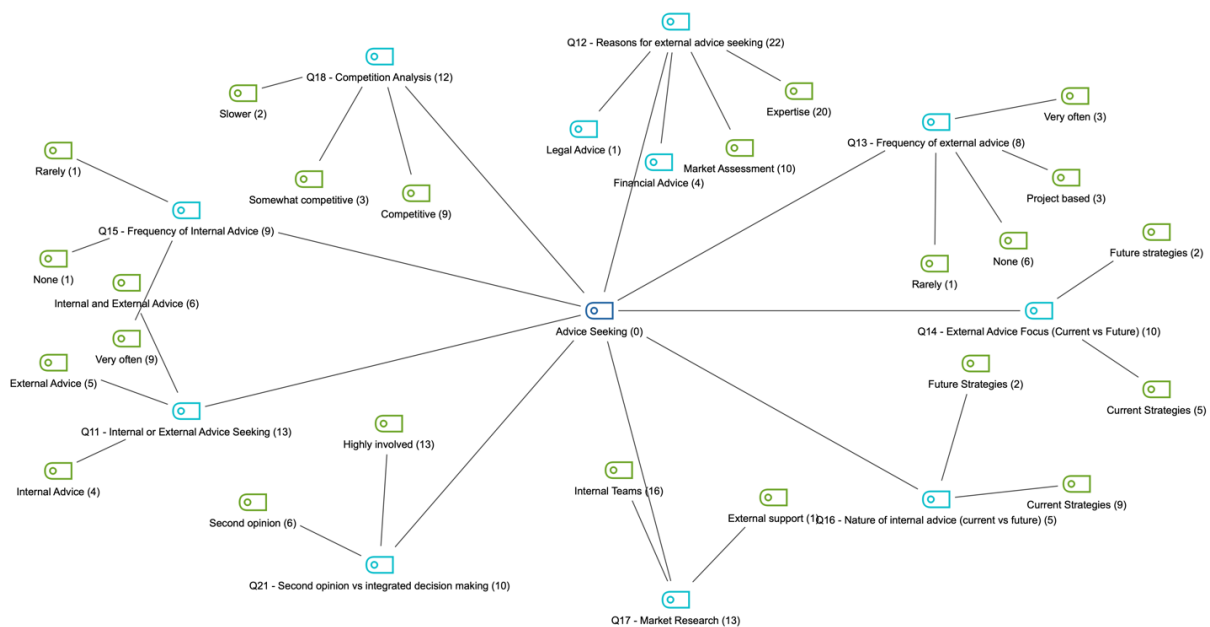
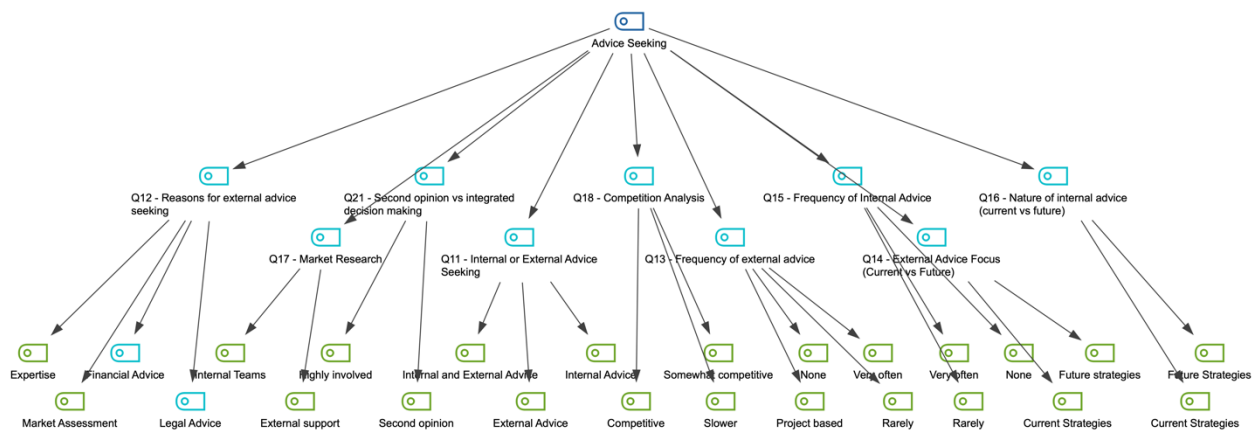


Figure 30 - Hierarchical Code-Subcodes Model for Advice Seeking



5.3.7.4 Theme 4: Decision Outcomes

The outcomes of a decision might be thought of as the results or the repercussions of that decision. This could include things like the firm's financial success, its operational efficiency, the satisfaction of its customers, or any number of other outcomes that are essential to the organization.

The speed at which a decision is made is referred to here as "decision speed." A hasty decision may be beneficial in certain circumstances; yet it may also result in a conclusion that is not as well thought out as one that is given more consideration. This code refers to the speed of the decision being made. A very slow decision may take a long time to make and may involve a lot of deliberation and analysis. A slow decision may take some time to make, but not as much as a very slow decision. A fast decision may be made quickly, without much deliberation or analysis. A very fast decision may be made almost instantly, with little or no time for deliberation or analysis.

The term "decision quality" describes the level of quality or efficiency that an individual decision possesses as a whole. The time it takes to arrive at a decision of high quality may be proportional to the increased probability that it will produce the desired results. This code refers to the quality of the decision being made. A very low quality decision may be based on incomplete or incorrect information, and may not be well thought out. A low quality decision may be based on some, but not all, of the relevant information, and may not be thoroughly thought out. A high quality decision is based on all relevant information and has been carefully considered.

The term "advice seeking effect on decision speed" refers to the effect that soliciting the counsel of others has on the rate at which decisions are made. The process of making a decision can be slowed down by seeking help, but it could also result in a decision that is of a higher quality. This category refers to the impact of seeking advice on the speed of the decision being made. It can be internal (advice seeking occurs within the organization) or external (advice seeking occurs outside the organization). The effect on the speed of the decision can be either an increase or a decrease. For example, seeking advice internally may increase the speed of the decision, while seeking advice externally may decrease the speed of the decision.

The code "Advice Seeking Effect on Decision Quality" references the soliciting effect on decision quality refers to the effect that seeking assistance from other people has on the quality of the decision as a whole. The decision's overall quality could potentially increase if you seek guidance, but it could also take you longer to settle on a choice. This category refers to the impact of seeking advice on the quality of the decision being made. It can be internal (advice seeking occurs within the organization) or external (advice seeking occurs outside the

organization). The effect on the quality of the decision can be either an increase or a decrease. For example, seeking advice internally may increase the quality of the decision, while seeking advice externally may decrease the quality of the decision.

The effect of advice seeking advice from others has been shown to have a positive influence on both the organization's financial and operational performance. This is referred to as the "advice seeking effect on financial and operational performance." It's possible that seeking guidance could boost financial and operational performance, but it could also lengthen the time it takes to make a choice. This category refers to the impact of seeking advice on the financial and operational performance of the organization. It can be internal and external (advice seeking occurs both within and outside the organization), internal (advice seeking occurs within the organization), or external (advice seeking occurs outside the organization). The impact on performance can be either high or very high. For example, seeking advice both internally and externally may have a very high impact on performance, while seeking advice only internally may have a high impact on performance.

The results of these survey questions paint a nuanced picture of the decision-making process within an organization. It seems that seeking external advice can have a positive impact on both the speed and quality of decision-making, as well as on financial and operational performance. This suggests that bringing in outside perspectives and expertise can help to inform and improve the decision-making process.

On the other hand, seeking internal advice appears to have a more mixed effect. While it can improve the quality of decisions, it may also slow down the decision-making process. This

may be due to a variety of factors, such as the need to consult with multiple internal stakeholders or the challenge of coordinating input from different departments or teams.

The results also show that the overall speed of decision-making varies within the survey participants. While some respondents indicated that decisions are made quickly, others reported that they are made slowly. This suggests that there may be factors that influence the speed of decision-making on a case-by-case basis. It could be useful to explore what these factors might be in order to identify opportunities for improvement.

As for the quality of decisions, the majority of respondents indicated that it is high. However, a significant minority indicated that it is low. This raises the question of what might be causing the discrepancy in perceptions of decision quality. It could be that different individuals or teams have different standards for what constitutes a high-quality decision, or it could be that some decisions are being made with insufficient information or analysis. Further investigation could help to shed light on this issue and identify potential solutions.

Overall, these results suggest that seeking external advice and carefully considering the factors that influence the speed and quality of decision-making can help to improve the decision-making process within an organization.

Q19 - Decision Speed:

- 18 responses were received for this question.
- The most common response was "slow," with 6 responses (33% of the total).
- 5 responses (28% of the total) indicated that decisions were made "fast."
- 4 responses (22% of the total) indicated that decisions were made "very fast."

- 2 responses (11% of the total) indicated that decisions were made "very slow."
- 1 response (6% of the total) indicated that there was "too much advice" given, which slowed down the decision-making process.

Q20 - Decision Quality:

- 17 responses were received for this question.
- The most common response was "high," with 10 responses (59% of the total).
- 7 responses (41% of the total) indicated that the quality of the decisions was "low."
- There were no responses indicating that the quality of the decisions was "very low" or "very high."

Q22 - Advice Seeking Effect on Decision Speed:

- 22 responses were received for this question.
- The most common response was "internal increases," with 8 responses (36% of the total).
- 9 responses (41% of the total) indicated that seeking external advice increased the speed of decision-making.
- 4 responses (18% of the total) indicated that seeking internal advice decreased the speed of decision-making.
- 1 response (5% of the total) indicated that seeking external advice decreased the speed of decision-making.

Q23 - Advice seeking effect on decision quality:

- 16 responses were received for this question.

- The most common response was "external increases," with 10 responses (63% of the total).
- 5 responses (31% of the total) indicated that seeking internal advice increased the quality of the decisions.
- 1 response (6% of the total) indicated that seeking external advice decreased the quality of the decisions.
- There were no responses indicating that seeking internal advice decreased the quality of the decisions.

Q25 - Advice seeking effect on financial and operational performance:

- 25 responses were received for this question.
- The most common response was "high," with 7 responses (28% of the total).
- 5 responses (20% of the total) indicated that the effect of seeking advice on financial and operational performance was "very high."
- 4 responses (16% of the total) indicated that seeking internal advice had a positive effect on financial and operational performance.
- 8 responses (32% of the total) indicated that seeking external advice had a positive effect on financial and operational performance.
- 1 response (4% of the total) indicated that both internal and external advice had a positive effect on financial and operational performance.

Table 72 - Theme 4: Decision Outcomes Coding Table

1 st Level Code	2 nd Level Code	3rd Level Code
Decision Outcomes	Decision Speed	Very Slow Very Fast Fast Slow
	Decision Quality	Very Low Very High High Low
	Advice Seeking Effect on Decision Speed	Internal increases Internal decreases External increases External decreases
	Advice Seeking Effect on Decision Quality	Internal increases Internal decreases External increases External decreases
	Advice Seeking Effect on Financial and Operational Performance	Internal and external Internal advice External advice High Very high

Figure 31 - Code Theory Model for Decision Outcomes



The results of the interview data analysis reveal a complex and nuanced picture of strategic decision making, leadership, advice seeking, and decision outcomes within the organizations studied.

One key theme that emerged was the importance of strategic mindset in effective decision making. Participants emphasized the need to think both short-term and long-term, with some noting the importance of being able to adapt to changing circumstances and pivot when necessary. The strategic decision-making process was also seen as critical, with participants highlighting the importance of being accountable, actively involved, and seeking advice as key factors in successful decision making.

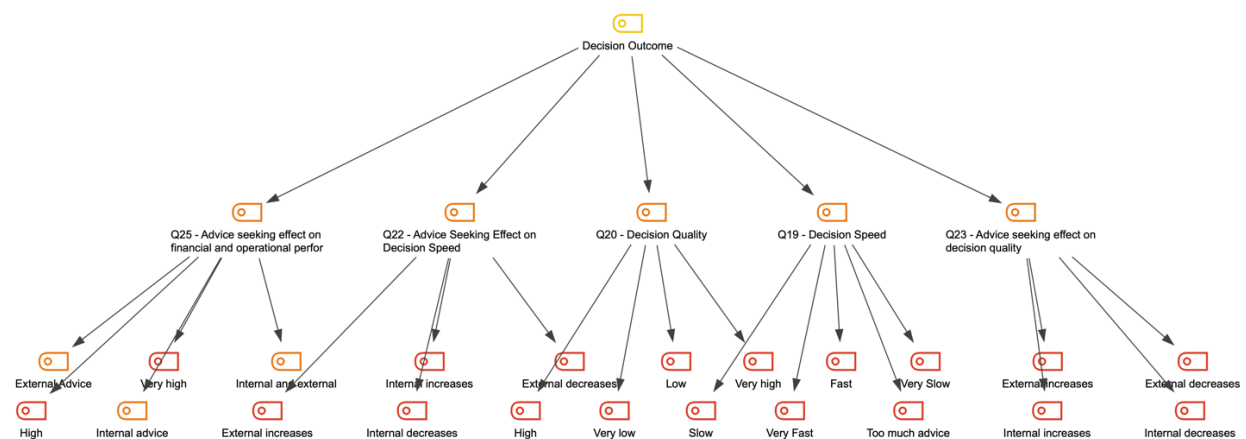
Leadership emerged as another important theme, with participants sharing their definitions of leadership and discussing the various styles and traits they believed were important in effective leaders. Autocratic, transactional, and transformational leadership styles were all mentioned, as well as the importance of traits such as analytical thinking, team spirit, and communication skills.

Advice seeking was also a significant theme, with participants discussing their preferences for seeking advice internally or externally and the reasons behind their choices. The frequency and focus of internal and external advice seeking were also explored, as were the roles of market assessment and competition benchmarking in the decision-making process.

Finally, the theme of decision outcomes revealed the importance of both decision speed and quality in the success of an organization. Participants discussed the impact of advice seeking on these factors, as well as the effect on financial and operational performance.

Overall, these themes paint a rich and multifaceted picture of the decision-making processes and outcomes within the organizations studied. By understanding the factors that influence strategic decision making, leadership, advice seeking, and decision outcomes, organizations can work to improve their own decision-making processes and achieve better outcomes.

Figure 32 - Hierarchical Code-Subcodes Model for Decision Outcomes



5.3.7.5 Other Visualized Representations Through MaxQDA Maps

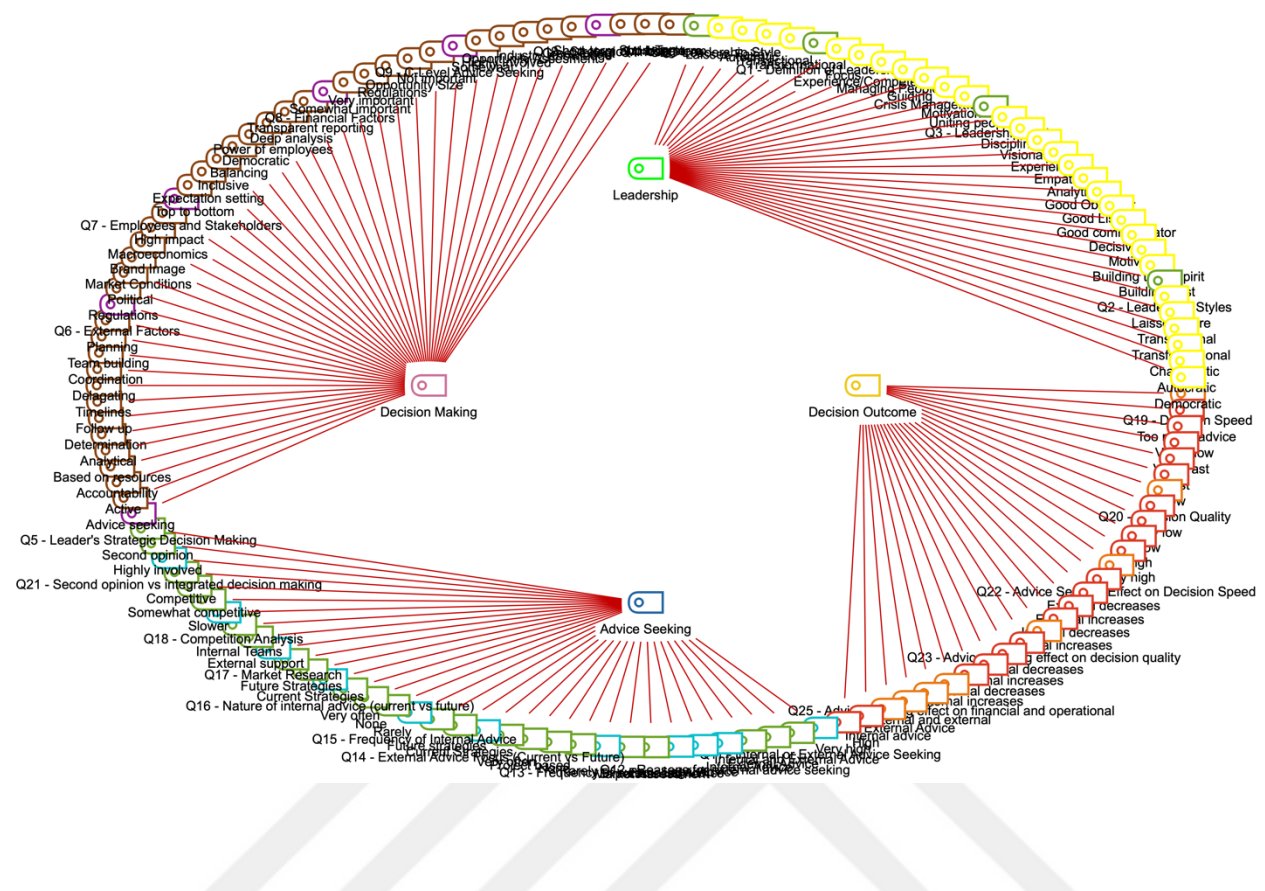
The CODE CO-OCCURRENCE model is a method of qualitative data analysis that is used to identify patterns and relationships between different codes in a dataset. This model is often used in conjunction with computer-assisted qualitative data analysis (CAQDAS) programs like MAXQDA.

To use the CODE CO-OCCURRENCE model with MAXQDA, researchers first import their data into the program and then begin the process of coding the data. This involves identifying and labeling key themes, patterns, or ideas within the data. Researchers can then use the CODE CO-OCCURRENCE model to identify relationships between different codes by looking at how often they co-occur in the data.

For example, if two codes (such as "internal advice seeking" and "decision quality") co-occur frequently in the data, it may suggest that there is a relationship between the two concepts. On the other hand, if two codes rarely co-occur, it may suggest that there is little relationship between the two concepts.

Using the CODE CO-OCCURRENCE model with MAXQDA can help researchers to identify relationships and patterns in their data, and to better understand the ways in which different concepts are related to one another. This can be particularly useful for organizations trying to understand customer preferences or market trends, or for researchers trying to identify patterns in social or behavioral data.

Figure 33 - Code Co-occurrence Model (based on Code Intersection)



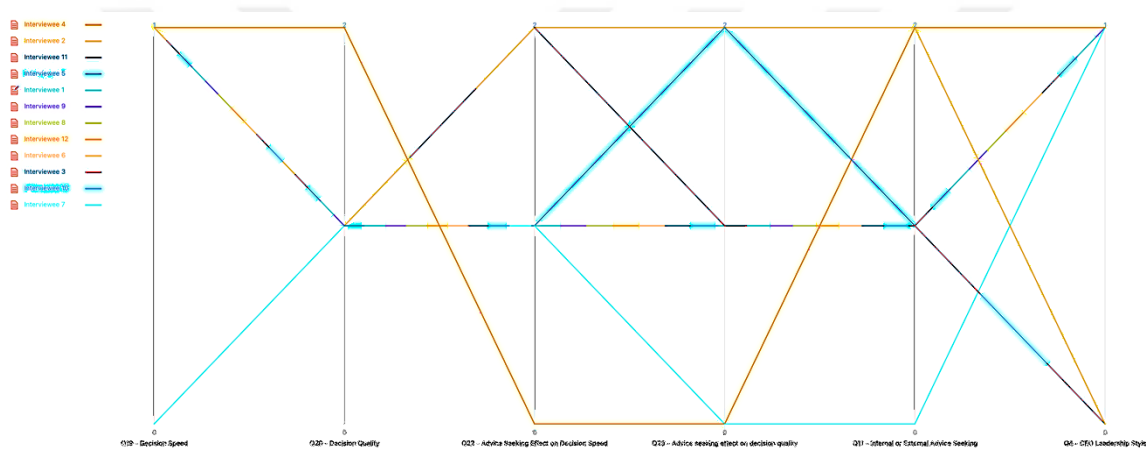
A profile comparison chart is a visual tool that can be used to compare and contrast different characteristics or attributes of a set of individuals or groups. In the context of qualitative data analysis using a program like MAXQDA, a profile comparison chart can be used to compare and contrast the characteristics or attributes of different codes or categories of data.

To create a profile comparison chart using MAXQDA, researchers first need to import their data into the program and code the data, identifying and labeling key themes, patterns, or ideas within the data. They can then use the program's visualization tools to create a chart that compares and contrasts the characteristics or attributes of different codes or categories.

For example, a researcher might create a profile comparison chart to compare and contrast different advice seeking behavior, or to compare and contrast different leadership styles.

Using a profile comparison chart in conjunction with MAXQDA can help researchers to better understand and visualize the relationships between different codes or categories, and to identify patterns and trends in their data. It can also be a useful tool for presenting and communicating research findings to others.

Figure 34 - Profile Comparison Chart of Interviewees based on codes generated on MaxQDA 2022 Software



5.3.7.6 Word Clouds

Word clouds are a visual representation of the frequency and prominence of words in a given text. They are often used in thematic analysis as a way to quickly identify patterns and themes in a large amount of text data.

To create a word cloud for thematic analysis, you would typically start by selecting a body of text to analyze. This could be a set of interview transcripts, survey responses, or other written documents. You would then use a word cloud generator tool to create a word cloud from

the text. The word cloud generator will highlight the most frequently occurring words in the text and display them in larger font sizes, while less common words will be displayed in smaller font sizes.

Once you have created the word cloud, you can use it to identify patterns and themes in the text. For example, you might look for words that appear frequently in the word cloud and consider what they might indicate about the content of the text. You might also look for clusters of words that seem to be related to each other, as these could potentially represent themes or subthemes within the text.

It's important to note that word clouds are just one tool that can be used in thematic analysis, and they should not be used as a substitute for a more thorough analysis of the text. However, they can be a useful starting point for identifying patterns and themes, and they can be a helpful way to quickly get a sense of the content of a large amount of text data.

The following two word clouds are generated by MAXQDA software to represent the cloud of most commonly used codes during the interviews and the cloud of the words that are most commonly used in the interviews.

Figure 35 - Code Cloud generated by MaxQDA 2022 Software



Figure 36 - Word Cloud generated by MaxQDA 2022 Software



6 Chapter 6: Discussion, Implications and Conclusions

6.1 Introduction

The context of the modern business world is rapidly shifting as a result of a number of factors, including the emergence of disruptive new business models, the development of high technology, its increasing availability and adoption, and the production of higher volumes of data that is relevant to businesses. Every company, whether it is a large corporation or a new start-up, needs to make sure that their internal operations and processes are aligned and continually improved so that they can continue to be competitive in the ever-shifting business climate and dynamics. As a result, the level of efficacy and efficiency with which chief executive officers and top management teams arrive at strategic decisions is one of the most important factors in determining whether or not an organization will be sustainable. In today's highly dynamic environment, chief executive officers and top management teams are constantly confronted with complex and difficult decisions, and they frequently have limited time and resources to analyze all of the information and move ahead with a sound strategic decision. In addition, they are constantly faced with a variety of options, each of which could have potentially disastrous consequences. Because of the difficulty of this task, those in higher-up positions have frequently sought the assistance of external consultants, advisors, and management consulting organizations in order to guide them through it.

The work of chief executive officer (CEO) requires making decisions and carrying them through despite the presence of change and uncertainty, as well as dealing with complicated, ambiguous, and important strategic challenges. CEOs often seek counsel from a diverse range of persons and groups in order to overcome these problems and make intelligent judgments. This

occurrence is one that management researchers are paying an increasing amount of attention to due to its prevalence. As a consequence of this, there is a growing body of research that investigates various facets of chief executive officer (CEO) advice seeking, which is defined here as any interaction between a CEO and another individual or group that is ostensibly aimed at gaining access to knowledge that is deemed helpful for dealing with a problem (Heyden, et al., 2013).

Whenever people are put in a position where they must make critical and challenging choices, they invariably look for guidance (for reviews on advice seeking as a general phenomenon, (Bonaccio & Dalal, 2006; MacGeorge, et al., 2016). However, due to the nature of the CEO's role, soliciting advice from other people is a fact that stands out from the crowd in a number of ways. It is very consequential since the actions made by CEOs touch a huge number and variety of constituents. This makes it very difficult to predict what will happen next. It also takes place through a separate network of advisors from both within and outside the firm, and some of the advice is sent through organizations (such as a board) that govern the work of the CEO.

When confronted with problems in making strategic decisions or dealing with significant issues, CEOs frequently seek advice (Alexiev, et al. 2010). Literature demonstrates that CEOs routinely seek counsel on strategic concerns relating to their company's present or future strategy (e.g., Alexiev, et al., 2010; (Haunschild & Beckman, 1998). When their management team lacks the necessary operational competence, CEOs also seek counsel on crucial operational matters, albeit less frequently (Krause et al., 2013). Moreover, CEOs seek counsel regarding leadership issues. For instance, (Shen, 2003) argues that in the early years of their term, CEOs may seek

counsel from their boards on leadership concerns. In addition to usual commercial and leadership concerns, CEOs seek counsel on personal matters when they are having marital problems, discord with their children, or illness in the family (McDonald & Westphal, 2011).

According to research, CEOs seek guidance from a wide variety of sources, including members of the top management team (TMT), the board of directors, lower-level managers, CEOs of other enterprises, and other external contacts. Among the TMT members are those who serve as board members (e.g., Arendt, Priem, & Ndofo, 2005; Garg & Eisenhardt, 2017; Kor & Mesko, 2013; Ma & Seidl, 2018; McDonald, Khanna, & Westphal, 2008).

This research aimed to study the relationship between full-range leadership styles (i.e., transformational, transactional, and laissez-faire), types of advice seeking behavior (i.e., internal, and external advice seeking) and decision outcomes (i.e., decision speed and decision quality).

This research tried to investigate the antecedents of advice seeking behavior by analyzing different styles of leadership and understand how this selection and utilization of advice can result in achieving increased quality and speed in terms of their decision outcomes. This chapter will discuss the results gathered through both the quantitative and qualitative studies conducted for this study.

6.2 Summary of Main Findings from the Quantitative Study

The research first aimed to explore the relationship between leadership style and the speed of strategic decision outcomes. To do this, the study tested three hypotheses: H1a, H1b, and H1c, which stated that transformational, transactional, and laissez-faire leadership styles, respectively, would have a negative, positive, and negative effect on decision speed.

The results of the regression analysis did not support the first hypothesis, H1a, which stated that transformational leadership style would have a negative effect on decision speed. The regression model showed that transformational leadership (TFL) was significantly related to decision speed, with a beta coefficient of .529 and a p-value of $<.001$. This suggests that as transformational leadership increases, decision speed increases. This means that there is a positive relationship between two variables indicating that the hypothesis is rejected.

The second hypothesis, H1b, stated that transactional leadership style would have a positive effect on decision speed. The regression analysis supported this hypothesis, with a beta coefficient of .588 and a p-value of $<.001$. This means that as transactional leadership increases, decision speed also increases. This result confirms the initial hypothesis.

Finally, the third hypothesis, H1c, stated that laissez-faire leadership style would have a negative effect on decision speed. The regression analysis supported this hypothesis, with a beta coefficient of $-.775$ and a p-value of $<.001$. This indicates that as laissez-faire leadership increases, decision speed decreases. This result also confirms the original hypothesis.

Overall, these findings suggest that leadership style can have a significant impact on the speed of strategic decision outcomes. Transformational leadership and transactional leadership

styles both have a positive effect whereas laissez-faire leadership style has a negative effect. These results provide valuable insights for leaders looking to improve the speed of decision-making in their organizations and highlight the importance of considering leadership style when trying to optimize decision-making processes.

The current study also aimed to investigate the relationship between leadership style and the quality of strategic decisions. Three hypotheses were proposed and tested: H2a posited that transformational leadership style would have a positive effect on decision quality, H2b posited that transactional leadership style would have a positive effect on decision quality, and H2c posited that laissez-faire leadership style would have a negative effect on decision quality.

The results of the regression analysis provided strong support for all three hypotheses. Transformational leadership style was found to be positively related to decision quality, with a significant coefficient of .474 in the model. This suggests that leaders who exhibit transformational leadership behaviors, such as inspiring and motivating their followers, are more likely to produce high-quality strategic decisions.

Transactional leadership style was also found to be positively related to decision quality, with a significant coefficient of .352 in the model. This suggests that leaders who engage in transactional behaviors, such as setting clear expectations and rewarding good performance, are more likely to facilitate high-quality strategic decision-making.

Laissez-faire leadership style was found to be negatively related to decision quality, with a significant coefficient of -.545 in the model. This suggests that leaders who adopt a hands-off

approach and allow their followers to make decisions independently are more likely to produce lower-quality strategic decisions.

Overall, these findings highlight the importance of leadership style in the strategic decision-making process. Transformational and transactional leadership styles appear to be particularly effective in fostering high-quality decisions, while laissez-faire leadership style seems to be detrimental to decision quality. These results have important implications for leaders and organizations seeking to improve their strategic decision-making processes. By adopting leadership styles that prioritize inspiration, motivation, clear expectations, and rewards, leaders may be able to increase the quality of their strategic decisions.

In the next section, the present study aimed to investigate the relationship between CEO leadership style and advice seeking behavior. To accomplish this, the study conducted a regression analysis with three dependent variables (Transformational Leadership (TFL), Transactional Leadership (TXL), and Laissez-Faire Leadership (LF)) and two independent variables internal advice seeking and external advice seeking behavior (INTAD and EXTAD). The results of the analysis were as follows:

First, the hypothesis that the more transformational the CEO's leadership style, the more likely they are to seek advice from internal sources when making strategic decisions (H3) was supported by the data. The regression analysis showed a significant positive relationship between TFL and INTAD, indicating that the more transformational the CEO's leadership style, the more likely they are to seek advice from internal sources. However, the relationship between TFL and EXTAD was not significant, suggesting that transformational leadership does not have a strong influence on seeking advice from external sources.

Second, the hypothesis that the more transactional the CEO's leadership style, the more likely they are to seek advice from external sources when making strategic decisions (H4) was also supported by the data. The regression analysis showed a significant positive relationship between TXL and EXTAD, indicating that the more transactional the CEO's leadership style, the more likely they are to seek advice from external sources. However, the relationship between TXL and INTAD was not as strong, with a non-significant t-value.

Finally, the hypothesis that the more laissez-faire the CEO's leadership style, the less likely they are to seek advice from both internal and external sources when making strategic decisions (H5) was fully supported by the data. The regression analysis showed a significant negative relationship between LF and both INTAD and EXTAD, indicating that the more laissez-faire the CEO's leadership style, the less likely they are to seek advice from either internal or external sources.

Overall, these findings suggest that CEO leadership style does have an impact on advice seeking behavior. Transformational and transactional leadership styles are associated with an increased likelihood of seeking advice, while laissez-faire leadership is associated with a decreased likelihood of seeking advice. These results have important implications for organizations, as they suggest that the leadership style of the CEO may influence the decision-making process and the quality of strategic decisions made within the organization.

In the following section, the study aimed to examine the relationship between leadership style, advice seeking behavior, and the speed of strategic decision outcomes. Specifically, the researcher hypothesized that transformational leadership would be positively related to internal advice seeking behavior, transactional leadership would be positively related to internal advice

seeking behavior, and laissez-faire leadership would be negatively related to both internal and external advice seeking behavior. The researcher also hypothesized that advice seeking behavior would moderate the relationship between leadership style and the speed of strategic decision outcomes.

The results of the regression analysis supported the first three hypotheses. Transformational leadership was found to be positively related to internal advice seeking behavior, with a significant t-value and p-value for the INTAD coefficient. Similarly, transactional leadership was found to be positively related to internal advice seeking behavior, with a significant t-value and p-value for the INTAD coefficient. Laissez-faire leadership was found to be negatively related to both internal and external advice seeking behavior, indicated by the negative coefficients and significant t-values for INTAD and EXTAD.

In terms of the moderating role of advice seeking behavior, the results of the regression analysis showed that INTAD and EXTAD had significant t-values and p-values, indicating that they had a moderating effect on the relationship between leadership style and the speed of strategic decision outcomes. This suggests that the speed of strategic decision outcomes may be influenced by the extent to which leaders seek advice from internal and external sources.

Overall, these findings support the idea that leadership style and advice seeking behavior are related and can impact the speed of strategic decision outcomes. Transformational leaders, who are known for their vision and inspiration, appear to be more likely to seek advice from internal sources, which may help to facilitate faster decision making. Similarly, transactional leaders, who are known for their emphasis on clear expectations and rewards, also appear to be more likely to seek advice from internal sources. On the other hand, laissez-faire leaders, who

are known for their hands-off approach, are less likely to seek advice from either internal or external sources, which may result in slower decision making. The moderating role of advice seeking behavior highlights the importance of seeking input from a variety of sources in order to facilitate effective decision making.

In the final section, the study examined the relationship between leadership style and the quality of strategic decision outcomes, and the moderating role of advice seeking behavior in this relationship. Three hypotheses were tested: H7a, H7b, and H7c.

H7a proposed that seeking more advice from external sources would moderate the relationship between the quality of the strategic decision outcomes and transformational leaders. The results of the regression analysis and the Hayes Process Macro supported this hypothesis, with the interaction term "TFL x EXTAD" being significant. This suggests that the positive effect of transformational leadership on the quality of strategic decision outcomes is stronger when leaders seek advice from external sources.

H7b proposed that seeking more advice from external sources would moderate the relationship between the quality of the strategic decision outcomes and transactional leaders. The results of the regression analysis and the Hayes Process Macro supported this hypothesis, with the interaction term "TXL x EXTAD" being significant. However, the conditional effects of transactional leadership at different levels of advice seeking behavior showed that the positive effect of transactional leadership on the quality of strategic decision outcomes becomes negative when advice seeking behavior is at its highest level.

H7c proposed that seeking more advice from external sources would moderate the relationship between the quality of the strategic decision outcomes and laissez-faire leaders. The results of the regression analysis and the Hayes Process Macro did not support this hypothesis, with the interaction term "LF x EXTAD" being not significant. This suggests that the negative effect of laissez-faire leadership on the quality of strategic decision outcomes is not significantly affected by advice seeking behavior. However, the results did show that advice seeking behavior is a significant predictor of the quality of strategic decision outcomes, with higher levels of advice seeking being associated with higher quality outcomes.

Overall, the results of this study suggest that leadership style and advice seeking behavior play important roles in the quality of strategic decision outcomes. Transformational and transactional leaders who seek advice from external sources tend to have higher quality outcomes, while laissez-faire leadership is negatively related to the quality of strategic decision outcomes. Advice seeking behavior can also strengthen the positive effect of transformational and transactional leadership on the quality of strategic decision outcomes but may weaken the positive effect of transactional leadership when it is at its highest level. These findings have implications for leaders looking to improve the quality of their strategic decision-making processes.

A one-way ANOVA analysis was conducted to examine the relationship between firm size and decision speed. The sample included 452 firms, divided into five categories based on the number of employees: 1-10, 11-1000, 101-1000, 1001-5000, and 5000+. The results of the analysis showed that there is a statistically significant difference in decision speed between the different categories of firm size, with a p-value less than .001. The effect sizes, as measured by

eta-squared and epsilon-squared, suggest that about 10% of the variance in decision speed can be explained by firm size. The multiple comparisons showed that firms with fewer employees tend to have faster decision speeds compared to firms with more employees, with the difference being statistically significant for some pairs of firm size categories. These findings suggest that firm size is significantly related to decision speed, with smaller firms potentially being more agile and able to make decisions faster than larger firms.

A one-way ANOVA analysis was conducted to examine the relationship between firm size and decision quality. The sample included 452 firms, divided into five categories based on the number of employees: 1-10, 11-1000, 101-1000, 1001-5000, and 5000+. The results of the analysis showed that there is a statistically significant difference in decision quality between the different categories of firm size, with a p-value less than .001. The effect sizes, as measured by eta-squared and epsilon-squared, suggest that about 5% of the variance in decision quality can be explained by firm size. The multiple comparisons showed that firms with fewer employees tend to have higher decision quality compared to firms with more employees, with the difference being statistically significant for some pairs of firm size categories. These findings suggest that firm size is significantly related to decision quality, with smaller firms potentially being more capable of making high quality decisions compared to larger firms.

The study also found that there is a significant relationship between firm age and decision speed, with older firms tending to have slower decision speed. This relationship was found to be moderate to strong in strength, depending on the measure used. The study analyzed data from 452 firms, which were divided into four groups based on their age: less than 1 year, 1-3 years, 3-7 years, and 7 or more years. An analysis of variance (ANOVA) and post-hoc tests were

conducted to identify significant differences between the means of the groups. Robust tests of equality of means also supported the finding of a significant difference between the means.

Another finding was that there is a significant relationship between firm age and decision quality, with older firms tending to have lower decision quality. This relationship was found to be moderate in strength, depending on the measure used. The study analyzed data from 452 firms, which were divided into four groups based on their age: less than 1 year, 1-3 years, 3-7 years, and 7 or more years. An analysis of variance (ANOVA) and post-hoc tests were conducted to identify significant differences between the means of the groups. Robust tests of equality of means also supported the finding of a significant difference between the means.

It was also found that there is no significant relationship between CEO tenure and either decision speed or decision quality. This was concluded based on the results of one-way ANOVA tests, which showed that the means of the groups were not significantly different. The study analyzed data from 452 firms, which were divided into four groups based on the tenure of their CEO: less than 1 year, 1-3 years, 3-7 years, and 7 or more years. Robust tests of equality of means also supported the finding of no significant difference between the means. The strength of the relationship between CEO tenure and decision speed or decision quality was found to be negligible, based on the effect sizes calculated using eta-squared and epsilon-squared.

Additionally, one-way ANOVA analysis that was conducted to examine the relationship between team size (TMT size) and decision speed. The analysis shows that there are significant differences in decision speed among the different TMT sizes, as indicated by the p-value of .001 under the Sig. column in the ANOVA table.

According to the multiple comparisons results, the mean difference in decision speed between the 1 person TMT size and the 2-4 people TMT size is not significant, as indicated by the p-value of .577. However, the mean difference in decision speed between the 1 person TMT size and the 4-8 people TMT size, as well as the 1 person TMT size and the 8+ people TMT size, are significant, as indicated by the p-values of .027 and $<.001$, respectively. This suggests that TMTs with larger sizes tend to have slower decision speeds compared to smaller TMTs.

It's worth noting that the effect sizes (eta-squared, epsilon-squared, omega-squared fixed-effect, and omega-squared random-effect) for this analysis are relatively small, indicating that the relationship between TMT size and decision speed is not very strong.

The study also conducted a one-way ANOVA to examine the relationship between team size (i.e., 1 person, 2-4 people, 4-8 people, 8+ people) and decision quality. The results indicate that there is a statistically significant difference in decision quality among the different team sizes, with a significance level of .009. The effect size for this relationship is small, as indicated by the eta-squared value of .025. The multiple comparisons show that team sizes of 1 person and 8+ people had significantly higher decision quality scores compared to team sizes of 2-4 people and 4-8 people. Team sizes of 1 person and 8+ people did not significantly differ from each other in terms of decision quality.

Finally, the researcher analyzed the relationship between the formal decision-making process (i.e., whether a formal process was followed or not) and decision speed and quality. It was found that the formal decision-making process was significantly related to decision speed and quality. Specifically, it was witnessed that decisions made using a formal process were made more slowly, but were of higher quality, compared to decisions made without a formal process.

This suggests that using a formal process may lead to slower decision-making but may result in better quality decisions.

6.3 Summary of Main Findings from the Qualitative Study

The purpose of this research was to examine the factors that influence strategic decision making and leadership in organizations. To achieve this goal, a qualitative analysis of data collected from a diverse group of respondents were analyzed. Through a qualitative analysis of data collected from a diverse group of respondents, we identified four major themes: decision outcome, strategic decision making, leadership style, and advice seeking behavior.

The first theme, decision outcome, focused on the impact of various external and internal factors on the success or failure of a decision. We found that market conditions, financial performance, and regulatory compliance were among the key external factors that had a significant influence on decision outcome. On the internal side, we found that the strategic mindset of the organization and the level of involvement and advice-seeking behavior of C-level executives played a crucial role in decision outcome.

The second theme, strategic decision making, explored the processes and factors that influence strategic decision making in organizations. We found that the focus of external and internal advice, as well as the frequency of market research and competition analysis, were important considerations in the strategic decision-making process. Additionally, we found that the role of employees and stakeholders in the decision-making process varied significantly across organizations.

The third theme, leadership style, examined the leadership styles of CEOs and the impact they had on organizational decision making. Our analysis revealed that transformational leadership was the most prevalent style among the respondents, followed by transactional and autocratic styles.

The fourth and final theme, advice seeking behavior, focused on the factors that influence the decision to seek advice from external sources. We found that the nature and focus of the advice sought, as well as the frequency of advice seeking, varied significantly across organizations. Additionally, we found that the focus of the advice sought was often on current strategies, rather than future strategies.

Overall, our research highlights the complex and multifaceted nature of decision making and leadership in organizations. The findings of this study have important implications for practitioners and researchers seeking to understand and improve decision making and leadership in their organizations.

Based on the findings of this qualitative study, the following key findings can be identified:

1. The CEO's leadership style is primarily transformational, with a focus on inspiring and guiding team members to achieve their full potential and work towards shared goals.
2. The organizations of the respondents value a range of leadership traits, including experience, empathy, being a good communicator, motivation, building team spirit, and building trust.

3. The respondents' organizations leadership style is largely transformational and autocratic, with smaller percentages of respondents identifying the leadership style as charismatic, transactional, or democratic.
4. The respondents' organizations decision-making process is often slow, with the most common response being "slow" (33% of responses).
5. The quality of the respondents' organizations decisions is generally high, with the most common response being "high" (59% of responses).
6. Seeking external advice tends to increase the speed of decision-making (41% of responses), and also tends to increase the quality of decisions (63% of responses).
7. The effect of seeking advice on financial and operational performance is generally positive, with 28% of responses indicating that it had a high impact and 20% of responses indicating that it had a very high impact.
8. The frequency of external advice sought by the respondents' organizations is varied, with 46% of responses indicating that no external advice is sought, 23% indicating that it is sought on a project-based basis, and 23% indicating that it is sought very often.
9. The focus of external advice sought by the respondents' organizations is mostly on current strategies (71% of responses).
10. The frequency of internal advice sought by the respondents' organizations is high, with 82% of responses indicating that it is sought very often.
11. The focus of internal advice sought by the respondents' organizations is mostly on current strategies (82% of responses).
12. The respondents' organizations tends to conduct market research using internal teams (94% of responses).

13. The competition in the respondents' organizations industry is generally competitive (64% of responses).
14. The decision-making process in the respondents' organizations is generally highly involved (68% of responses), with a smaller percentage of responses indicating that a second opinion is sought (32% of responses).
15. The CEO is the primary source of advice for strategic decisions (47% of responses), with a smaller percentage of responses indicating that C-level executives (18% of responses) or external advisors (35% of responses) are the primary source of advice.

6.4 Implications and Recommendations for Management

The research presented in this paper has important implications for management practice. By exploring the effect of advice seeking behavior on strategic decision-making process, we have gained insight into how it is related with different leadership styles and decision outcomes as well its moderating nature on these two variables. This knowledge can be used by managers to make more informed decisions, improve strategic decision-making process, and ultimately enhance the overall speed and quality of these decisions. In this section, we will discuss the management implications of our research, highlighting the key takeaways for managers and offering practical recommendations for how these findings can be applied in the real world.

The relationship between advice seeking behavior, leadership styles, decision speed, and decision quality is an important area of study for managers and organizations. By understanding how these factors influence one another, managers can make more informed decisions and improve the quality and effectiveness of their leadership. In this research, we have examined this relationship and identified several key findings. In this section, we will discuss the managerial

implications of our research, highlighting the key takeaways for managers and offering practical recommendations for how these findings can be applied in the real world. By applying these insights, managers can better understand the role that advice seeking behavior, leadership styles, decision speed, and decision quality play in their decision-making processes and use this knowledge to make more effective and efficient decisions.

The leadership style of a manager can have a significant impact on decision quality and speed. The study found that certain leadership styles are correlated with better decision quality and faster decision-making. Therefore, leaders or managers in organizations can consider adopting these styles in their own organizations. For example, the study found that there is a significantly positive relationship between transactional leaders and decision speed. Leaders can involve their team members who display such leadership in the decision-making process to get faster results. Likewise, the study also found a significantly negative relationship between laissez-faire leadership and both decision speed and quality. Therefore, the leaders in the organizations may try to avoid adopting such style in order to prevent slower decision making or making lower quality decisions.

The study also provides insights into the value of seeking advice from others in the decision-making process. The study finds that leaders who seek advice from their team members or external experts tend to make better and faster decisions, managers may encourage their team members to seek advice more frequently. This could involve setting up systems for team members to seek advice from one another or establishing relationships with external experts who can provide valuable input on specific decisions.

The study also provides insights into the trade-offs between decision speed and decision quality. The study also reveals that leaders who make decisions quickly tend to compromise on decision quality, managers may need to find ways to balance the need for speed with the need for thorough decision-making processes. This could involve identifying the most important decisions that need to be made quickly and focusing on those, while allowing more time for less critical decisions.

The study results showed that firm size and firm age are also correlated with decision speed and decision quality. The results suggested that firms that are younger and smaller in size display higher decision speed and quality. Therefore, as a possible implication managers or leaders in organizations may need to consider the size of their organization when making decisions. Managers in large firms may need to put more emphasis on thorough but fast decision-making processes by keeping their decision-making teams smaller to ensure that their decisions are of high quality and speed.

Study also demonstrates that older and larger firms tend to make lower quality decisions compared to smaller and younger groups of firms. Hence, managers in newer firms may need to be more proactive in seeking advice and input from others to ensure that their decisions are of high quality.

The size of a top management team, as shown by the results of the study may also be a factor in decision speed and decision quality. The research found that larger TMTs tend to make slower but higher quality decisions which means that managers may need to consider the size of their TMT when making decisions.

As a summary the following are some additional lists of recommendations based on the findings of the study:

- Managers should consider adopting leadership styles that are correlated with better decision quality and speed. In particular, transactional leadership appears to be positively related to decision speed, while laissez-faire leadership is negatively related to both decision speed and quality.
- Encourage team members to seek advice from one another or external experts as this can lead to better and faster decisions. This can be done through setting up systems for seeking advice or establishing relationships with external experts.
- When making decisions, try to balance the need for speed with the need for thorough decision-making processes. This may involve prioritizing the most important decisions and allowing more time for less critical ones.
- Consider the size and age of the organization when making decisions. Smaller and younger firms tend to have higher decision speed and quality, so managers in large or older firms may need to put extra emphasis on decision-making processes that are both thorough and fast.
- Use advice seeking behavior as a moderating variable to enhance the relationship between leadership styles and decision outcomes. Encourage team members to seek advice when making decisions, as this can help to improve the quality and speed of decisions made by different leadership styles.
- Train leaders and team members on the importance of advice seeking behavior and how it can improve decision-making processes. This could involve providing

training on how to seek and use advice effectively, as well as encouraging a culture of seeking advice within the organization.

- Monitor the decision-making processes within the organization and identify areas where improvements can be made. This could involve collecting data on decision speed and quality and using this information to identify trends or patterns that can be addressed.
- Encourage collaboration and communication within the organization, as this can improve the quality and speed of decisions. This can be done through things like holding regular team meetings, encouraging open communication, and fostering a culture of teamwork.
- Use decision-making tools and techniques to improve the speed and quality of decisions. This could involve using decision-making frameworks, conducting risk assessments, or using decision-making software to help identify the best options.
- Seek input from a diverse group of people when making decisions, as this can help to improve the quality and speed of decisions. This could involve seeking advice from people with different backgrounds, expertise, or perspectives, as well as soliciting input from customers or other stakeholders.
- Encourage leaders to seek out advice: Organizations could encourage their leaders to proactively seek out advice from both internal and external sources, as this is likely to be related to more effective leadership and better outcomes. This could be done through training programs or leadership development initiatives that focus on the importance of seeking out advice.

- Foster a culture of seeking advice: Organizations can also create a culture that values and supports the seeking of advice. This could include encouraging employees to ask for help when needed and providing resources and support for seeking out external advice.
- Encourage the use of diverse sources of advice: Leaders who seek out advice from a diverse range of sources are likely to have a broader perspective and be more open to new ideas. Organizations could encourage their leaders to seek out advice from a variety of sources, including colleagues, mentors, industry experts, and professional organizations.
- Foster a culture of continuous learning: Encouraging a culture of continuous learning can help leaders stay up-to-date on the latest trends and best practices in their field. This could include providing opportunities for leaders to attend conferences, workshops, and other learning events, as well as encouraging them to stay current through reading and other forms of professional development.
- Provide support and resources for seeking advice: Organizations can also provide support and resources to help their leaders seek out advice effectively. This could include access to databases of industry experts, support for networking and building relationships with external advisors, and other resources that can help leaders connect with the knowledge and expertise they need to succeed.

By following these recommendations, managers can improve the decision-making processes within their organizations and enhance the overall speed and quality of their decisions.

6.5 Research Implications

The research implications of this study provide valuable insights for both practitioners and researchers in the field of management and leadership. For practitioners, the findings highlight the importance of considering leadership style in the decision-making process, as it can have a significant impact on both the speed and quality of strategic decisions. This suggests that organizations may want to focus on developing and training their leaders in specific leadership styles, such as transformational and transactional, in order to facilitate faster and higher quality decision-making. These leadership styles have been found to be particularly effective in fostering high-quality strategic decisions, and may be especially important for organizations that operate in fast-paced or competitive environments.

Additionally, the finding that advice seeking behavior can moderate the relationship between leadership style and decision outcomes suggests that leaders should be encouraged to seek input from a diverse range of sources when making strategic decisions. This could include both internal and external sources, such as top management team members, external advisors, and board members. By seeking advice from a variety of sources, leaders may be able to access a wider range of perspectives and information, which can help to facilitate more informed and effective decision-making.

One possible research implication of this study is the need for further exploration of the relationship between leadership style and advice seeking behavior. The current study found that transformational and transactional leadership styles are positively related to internal advice seeking behavior, while laissez-faire leadership style is negatively related to both internal and external advice seeking behavior. However, further research could delve deeper into the nuances

of this relationship, including exploring the specific types of advice that leaders with different leadership styles tend to seek and how they use this advice in their decision-making processes.

Another research implication is the need to consider the moderating role of advice seeking behavior in the relationship between leadership style and decision outcomes. The current study found that internal and external advice seeking behavior both moderate the relationship between leadership style and decision speed, and internal advice seeking behavior moderates the relationship between leadership style and decision quality. This suggests that the way in which leaders seek and utilize advice may be an important factor in determining the speed and quality of their strategic decisions. Further research could investigate the mechanisms through which advice seeking behavior moderates these relationships and explore the role of other factors, such as the quality and diversity of the advice received, in moderating these relationships.

An additional research implication is the importance of considering organizational characteristics, such as firm size and age, in studying decision-making processes. The current study found that firm size is significantly related to decision quality, with smaller firms tending to have higher decision quality, and that firm age is significantly related to decision speed and quality, with older firms tending to have slower decision speed and lower decision quality. These findings suggest that the characteristics of the organization in which decisions are being made may impact the decision-making process and outcomes. Further research could investigate the specific mechanisms through which organizational characteristics influence decision-making and explore the role of other organizational factors, such as culture, structure, and resources, in shaping decision-making processes.

For researchers, this study adds to the growing body of literature on CEO advice seeking and leadership style and highlights the need for further research in this area. For example, future research could explore the conditions under which certain leadership styles and advice seeking behaviors are more or less effective in facilitating strategic decision-making. This could include examining the impact of factors such as organizational culture, industry context, or environmental uncertainty on the relationship between leadership style, advice seeking, and decision outcomes. Additionally, further research could investigate the moderating role of other variables on the relationship between leadership style, advice seeking, and decision outcomes. This would provide a more comprehensive understanding of the factors that impact decision-making in organizations and inform the development of more effective practices for improving strategic decision-making.

Finally, this study highlights the need for further research on the relationship between leadership style, advice seeking behavior, and strategic decision making. The findings of this study provide valuable insights, but there is still much that is not known about how these factors interact and influence each other. Future research could explore these relationships in more depth, using a variety of methods and contexts to provide a more nuanced understanding of the complex dynamics at play.

6.6 Policy Implications

The policy implications of this research are wide-reaching, as the findings have the potential to inform decision-making practices at both the individual and organizational levels. On an individual level, the findings highlight the importance of leadership style in the strategic decision-making process. This suggests that leaders should be aware of their own leadership

style and the potential impact it may have on their decision-making outcomes. In particular, transformational and transactional leadership styles appear to be effective in fostering high-quality decisions, while laissez-faire leadership style seems to be detrimental to decision quality. Therefore, leaders who adopt a more hands-off approach may benefit from considering how they can be more involved in the decision-making process in order to improve the quality of their decisions.

On an organizational level, the findings suggest that it may be beneficial for companies to consider the leadership style of their top executives when trying to optimize their decision-making processes. This may involve providing training or support to leaders to help them develop more effective leadership styles, or actively seeking out leaders with proven track records of making high-quality strategic decisions. Additionally, the findings on the moderating role of advice seeking behavior highlight the importance of seeking input from a variety of sources in order to facilitate effective decision making. Companies may want to consider ways to encourage their leaders to seek out advice from both internal and external sources, such as by providing resources or creating a culture that values diverse perspectives.

Other potential policy implications of this research include the following:

- Companies may want to consider implementing processes or systems that allow for more efficient decision making, such as decision-making tools or software. This may be particularly beneficial for larger firms, which tend to have slower decision speed according to the findings of this study.
- Organizations may want to consider the impact of team size on decision-making outcomes. The findings of this study suggest that larger teams may be slower to

make decisions, so companies may want to consider ways to streamline their decision-making processes in order to facilitate faster decision speed.

- The relationship between firm size and decision quality found in this study suggests that smaller firms may be more capable of making high-quality decisions compared to larger firms. This may be due to a number of factors, such as the ability to be more agile and responsive to change. Companies may want to consider ways to leverage the advantages of small size in order to improve their decision-making processes.
- The relationship between firm age and decision quality found in this study suggests that older firms may be more likely to produce lower-quality strategic decisions. Companies may want to consider ways to encourage continuous learning and innovation in order to maintain the quality of their decisions over time.
- Organizations can consider implementing leadership development programs that focus on developing transformational and transactional leadership skills, as these styles have been shown to be positively related to both the speed and quality of strategic decisions.
- Companies may want to consider creating a more diverse range of internal advisors and external consultants, to ensure that the CEO has access to a wide range of perspectives and expertise when making strategic decisions.
- Organizations can consider implementing processes and systems that encourage and facilitate advice seeking behavior, such as creating a culture of open communication and promoting the sharing of knowledge and expertise.

- Policymakers and industry leaders may want to consider the impact of firm size on decision quality and consider implementing measures to support and promote small businesses, which may have a higher potential for producing high-quality decisions.
- Governments and regulatory bodies may want to consider the impact of firm age on decision speed and quality and consider implementing policies that encourage organizations to continually innovate and adapt to changing conditions.
- Policymakers and industry leaders may want to consider the impact of TMT size on decision speed and consider implementing measures to optimize team size and structure in order to facilitate faster decision making.
- Governments and regulatory bodies may want to consider the impact of CEO tenure on decision speed and quality and consider implementing policies that encourage frequent leadership turnover or the rotation of CEO roles within organizations.

6.7 Research Limitations

Research is a crucial aspect of the scientific process, providing a means of understanding and advancing our knowledge of the world around us. However, it is important to recognize that all research is subject to limitations, which can affect the accuracy, reliability, and generalizability of the findings. These limitations can arise from a variety of sources, including the design of the study, the sample size, the measures used, and the data collection methods. Understanding the limitations of research is crucial for interpreting and applying the findings appropriately, as well as for identifying areas for future research. In this section, we will discuss some common limitations in research and how they can impact the validity of the results.

The use of mixed methods research, which combines both quantitative and qualitative approaches, offers a rich and nuanced understanding of complex phenomena. In this study, we adopted an explanatory sequential design, in which we first collected and analyzed quantitative data and then followed up with qualitative data to further explore and contextualize the findings. While this design has many strengths, it is also subject to certain limitations that should be considered when interpreting the results. In this section, we will discuss some of the limitations of our mixed methods study, including those related to the sample size, the data collection and analysis methods, and the generalizability of the findings. By acknowledging these limitations, we can better understand the limitations of our study and identify areas for future research.

There are several limitations to using an explanatory sequential design in research (Creswell & Clark, 2011; Driscoll, et al., 2007):

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- Sampling: One potential limitation is the sampling process, as the sample size may be small and not representative of the entire population being studied. This can lead to findings that may not be generalizable to the larger population.
 - Data analysis: There may also be limitations in the data analysis process, particularly when combining and interpreting results from both the quantitative and qualitative phases. It can be challenging to integrate and compare the different types of data collected, and the researcher must be careful to interpret the findings accurately and objectively.
 - Limited generalizability: The results of an explanatory sequential study may not be generalizable to the wider population, as the sample size may be small, and the study may be conducted in a specific context or location.

- Dependence on prior research: The explanatory phase of the design relies on the results of previous research, which may be limited or flawed.
- Difficulty in establishing cause and effect: It can be difficult to establish a causal relationship between variables in an explanatory sequential design, as the study is not designed to manipulate the independent variable.
- Limited control: It can be difficult to control for extraneous variables in an explanatory sequential design, as the study is not designed to manipulate the independent variable.
- Bias: There is a risk of bias in the sampling process, as the sample in the explanatory phase is drawn from the participants in the exploratory phase.
- Limited sample size: The sample size may be small in an explanatory sequential design, which can limit the statistical power of the study.
- Limited ability to replicate: The results of an explanatory sequential study may be difficult to replicate, as the study is not designed to be repeated in the same way.
- Limited flexibility: It can be difficult to make changes to the study design or analysis plan in an explanatory sequential design, as data collection and analysis are conducted in two separate phases.

Regarding this research study in general following are seen to be some of the possible limitations of the study:

- The research is limited to Turkish companies, so the findings may not be applicable to companies in other countries or regions.

- The sample size may be too small to accurately represent the entire population of Turkish companies, which could limit the generalizability of the findings.
- The research relies on self-reported data from participants, which may be subject to bias or exaggeration.
- The research is limited to the perspective of the CEO or top management team, so other stakeholders may have different experiences or perspectives on the decision-making process.
- The research only examines the relationship between leadership style and advice seeking behavior, so it may not capture other important factors that influence the decision-making process.
- The research may not be able to control for all potential confounding variables that could affect the results.
- The research may be subject to researcher bias, as the researcher's own experiences and perspectives could influence the interpretation of the data.
- The research may not be able to accurately measure the quality or outcomes of strategic decisions, as these can be subjective and difficult to quantify.
- The research may not be able to adequately control for the influence of external factors, such as economic conditions or industry trends, which could affect the decision-making process and outcomes.
- The use of a mixed-methods approach may present challenges in terms of data integration and interpretation, as the qualitative and quantitative data may be difficult to compare or synthesize.

- The research may not adequately consider the context in which strategic decisions are made, as different companies may have different organizational cultures, structures, and resources that could influence the decision-making process.
- The research may not be able to fully capture the complexity of the strategic decision-making process, as it may involve multiple decision makers, stakeholders, and sources of information and advice.
- The research may be limited by the availability and quality of data, as some sources of information or advice may be more difficult to access or may not be reliable.

To mitigate the effects of the limitations listed above, researchers can consider the following strategies:

- Increase the sample size: A larger sample size can help increase the reliability and generalizability of the findings.
- Use multiple sources of data: Researchers can gather data from multiple sources, such as interviews, surveys, and case studies, to triangulate their findings and reduce the potential for bias or error.
- Use objective measures: Researchers can use objective measures, such as financial data or performance metrics, to reduce the reliance on self-reported data and minimize the potential for bias.
- Consider the perspectives of multiple stakeholders: Researchers can gather data from multiple stakeholders, such as employees, customers, or shareholders, to gain a more comprehensive understanding of the decision-making process.

- Control for potential confounding variables: Researchers can use statistical techniques, such as regression analysis, to control for potential confounding variables and increase the validity of the findings.
- Minimize researcher bias: Researchers can use techniques such as peer review and member checking to reduce the impact of their own biases on the research process.
- Use appropriate statistical methods: Researchers can use appropriate statistical methods, such as power analysis, to ensure that the sample size is sufficient to detect meaningful differences between groups or variables.
- Consider the context of the research: Researchers can carefully consider the context in which the research is being conducted and how it may influence the results.
- Use appropriate data analysis techniques: Researchers can use appropriate data analysis techniques, such as content analysis or factor analysis, to analyze and interpret the qualitative and quantitative data.
- Ensure the quality of the data: Researchers can carefully check the quality and reliability of the data sources and ensure that they are appropriate for the research question being addressed.

6.8 Recommendations for Future Research

The research presented in this paper has contributed to our understanding of the relationship between advice seeking behavior, leadership styles and decision outcomes. However, there are still many questions that remain unanswered and areas that are ripe for further investigation. In this section, we will discuss some potential future research directions

that could build on the work presented in this paper. These areas of investigation may include other contexts or concepts and have the potential to deepen our understanding of advice seeking behavior in further detail and its implications for strategic decision-making process. By addressing these research gaps, we can continue to make progress towards a more comprehensive and nuanced understanding of the effect of advice seeking on the strategic decision-making process.

The following can be seen as potential areas for further research based on the topics discussed in this research study:

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- Examining the impact of specific leadership styles on advice seeking behavior and the effectiveness of the strategic decision-making process: Additional research could investigate the specific leadership styles that are most likely to encourage or discourage advice seeking, and whether certain styles are more effective at facilitating the use of diverse sources of advice.
 - Exploring the role of organizational culture in shaping advice seeking behavior: It could be interesting to examine how organizational culture influences the willingness of managers to seek advice, and whether certain cultures are more conducive to effective advice seeking and decision making.
 - Examining the influence of individual characteristics on advice seeking behavior: Research could explore how personal characteristics such as cognitive style, risk aversion, and need for closure may influence the likelihood of seeking advice and the sources of advice sought.

- Investigating the impact of external factors on advice seeking behavior: External factors such as market conditions, regulatory environment, and technological changes may also impact the decision to seek advice and the sources of advice sought. Further research could explore these influences.
- Examining the effectiveness of different sources of advice: It could be useful to compare the effectiveness of different sources of advice, such as external consultants versus internal teams, in different decision-making contexts. This could help organizations to identify the most effective sources of advice for different types of strategic decisions.
- Developing and testing interventions to improve advice seeking behavior: Given the potential benefits of seeking out advice, it would be worthwhile to develop and test interventions that encourage employees to seek out advice more frequently or from a wider range of sources.
- Exploring the moderating effects of contextual factors: It would be interesting to examine how contextual factors such as organizational culture, individual characteristics, and task characteristics influence the relationship between leadership styles, advice seeking behavior, and decisional outcomes.
- Examining the role of advice seeking in team decision making: Research could examine the extent to which advice seeking behavior within teams leads to better decisional outcomes, as well as how leadership styles influence the advice seeking behavior of team members.
- Exploring the role of power dynamics in the advice seeking process: Research could examine how power imbalances within an organization, such as between

leaders and subordinates, may impact the willingness of individuals to seek or provide advice, and whether these dynamics affect the quality of the advice given and received.

- Another interesting avenue for research could be the use of digital technologies to facilitate advice seeking, such as through the use of online forums or social media platforms. This could include exploring how these technologies impact the sources of advice sought, the effectiveness of the advice received, and the potential for creating more inclusive and diverse networks of advisors.
- Examining the relationship between advice seeking behavior and leadership development: Research could investigate whether seeking advice from a variety of sources is related to better leadership development and performance.
- Studying the impact of advice seeking on team performance: Research could examine how seeking advice from team members and other sources affects the performance of teams, and whether certain types of advice are more or less effective in different team contexts.
- Investigating the effect of advice seeking on conflict resolution: Research could explore whether seeking advice from diverse sources helps to resolve conflicts within organizations and whether it leads to better decision-making outcomes.
- Examining the influence of advice seeking on risk management: Research could investigate whether seeking advice from a range of sources is related to better risk management practices and outcomes within organizations.

- Studying the impact of advice seeking on innovation: Research could examine how seeking advice from diverse sources affects innovation within organizations and whether it leads to better outcomes.
- Investigating the role of emotional intelligence in advice seeking behavior: Research could explore whether individuals with higher emotional intelligence are more likely to seek advice and whether this leads to better decision-making outcomes.
- Examining the influence of advice seeking on ethical decision-making: Research could investigate whether seeking advice from diverse sources is related to better ethical decision-making within organizations.
- Studying the effect of advice seeking on strategic planning: Research could examine how seeking advice from a range of sources affects the strategic planning process and whether it leads to better outcomes.
- Finally, it may also be valuable to examine the effects of advice seeking behavior on the long-term performance and success of organizations. This could include studies that explore how seeking advice from a range of sources and incorporating diverse perspectives into decision-making processes affects outcomes such as financial performance, innovation, and customer satisfaction.

In addition, following research questions and topics can also be investigated to enrich the literature:

- What are the specific factors that influence the advice seeking behavior of CEOs and top management teams? Potential antecedents could include individual

characteristics (e.g., personality traits), team characteristics (e.g., diversity, cohesiveness), and organizational factors (e.g., culture, structure).

- How does the type of advisor (internal vs. external) and the type of advice sought (formal vs. informal) affect the outcomes of the advice seeking process?
- What are the impacts of advice seeking behavior on innovation and entrepreneurial behavior within an organization?
- How does the frequency and timing of advice seeking behavior influence organizational performance over time?
- How does the level of fit between the advice sought and the organizational context influence the effectiveness of the advice seeking process and the resulting outcomes?
- To what extent does the effectiveness of advice seeking behavior depend on the quality of the advice received and the ability of the organization to effectively implement the advice?

6.9 Conclusion

In conclusion, this dissertation has significantly contributed to the understanding of the relationships between leadership styles, advice-seeking behavior, decision speed, and decision quality in the context of the modern business world. The rapid shifts in technology, business models, and data production have created an environment where CEOs and top management teams face complex and challenging decisions. The findings of this research highlight the importance of leadership style and advice-seeking behavior in the strategic decision-making process.

Transformational leadership has emerged as the most effective style in terms of its positive impact on decision quality and speed. CEOs employing this leadership style inspire and motivate their followers, ultimately resulting in higher-quality strategic decisions. In contrast, laissez-faire leadership was found to have a negative relationship with decision quality, indicating the need for active and engaged leadership.

This research also revealed the importance of advice-seeking behavior and its moderating effects on the relationship between leadership style and decision outcomes. CEOs with a transformational leadership style are more likely to seek advice from internal sources, while transactional leaders tend to seek advice from external sources. Furthermore, the study showed that firm size and age play significant roles in decision speed and quality. Smaller, younger firms tend to make faster decisions, while older, larger firms may need to focus on streamlining decision-making processes to improve speed without sacrificing quality.

Considering the top management team's size, this research found that larger TMTs generally make slower but higher quality decisions. Hence, managers should be mindful of their TMT size when strategizing decision-making processes. To enhance decision quality and speed, organizations should adopt leadership styles associated with these traits, foster a culture of advice-seeking, provide resources and support for effective advice-seeking, and leverage decision-making tools and techniques.

In addition to the findings related to leadership styles and advice-seeking behavior, this dissertation has shed light on the external factors affecting strategic decision outcomes. The study revealed that market conditions, financial performance, and regulatory compliance are key external factors influencing decision quality and speed. This highlights the need for organizations to closely monitor the external environment, staying informed and adapting to changes that may impact their decision-making processes. Organizations should develop robust mechanisms to gather, analyze, and act upon relevant market intelligence to maintain a competitive edge.

Another important aspect of this research pertained to the role of employees and stakeholders in the decision-making process. A diverse and inclusive approach to decision-making, incorporating input from various internal and external sources, can lead to better decision outcomes. By engaging employees and stakeholders in the decision-making process, organizations can tap into a broader knowledge base, resulting in more informed decisions that are better aligned with the needs and expectations of those involved. To achieve this, organizations should invest in developing the communication and collaboration skills of their employees, and establish clear channels for stakeholder input and feedback.

The study also highlighted the significance of a formal decision-making process in achieving higher quality decisions. A well-structured and systematic approach to decision-making ensures that all relevant factors are considered, potential risks are assessed, and viable alternatives are evaluated. Organizations should strive to establish and refine their decision-making processes, incorporating best practices and relevant decision-making tools. Additionally, training and development programs focused on improving employees' decision-making skills can help foster a culture of informed, effective decision-making.

The influence of CEO tenure on decision speed and quality was found to be insignificant, suggesting that experience alone does not guarantee better decision outcomes. This finding underscores the importance of continuous learning and development for leaders, regardless of their tenure. Organizations should invest in leadership development programs, offering ongoing training and support to ensure that their leaders remain agile and adaptable in an ever-changing business environment.

In light of the rapid technological advancements and the increasing complexity of the business world, it is essential for organizations to continuously review and adapt their decision-making processes. The integration of advanced decision-support systems, big data analytics, and artificial intelligence can further enhance decision-making capabilities, allowing organizations to make more accurate predictions, optimize resource allocation, and identify new opportunities. By embracing these emerging technologies, organizations can not only improve decision speed and quality but also gain a competitive advantage in the market.

This study has provided valuable insights into the interplay between leadership styles, advice-seeking behavior, and strategic decision outcomes. However, it is important to acknowledge that the findings may not be universally applicable to every organization or context. Future research could expand on this work by investigating the influence of other contextual factors, cultural dimensions, or industry-specific characteristics on the relationships identified in this dissertation. Despite these limitations, this research has significant implications for organizations and their leaders, offering practical recommendations for enhancing decision quality and speed in an ever-evolving business landscape.

In conclusion, this dissertation has provided a comprehensive examination of the factors affecting strategic decision-making in the modern business landscape. By understanding the interplay between leadership styles, advice-seeking behavior, and various internal and external factors, organizations can make more informed decisions that drive success and growth. As the business environment continues to evolve, leaders must remain agile, adaptable, and open to new ideas and perspectives, ensuring that their organizations remain at the forefront of innovation and progress.

7 Bibliography

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Appendix I – Quantitative Survey Questionnaire

Transformational Leadership Questions:

Please select your rating that applies to each statement given.

Strongly Disagree

Strongly Agree

1

2

3

4

5

- 1 The CEO encourages me to think I can do very well in my work.
- 2 The CEO increases my optimism for the future.
- 3 The CEO provides me with reasons to change the way I think about problems.
- 4 The CEO inspires me to get a lot more done than I could have if the CEO was not around.
- 5 The CEO provides a vision to our organization.
- 6 The CEO arouses in me the effort to work harder and better.
- 7 The CEO provides me with new ways of looking at things which used to be a puzzle.
- 8 I am ready to trust the CEO to overcome any obstacle.
- 9 The CEO motivates me to do more than I originally expected I would do.
- 10 The CEO provides a clear vision of who and what we are.
- 11 The CEO encourages me to expect high performance from myself.
- 12 The CEO makes me enthusiastic about assignments.
- 13 The CEO provides a clear vision of where we are going.
- 14 Because of the CEO, I do more than expected I could do.
- 15 The CEO enables me to think about old problems in new ways.
- 16 There is no doubt that the CEO is very visionary.
- 17 The CEO's ideas have forced me to rethink some of my own ideas which I had never before.
- 18 The CEO makes me feel good to be around him/her.
- 19 The CEO stimulates my efforts to excel.
- 20 The CEO heightens my motivation to succeed.
- 21 The CEO provides his/her vision of our organization to me

Transactional Leadership Questions:

Please select your rating that applies to each statement given.

Strongly Disagree

Strongly Agree

1

2

3

4

5

- 1 The CEO establishes my performance goals.
- 2 The CEO will make sure I'm compensated more if I perform well.
- 3 The CEO sets goals for my performance.
- 4 The CEO makes my compensation contingent upon my performance.
- 5 The CEO makes decisions about my compensation mainly on performance.
- 6 The CEO establishes the goals for my work
- 7 The CEO determines my compensation based on my performance.
- 8 I am ready to trust the CEO to overcome any obstacle.
- 9 The CEO establishes my goals for me

Laissez-Faire Leadership Questions:

Please select your rating that applies to each statement given.

Strongly Disagree

Strongly Agree

1

2

3

4

5

- 1 No-one, including myself, is solving the problems of my job.
- 2 No-one, including myself, expects much of me in terms of performance
- 3 No-one, including myself, is providing any vision for our organization.

Source of Advice:

Not at all

To a great extent

1 2 3 4 5 6 7

External Advice Seeking:

To what extent do you...

- 1 ...frequently use advisers from other organizations
- 2 ...ask for advice from managers of other organizations about the current strategy
- 3 ...ask for advice from managers of other organizations about the future strategy

Internal Advice Seeking:

To what extent do you...

- 1 ... frequently use advisers from your own organization
- 2 ... ask for advice from managers of your own organization about the current strategy
- 3 ... ask for advice from managers of your own organization about the future strategy

Decision Speed Questions:

Strongly Disagree

Strongly Agree

1

2

3

4

5

- 1 When this company sees an opportunity, it can move faster than its competitors
- 2 Our competitors consider us fast in responding to their actions.
- 3 From start to finish we respond faster than our competitors to problems

Decision Quality Questions:

Poor

Excellent

1

2

3

4

- 1 The overall quality of the decision
- 2 The quality of the decision relative to its original intent
- 3 The quality of the decision given its effect on organizational performance

Appendix II – Interview Request Letter

Greetings,

My name is Ahmed Furkan Gül, and I am a Ph.D. candidate for the Doctor of Business Administration degree in the area of Management at Yeditepe University, Istanbul. At the moment, I am currently working on research for my dissertation in the area of senior and executive leader decision-making processes.

My research is entitled: STRATEGIC ADVICE SEEKING BEHAVIOR OF DIFFERENT LEADERSHIP STYLES AND ITS IMPACT ON STRATEGIC DECISION OUTCOMES: AN OVERVIEW OF TURKISH COMPANIES

The goal of my research is to explain how different leadership styles make decisions and how they seek advice in the process of strategic decision making. The study will investigate the relationship between different leadership styles and advice seeking behavior as well its effect on the various types of outcomes of these strategic decisions such as speed, quality, and effectiveness.

I would like to conduct interviews (Date once proposal has been approved) if that works into your schedule. There will first be a 10-minute phone interview that will be followed by a scheduled 1-hour face to face interview in a location of your choosing. At your request, I will send you a copy of the interview questions that I will be asking prior to the interview.

Best regards,

Ahmed Furkan Gül

Appendix III – Interview Consent Letter

Ahmed Furkan Gül, a Ph.D. Candidate at Yeditepe University in Istanbul and an independent researcher, has been authorized by _____ to do an interview for a research study on “Strategic Advice Seeking Behavior of Different Leadership Styles and its Impact on Strategic Decision Outcomes”.

Interviewee:

I, _____, a member of (organization) _____ have voluntarily accepted to contribute to this research study. My involvement in the study is completely based on my personal decision and my participation or non-participation will not be conveyed to the supervisory staff. I acknowledge that

I may object to partake and/or decide to leave the study at any time without any consequences to my employment.

Research data and list of interviewees will be kept confidential.

Personal anonymity will be guaranteed.

Results of research data will be used for presentation and publications.

As the data is presented, I can choose to be identified as the source of that information for group discussion purposes.

Ahmed Furkan Gül has explained this study to me and answered my questions. If I have other questions or research issues, I can be reached through

_____.

There are no other agreements, written or verbal, related to this study beyond that expressed in this consent form. I, the undersigned, understand the above explanation, and I give my consent to my voluntary participation in this research.

Signature of the Interviewee _____ Date _____

Signature of the Researcher _____ Date _____

Appendix IV – Qualitative Survey Questionnaire

Background Data:

Firm Size:

Firm Age:

Industry (Optional):

CEO Tenure:

C-Level Team Size:

Formal Leadership Training Courses/Classes:

How Long in Current Position:

Survey Questions:

Question # 1: Please define the term leadership as you understand and/or apply it.

Question # 2: What kind of different leaderships are there, and can you please explain these differences in your own understanding?

Question # 3: How would you describe your or your current CEO's leadership style?

Question # 4: What characteristics do you feel are the primary make up of a leader?

Question # 5: Please define decision-making from a leader's perspective and the importance of the decision process.

Question # 6: How much do outside influences contribute to your or your CEO'S decision-making process?

Question # 7: How do you see leadership and the decision process interrelated as it pertains to obligations to employees and stockholders?

Question # 8: How does the organization's financial situation affect your decision-making process? Does the financial situation of your organization affect how you seek advice either through external or internal advisory sources?

Question # 9: Do you or your CEO value the opinions of your top management when it comes to making a strategic decision? Please explain.

Question # 10: Do your company have a short-term or long-term strategy mindset? Why is that the case?

Question # 11: What triggers you or your CEO to seek for advice when making a strategic decision?

Question # 12: How often do you use advisers from other organizations?

Question # 13: When do you ask for advice from managers of other organizations about the current and future strategy?

Question # 14: Please explain if and how frequently you or your CEO seek advice from people in your own organization. Are they mainly on current or future (long-term) strategies?

Question # 15: How does your company keep track of opportunities in the market?

Question # 16: How would you compare your company or your competitors in terms of providing a faster response to the changes in the market?

Question # 17: How do you think you can improve the speed of your strategic decisions?

Question # 18: How would you describe the overall decision quality of your strategic decisions?

Question # 19: How do you think you can improve the quality of your strategic decisions?

Question # 20: Where do you see the value of external advisors such management consultants, subject matter experts, other CEOs, or C-level individuals?

Question # 21: Would you or your CEO value the opinion of your external advisors' vs your internal top management team's? Please explain.

Question # 22: When you or your CEO seeks advice, do you do it just to get another opinion on a strategic decision or do you utilize it when making the decision?

Question # 23: Do you think seeking advice can speed up your decision-making process or not? Please explain how.

Question # 24: Do you think seeking advice can increase the quality of your decisions or not? Please explain how.

Question # 25: Do you think seeking advice can result in a more effective decision that can help your organization reach its financial or operational goals or not? Please explain how.

Appendix V - Research on Antecedents and Outcomes of CEO Advice Seeking

Research	Underlying Theory	Advisory Source	Method/ Sample
<i>Context 1: Strategic Decision-Making Process and Advice Seeking</i>			
Alexiev et al. (in press)	Information processing; structural power interdependence	Internal & external	Survey/ The Netherlands
Arendt et al. (2005)	Information processing; social capital; leadership theory	Internal & external	Conceptual
Bacon-Gerasymenko and Eggers (2019)	Information processing	Hybrid (VC)	Survey & archival/ Ventures in France
Barney et al. (1996)	Organizational learning	Hybrid (VC)	Survey/ U.S. ventures
Bridwell-Mitchell and Lant (2014)	Social capital; managerial cognition	External	Experiments/ U.S. school principals
Heyden et al. (2013)	Information processing	Internal & external	Survey/ The Netherlands
Jones and Cannella (2011)	Information processing; personality theory	Internal (TMT) & Hybrid (board)	Conceptual
Kor and Mesko (2013)	Human capital; social capital	Internal (TMT)	Conceptual
Ma and Seidl (2018)	Information processing; role theory (implicit)	Internal & Hybrid (board)	Case studies/ Europe
McDonald and Westphal (2003)	Social capital; identity theory	External (other CEOs)	Survey/ Forbes index, U.S.
McNulty and Pettigrew (1999)	Resource dependence; agency theory	Hybrid (board)	Case studies/ U.K.
Minichilli et al. (2012)	Resource dependence; institutional theory	Hybrid (board)	Survey/ Industrial firms, Italy & Norway
Oehmichen et al. (2017)	Resource dependence; resource-based view	Hybrid (board)	Archival/ MSCI Europe and S&P 500, 17 countries
Rosenstein et al. (1993)	N/A	Hybrid (VC)	Survey/ high-tech ventures, U.S.
Sapienza (1992)	Information processing	Hybrid (VC)	Survey/ U.S. ventures
Sapienza and Gupta (1994)	Agency theory; information processing	Hybrid (VC)	Survey/ U.S. ventures
Sapienza et al. (1996)	Agency theory; information processing	Hybrid (VC)	Survey/ Ventures in the U.S., U.K., The Netherlands, & France
Westphal et al. (2006)	Resource dependence; social capital	External (other CEOs)	Survey/ Forbes index, U.S.
<i>Context 3: Individual Characteristics and Advice Seeking</i>			
Arendt et al. (2005)	Information processing; social capital; leadership theory	Internal & external	Conceptual

Barney et al. (1996)	Organizational learning	Hybrid (VC)	Survey/ U.S. ventures
Chen et al. (2009)	Identity theory	External (corporate elites)	Conceptual
Jones and Cannella (2011)	Information processing; personality theory	Internal (TMT) & Hybrid (board)	Conceptual
Lomi et al. (2014)	Identity theory; social capital	Internal & external	Survey/ A multiunit group
Ma and Seidl (2018)	Information processing; role theory (implicit)	Internal & Hybrid (board)	Case studies/ Europe
Mooney and Amason (2011)	Similarity attraction theory; information processing	Internal (TMT)	Survey/ Chief executive leadership institute
O'Reilly et al. (2018)	Personality theory	External (legal experts)	Mix methods/ Survey: U.S. high-tech firms; experiments: Amazon's Mechanical Turk
Sapienza and Gupta (1994)	Agency theory; information processing	Hybrid (VC)	Survey/ U.S. ventures
Shen (2003)	Stewardship theory; agency theory	Hybrid (board)	Conceptual
Sundaramurthy et al. (2014)	Human capital; social capital	Hybrid (board)	Archival/ U.S. biotechnology firms
Context 4: Decision Characteristics and Advice Seeking			
Eisenhardt (1989)	Information processing theory	Internal (TMT)	Case studies/ Microcomputer industry, U.S.
Garg and Eisenhardt (2017)	Resource dependence	Hybrid (board)	Case studies/ U.S. ventures
Levin and Walter (2019)	Social capital	External (new ties)	Experiments/ Executive MBAs, U.S.
Levin et al. (2011)	Social capital	External (dormant ties)	Experiments/ Executive MBAs, U.S.
Walter et al. (2015)	Social capital; prospect theory	External (dormant ties)	Experiments/ Executive MBAs, U.S.
Context 5: CEO Characteristics and Advice Seeking			
Ashford et al. (2018)	Leadership theory	Internal (TMT)	Survey/ 18 industries, U.S. & Belgium
McDonald and Westphal (2011)	Identity theory	External (other CEOs)	Survey/ Forbes & Fortune indexes, U.S.

Appendix VI – Codebook generated by MaxQDA Software

Table 73 – Codebook

1 Decision Outcome	0
1.1 Q19 - Decision Speed	11
1.1.1 Too much advice	1
1.1.2 Very Slow	2
1.1.3 Very Fast	4
1.1.4 Fast	5
1.1.5 Slow	6
1.2 Q20 - Decision Quality	13
1.2.1 Very low	0
1.2.2 Low	7
1.2.3 High	10
1.2.4 Very high	0
1.3 Q22 - Advice Seeking Effect on Decision Speed	13
1.3.1 External decreases	1
1.3.2 External increases	9
1.3.3 Internal decreases	4
1.3.4 Internal increases	8
1.4 Q23 - Advice seeking effect on decision quality	12
1.4.1 External decreases	1
1.4.2 External increases	10
1.4.3 Internal decreases	0
1.4.4 Internal increases	5
1.5 Q25 - Advice seeking effect on financial and operational performance	12
1.5.1 Internal and external	1
1.5.2 External Advice	8
1.5.3 Internal advice	4
1.5.4 High	7
1.5.5 Very high	5
2 Advice Seeking	0

2.1 Q11 - Internal or External Advice Seeking	13
2.1.1 Internal and External Advice	6
2.1.2 External Advice	5
2.1.3 Internal Advice	4
2.2 Q12 - Reasons for external advice seeking	22
2.2.1 Legal Advice	1
2.2.2 Financial Advice	4
2.2.3 Market Assessment	10
2.2.4 Expertise	20
2.3 Q13 - Frequency of external advice	8
2.3.1 Rarely	1
2.3.2 None	6
2.3.3 Project based	3
2.3.4 Very often	3
2.4 Q14 - External Advice Focus (Current vs Future)	10
2.4.1 Current Strategies	5
2.4.2 Future strategies	2
2.5 Q15 - Frequency of Internal Advice	9
2.5.1 Rarely	1
2.5.2 None	1
2.5.3 Very often	9
2.6 Q16 - Nature of internal advice (current vs future)	5
2.6.1 Current Strategies	9
2.6.2 Future Strategies	2
2.7 Q17 - Market Research	13
2.7.1 External support	1
2.7.2 Internal Teams	16
2.8 Q18 - Competition Analysis	12
2.8.1 Slower	2
2.8.2 Somewhat competitive	3
2.8.3 Competitive	9

2.9 Q21 - Second opinion vs integrated decision making	10
2.9.1 Highly involved	13
2.9.2 Second opinion	6
3 Decision Making	0
3.1 Q5 - Leader's Strategic Decision Making	9
3.1.1 Advice seeking	7
3.1.2 Active	1
3.1.3 Accountability	2
3.1.4 Based on resources	1
3.1.5 Analytical	14
3.1.6 Determination	4
3.1.7 Follow up	2
3.1.8 Timelines	1
3.1.9 Delegating	2
3.1.10 Coordination	4
3.1.11 Team building	1
3.1.12 Planning	1
3.2 Q6 - External Factors	12
3.2.1 Regulations	1
3.2.2 Political	4
3.2.3 Market Conditions	5
3.2.4 Brand Image	3
3.2.5 Macroeconomics	5
3.2.6 High impact	11
3.3 Q7 - Employees and Stakeholders	11
3.3.1 Top to bottom	5
3.3.2 Expectation setting	3
3.3.3 Inclusive	1
3.3.4 Balancing	4
3.3.5 Democratic	4
3.3.6 Power of employees	1

3.3.7 Deep analysis	6
3.3.8 Transparent reporting	1
3.4 Q8 - Financial Factors	11
3.4.1 Somewhat important	2
3.4.2 Very important	9
3.4.3 Regulations	1
3.4.4 Opportunity Size	5
3.4.5 Not important	2
3.5 Q9 - C-Level Advice Seeking	12
3.5.1 Somewhat	2
3.5.2 Highly Involved	4
3.5.3 Opportunity Assessment	4
3.5.4 Industry Knowledge	4
3.5.5 Great extent	8
3.6 Q10 - Strategic Mindset	12
3.6.1 Short-term and long-term	6
3.6.2 Short-Term	11
3.6.3 Long-term	5
4 Demographics	0
4.1 IQ5 - Job Duration	11
4.2 IQ4 - C-Level Team Size	12
4.3 IQ3 - CEO Tenure	12
4.4 IQ2 - Firm Age	12
4.5 IQ1 - Firm Size	12
5 Leadership	0
5.1 Q4 - CEO Leadership Style	9
5.1.1 Laissez-Faire	0
5.1.2 Autocratic	2
5.1.3 Transactional	6
5.1.4 Transformational	10
5.2 Q1 - Definition of Leadership	13

5.2.1 Focus	3
5.2.2 Experience/Competency	2
5.2.3 Managing People	7
5.2.4 Guiding	3
5.2.5 Crisis Management	1
5.2.6 Motivation	7
5.2.7 Uniting people	5
5.3 Q3 - Leadership Traits	10
5.3.1 Discipline	3
5.3.2 Visionary	5
5.3.3 Experience	5
5.3.4 Empathy	4
5.3.5 Analytical	3
5.3.6 Good Observer	1
5.3.7 Good Listener	2
5.3.8 Good communicator	6
5.3.9 Decisiveness	3
5.3.10 Motivation	4
5.3.11 Building team spirit	3
5.3.12 Building trust	4
5.4 Q2 - Leadership Styles	12
5.4.1 Laissez-Faire	5
5.4.2 Transactional	6
5.4.3 Transformational	10
5.4.4 Charismatic	6
5.4.5 Autocratic	10
5.4.6 Democratic	2