# **THESIS**

# NAME

Management and Leadership, MSc

Gödöllő

2024



# Hungarian University of Agricultural and Life Sciences Szent István Campus

# **Management and Leadership Programme**

# EXPLORING THE IMPACT OF TRANSFORMATIONAL LEADERSHIP ON ORGANIZATIONAL INNOVATION: A CASE STUDY OF GHANA REVENUE AUTHORITY

Rudnak Iidiko

Dr, Supervisor

**Elvis Duah-Boateng** 

**KPOIAK** 

Management and Leadership

# **Institute/Department:**

Institute of Agriculture and Food Economics,

Department of Agricultural Management and Leadership

Sciences

Gödöllő

2024

## **ABSTRACT**

The purpose of this study is to explore the Impact of Transformational Leadership on Organizational Innovation: A Case Study of Ghana Revenue Authority. The research used a Descriptive Research Design. The study population will comprise 210 staff of the Ghana Revenue Authority. A purposive sampling technique was adopted. Both structural questionnaires and interviews were used as data collection instruments. It was discovered from findings that idealized influence, inspirational drive, intellectual stimulation, and individualised consideration significantly enhance organizational productivity. The study therefore concluded that transformational leaders have long been regarded as boosting organisational creativity by pushing their followers to meet predetermined goals and instilling confidence in them to do so. Also, to pursue greater innovation, transformational leaders inspire people to strengthen their organisational and personal abilities. It was recommended that leaders actively involve team members in the innovation process and effectively express their vision to overcome opposition to change. Effective communication is essential to this process. Also, to increase employees' dedication and job happiness, leaders and management of the Ghana Revenue Authority (GRA) must make sure that all employee needs are given the desired priority to enhance innovation. Finally, training programmes that emphasise transformational leadership components are essential for identifying and nurturing prospective leadership talent inside the organisation.

# **Table of Contents**

1.	INTRODUCTION	1
1	1.1 Background of the Study	1
	1.3 Research Objectives	
	1.4 Research Questions	3
	1.5 Research hypothesis	4
	1.6 Significance of the Study	4
	1.7 Research Scope	4
<b>2.</b> ]	LITERATURE REVIEW	5
2	2.1 Introduction	5
2	2.2 Transformational Leadership	
2	2.2.1 Dimensions of Transformational Leadership	8
	2.2.2 Organizational Innovation	11
	2.2.3 Relationship between Transformational Leadership and Organizational Innovation	14
	2.2.4 Mediating Role of Organizational Learning and Innovation Climate	15
2	2.3 Organizational Performance	15
2	2.4 Conceptual Framework	16
2	2.5 Theories and Models on Transformational Leadership	17
2	2.6 Theoretical Framework	20
2	2.7 Empirical Review	24
<b>3.</b> ]	METHODS USED (MATERIAL AND METHOD)	27
3	3.1 Research Design	27
3	3.2 Research Approaches	27
3	3.3 Population of the Study	28
3	3.4 Sample Size	28
3	3.5 Sampling Techniques	28
3	3.6 Research Survey	29
3	3.7 Data Collection	29
	3.7.1 Source of Data Collection	29
	3.7.2 Data Collection Instruments	30
3	3.8 Data Analysis	30

3.8.1 Quantitative Data Analysis	30
3.9 Model Specification	31
3.10 Methods of Qualitative Data Analysis	31
3.11 Ethical Consideration	31
4. RESULTS AND THEIR EVALUATION (DISCUSSION)	32
4.1 Survey data presentation and analysis	32
4.1.1 Respondents' demographic characteristics	32
4.1.2 Descriptive Statistics	34
4.2 Discussion and Implications	41
4.2.1 Discussion	
4.2.2 Theoretical Implications	
4.2.3 Practical Implications	
5. CONCLUSION AND PROPOSAL	44
5.1 Conclusion	44
5.2 Recommendations	44
5.3 Limitations and Suggestions for Future Work	45
6. Bibliography	46
7. Appendixes	55
LIST OF TABLES AND FIGURES	59
8 DEDICATIONS	60
9. ACKNOWLEDGEMENT	61
Annex 1	62
DECLARATION ON AUTHENTICITY AND PUBLIC ASSESS OF MAST	ΓER'S THESIS62
STATEMENT ON CONSULTATION PRACTICES	63

# 1. INTRODUCTION

# 1.1 Background of the Study

Any organisation that wants to succeed and obtain a competitive edge must prioritise innovation. It pushes all businesses to continuously increase their operational effectiveness and efficiency to raise the quality of their goods and services. This indicates that managerial perspectives that prioritise innovation have an impact on organisational innovation (Ameen, et al. 2018). However, for companies to be relevant and competitive in the face of intense commercial competition, leadership plays a growing and more crucial role in helping them become more adaptable and sensitive to change (Muhamad et al., 2023). Arif and Akram (2018) assert that although there are numerous leadership philosophies, transformational leadership is among the most well-liked and has a big influence on the development of organisations.

Effiyanti et al. (2021) define transformational leadership as a style of leadership that prioritises changing subordinates' beliefs, values, emotional needs, behaviours, and attitudes to bring about better improvements in the future. As per Ammar et al. (2018), transformational leadership is the skill of persuading and directing subordinates in the pursuit of common goals that advance the success of the organisation. High levels of morale and motivation among followers and leaders define it. The drive to inspire followers to accomplish shared objectives, the clarity of their vision, the leaders' personalities, and their capacity to alter followers' expectations are all major factors contributing to the positive effects of transformational leadership (Abou-Shouk and Khalifa, 2017; Abdelaziz, et al. 2015; Ameen et al., 2018).

Organisational innovation is essential to the long-term viability and expansion of businesses (Waite 2014). According to Jia et al. (2018), organisations are using innovation more and more to keep up with the rapid advancement of technology. According to Waite (2014), organisational innovation is characterised by new ideas, products, radical transformation, and creativity. According to Jia et al. (2018) and Alblooshi et al. (2020), it can also be described as the creation and application of novel concepts and frameworks about product, marketing, process, service, and even organisational innovation to add value for customers and staff.

Furthermore, when faced with modifications to the corporate environment, creativity and adaptability could be a part of the answer (Qoura and Khalifa, 2016). According to Jia et al.

(2018), this makes having leaders capable of assisting followers in executing creatively and achieving long-term success essential. By the same logic, once leaders impact product innovation, they may also impact an organization's performance. Workers are the lifeblood of creativity. According to studies conducted by Alblooshi et al. (2020), transformational leadership has the potential to improve the quality of organisational innovation. The public would, however, anticipate that the Ghana Revenue Authority's (GRA) integrated operations will result in lower company costs due to improved innovation. Because the leaders initiate restructuring and combine it with the organization's creativity, invention, flexibility, and responsiveness, the transformational method is therefore appropriate for Ghana Revenue Authority's reformation goals.

The leadership paradigm known as transformational leadership, which emphasises intellectual stimulation, inspiration, attention to a shared goal and individualised influence is thought to have a great deal of potential to mould Corporate cultures that foster and encourage innovation. Although the notion has garnered considerable interest, there is a dearth of study that focuses on the intricacies of transformational leadership and how it affects innovation within the field of business acumen (Amankwaa et al., 2019). Thus, to maximise organisational capacity to face the challenges of changing market dynamics, it is essential to have a deeper comprehension of the potential effects of transformational leadership on the innovation process. Leaders need to be able to support their staff members in developing their creative abilities. Through the perception of organisational support, they can foster staff innovation (Suifan, Abdallah, & Al Janini, 2018). Against this background, the study therefore exploring the Impact of Transformational Leadership on Organizational Innovation, using Ghana Revenue Authority as a case study.

# 1.2 Problem Statement

One of the elements linked to the efficiency and effectiveness of an organisation is leadership. Through intellectual stimulation, charisma, consideration and inspiration transformational leaders inspire their teams to be productive. The majority of developing nations' organisations struggle with performance issues as a result of inadequate or non-existent transformational leadership knowledge and abilities. Because of this, very few managers possess the knowledge and abilities needed to apply a transformational leadership style and reap the rewards for their organisations (Karacsony, 2021).

It is possible to view transformational leadership as "power," which, if not used morally, may frequently be exploited to forward the goals of the leader. "Profit generation, shareholder returns, and personal wealth" are among the demands that many leaders are said to have had met by using transformational leadership (Al-Obthani & Ameen, 2018; Lamm et al., 2021).

Furthermore, organisations situated in poor nations have few policies that facilitate transformational leadership, which is why more research is necessary. In some developing nations, organisations established in such specific environments are not able to successfully implement transformational leadership styles.

There is not enough information in the literature about how organisational leaders can use the transformational leadership model's benefits to boost innovation and global competitiveness. I investigate the effect of transformational leadership on organisational innovation: a case study of the Ghana Revenue Authority in order to close this gap.

# 1.3 Research objectives

The main aim is to examine the impact of Transformational Leadership on Organizational Innovation (a case study of Ghana Revenue Authority). The specific objectives are:

- i. To examine how Idealized Influence affects organizational innovation in Ghana Revenue Authority
- To establish how inspirational motivation affects organizational innovation in Ghana Revenue Authority.
- iii. To evaluate relationship between intellectual stimulation and organizational innovation in Ghana Revenue Authority
- iv. To assess how individualized consideration affects organizational innovation in GhanaRevenue Authority

# 1.4 Research questions

Taking into account the study's problem and objectives, the investigation was directed by the following research questions.

- i. To what extent does Idealized Influence affect organizational innovation in Ghana Revenue Authority?
- ii. To what extent does Inspirational Motivation affect organizational innovation in Ghana Revenue Authority?

- iii. What is the relationship between Intellectual Stimulation and organizational innovation in Ghana Revenue Authority?
- iv. To what extent Individualized Consideration affect organizational innovation in the Ghana Revenue Authority?

# 1.5 Research hypothesis

Hypothesis 1: Idealized Influence significantly affects organizational innovation in the Ghana Revenue Authority

Hypothesis 2: Inspirational motivation significantly affects organizational innovation in the Ghana Revenue Authority.

Hypothesis 2: There is a significant relationship between intellectual stimulation and organizational innovation in the Ghana Revenue Authority

Hypothesis 4: Individualized consideration significantly affects organizational innovation in the Ghana Revenue Authority.

# 1.6 Significance of the Study

The management and stakeholders of the Ghana Revenue Authority (GRA) and other public institutions would find great value in this study. As a guide for future research projects for scholars, managers, and students in relevant fields, the study's results and conclusions would first and foremost add to the corpus of knowledge already available on transformational leadership and its effects on organisational innovation.

It is also anticipated that the research will yield numerous important recommendations about the successful integration of the transformation leadership role and the development of a dynamic organisational innovation that promotes high performance. Finally, the study would help managers in the field by guiding how to enhance transformational leadership aspects that could have a bigger influence on organisational innovation.

# 1.7 Research scope

The scope of this study is limited to the Ghana Revenue Authority (GRA). Beyond this constraint, the research is restricted to the participants who were chosen from the several GRA offices and departments located in the Greater Accra area. Due to time constraints and the need to be close to the respondents, the research has also been restricted to the Greater Accra area.

# 2. LITERATURE REVIEW

#### 2.1 Introduction

The literature that is relevant to this investigation is reviewed in this chapter. The objective behind doing this was to gather pertinent data that would help refine and enhance the research. Understanding the work that has been done on this subject is crucial for assisting in the clarification of concerns. The following headings were used to arrange the literature for this investigation.

# 2.2 Transformational Leadership

The term "transformational leadership" describes a leadership approach that focuses on encouraging and inspiring subordinates to attain greater levels of productivity and creativity. It consists of elements including intellectual stimulation, motivational inspiration, idealised influence, and individual consideration (Ngo et al., 2022).

According to Avolio and Yammarino (2002), transformational leadership is characterised by a leader who inspires followers to act in the group's and the organization's best interests, regardless of their own. Transformational leaders foster a culture of trust, confidence, and job worth among their workforce, which in turn boosts intrinsic motivation to achieve optimal performance (Bernard M. Bass, 1985; Seibert, Wang, & Courtright, 2011).

Transformational leaders foster a greater sense of personal worth and a collective dedication to accomplishing organisational objectives. Transformational leaders inspire workers to be more willing to exhibit emotional, cognitive and engagement in physical labour at work by employing idealised influence and inspirational motivation to support workers' belief in accomplishing psychologically meaningful group goals (Lai et al., 2020). Transformational leadership according to Usman (2020) is a highly suitable approach for overseeing constructive change and promoting innovation inside organisations.

According to Cho, Sosik, & Chun (2016) and Lorinkova & Perry (2019), transformational leadership can balance the need for goal achievement on an individual and group level (Dong et al. 2017; Suhana et al., & Udin, 2019). It can also encourage employee performance and mutual assistance behaviour. By encouraging staff members to work together to resolve issues

among themselves, transformational leaders emphasized the personal growth of their workforce. According to X.-H. Wang and Howell (2012), transformational leaders also fairly manage their staff members' work and recognise their achievements.

Organisational learning and knowledge management are two further ways that transformational leadership becomes critical in the workplace. To facilitate a culture of continuous learning and the application of knowledge, transformational leaders establish welcoming environments. They also foster employee involvement that is consistent with their future vision (Rodrigo-Moya, & Cegarra-Navarro, 2021). Transformational leaders demonstrate a clear vision, which makes them highly effective in managing the organisation and fostering an organisational learning culture (Mayes & Gethers, 2018).

Transformational leaders encourage or modify their subordinates' strengths and take joy in the result. A proficient transformational leader acknowledges the needs of their subordinates, provides them with direction, inspires them to surpass their initial expectations, emanates confidence, and communicates inner power. Through inspiration, it pushes employees to embrace the corporate vision as their own (Cacioppe, 1997, (Prasad & Junni, 2016; Sung & Kim, 2021; Sethibe & Steyn, 2018). Abbas and Ashgar (2010) claim that a transformational leadership style also raises an employee's level of commitment and drive to work against their interests in favour of the organization's improvement. According to them, attributes of transformational leadership could include the following: the capacity to act like change agents; bravery to take risks; trustworthiness; capacity to rely on others; strong learning capacities; values-driven traits; a distinct vision and a robust mental model to function in complex situations (Abbas & Ashgar, 2010). Martin (2015) asserts that transformational leadership is about fostering relationships between individuals and bringing about meaningful change inside an organisation by highlighting principles and forging a common vision. Transformational leaders typically emerge during periods of upheaval and transition within an organisation. Their primary objective is to recognise and comprehend the needs of each individual within the organisation, magnify those needs, concentrate their demands, inspire people to reach greater heights, and generate work they never would have believed they were capable of (Martin, 2015).

Wang and Howell (2010) state that transformational leadership has the group and the person at its core. The primary objective of empowerment is to "develop their full potential, enhance their abilities and skills, and improve their self-efficacy and self-esteem." A transformative leader uses a variety of techniques with their followers, including idealised influence, inspiring

motivation, intellectual stimulation, and individualised concern (Martin, 2015). Transformational leaders, as defined by Suresh and Rajini (2013), are frequently charismatic and possess extraordinary influence over their followers, inspiring them to act beyond their designated roles and embrace the leader's vision. Transformational leaders demonstrate strong organisational skills. They have the ability to match each person's goals and motivations with the organization's vision. The transformational leadership style has been extensively studied, is highly effective, intuitive, process-focused, expansive (adding a broader perspective to other leadership models), emphasises followers (highlighting their needs, values, and morals), and is the most widely used (Suresh & Rajini 2013).

Suresh and Rajini (2013), claim that the transformational leadership style is weak because it is overly complex, prone to abuse, and conceptually unclear. Its boundaries are also unclear, as the principles of transformational leadership overlap with other leadership conceptualizations. Because the validity of transformative leadership has not been thoroughly demonstrated, its measurement is also called into doubt (Suresh & Rajini, 2013). Certain elements of transformational leader are not exclusive; they view leadership higher as a personality or disposition attribute than as an attitude that can be taught. It is antidemocratic and elitist, prone to vulnerable to misuse and heroic leadership bias (Suresh & Rajini, 2013).).

Yukl (1999) attacked transformational leadership and claimed that there was a lack of previous studies on the effect of transformational leadership on organisations, teams, or work groups as well as an unclear underlying mechanism of leader influence at the office. The impact of organisational leadership on organisational performance was investigated by Mostashari (2009). The study involved a random selection of individuals from Iran's major industrial cities, Tehra, Mashhad, and Isfahan, who work for small and private companies (SMPCs). The results obtained from the Pearson correlations, linear regression and multifactor leadership questionnaire test indicated relationship between the transformational leadership style and employee satisfaction, increased effectiveness and additional effort.

Tahir (2015) conducted a study on the association between organisational performance and leadership styles, comparing transactional and transformational leadership philosophies. The study adopted regression analysis to base the study on a sample of 800 employees. The outcome implies that an organization's performance is significantly improved by a transformational leadership style. Dele, Adegboyega, and Taiwo (2015) investigated the effect of several leadership philosophies on the productivity of bank workers in Ado Ekiti, Nigeria. Regression

analysis on 450 randomly selected employees revealed a positive correlation between workers' performance and transformational leadership style. The effect of strategic leadership style on firm performance is examined by Ozer and Tinaztepe (2014) in their research. The study employed multiple regression and correlation analyses, a multifactor leadership questionnaire, and a sample of 215 white-collar management and non-managerial employment positions. It was their conclusion that there is a strong correlation between business performance and transformative leadership styles.

# 2.2.1 Dimensions of Transformational Leadership

Several important components make up transformational leadership, and they all work together to make it effective. They are these dimensions:

# i. Idealized Influence

The capacity of a leader to set an example for others and win their respect, trust, and adoration is known as idealised influence. High moral and ethical standards are displayed by transformational leaders, who also show consistency in their words and deeds and motivate others to adopt similar behaviours.

As per Gregory et al. (2011), the notion of idealised influence simply refers to the extent to which a leader motivates their subordinates by exhibiting moral behaviour, hence resulting in a lasting dedication and allegiance to them under various conditions. Voon et al. (2011) added that this idea relates to leaders' attention to their subordinates in terms of encouragement, direction, and motivation. Furthermore, leaders who possess this dimension win the trust and respect of their followers by acting morally, emphasising their accomplishments, adopting techniques that are appreciated, and maintaining open lines of communication (Humphreys & Einstein, 2003). Additionally, according to Voon et al. (2011), leaders should relate with their subordinates in a way that upholds the principles, ethics and values.

# ii. Inspirational Motivation

A compelling future vision and well-defined expectations are hallmarks of transformational leadership, which inspires and motivates followers. They inspire followers to aim for greatness, successfully convey their vision, and infuse energy and optimism.

Judge and Piccolo (2004) claim that inspirational motivation is the capacity of a leader to convince his people to realise the vision by fostering a sense of individuality and teamwork

inside the organisation. It also describes how leaders challenge and give significance to their job to inspire and encourage their people (Humphreys & Einstein, 2003). Furthermore, Voon et al. (2011) discovered that leaders with this element typically take note of the distinctions among their followers and guide them towards accomplishing objectives. This element demonstrates how leaders can engage in challenge exchanges with their followers. It also offers a process and feedback mechanism that provides meaning by identifying targets that draw followers and internal motivational forces. According to Kuepers (2011), transformational leadership is also reliant on the creative self-motivational traits of the leader to prevent and lessen apathy while working towards a mutually beneficial outcome for both sides.

# iii. Intellectual Stimulation

Transformational leaders challenge presumptions, encourage innovation and problem-solving, and support the presentation of novel ideas to foster critical thinking and creativity in their followers. They establish a setting that encourages experimentation, learning, and intellectual curiosity. This dimension describes how leaders may help their followers become more inventive and creative by solving challenges in novel ways and offering encouragement to try new things without passing judgment on their mistakes. Additionally, it fosters employee motivation and confidence, both of which contribute to the organization's goals being achieved in an inventive manner (Birasnay et al., 2010).

Furthermore, Kuepers (2011) noted that in this element, a transformational leader and his subordinates are seen as catalysts for fresh perspectives by coming up with original concepts and novel approaches to problems. In light of this, reciprocal stimulation, nurturing, and viewing unexpected circumstances as chances for growth and innovation can all contribute to this (Judge & Piccolo, 2004). As a result, the transformational leader influences employee motivation and consistently encourages them to engage in intentional, thought-provoking, and provocative activities (Kuepers, 2011).

Additionally, intellectual stimulation demonstrates leadership behaviours connected to supplying followers with information for decision-making and motivating them to challenge organisational norms and values (Judge & Piccolo, 2004). As a result, leaders can encourage creativity in their followers by helping them to think generatively and exploratorily. Additionally, they inspire followers to experiment and create creative solutions for resolving organisational problems (Voon et al., 2011).

### iv. Individualized Consideration

More emphasis on the goals, needs and individual growth of each of their subordinate is shown by transformational leaders. They offer individualised coaching, mentoring, and support while taking into consideration the special abilities, shortcomings, and room for development of every follower.

Individualised consideration, as per Judge and Piccolo (2004), refers to the leader's concerns about the requirements of the subordinates and validates that it is prepared to offer all required support for them to grow and advance in their careers. According to Birasnav et al. (2010), it highlights significant of a leader's responsibility in guiding, nurturing, and attending to the requests of their subordinates in order to achieve success, foster growth, and increase learning opportunities. Additionally, leaders who exhibit this behaviour foster a supportive environment and view their followers as individuals rather than merely group members, which in turn will boost workers' willingness to pay closer attention and perform their jobs more effectively (Nicholasonll, 2007). In practice, this dimension calls for leader to empathise with his subordinates, actively listen to their stories, and advise them to share their emotions in order to foster frank dialogue between them all. This entails being impulsive, upholding mutual respect at all times, and celebrating each unique and varied contribution made by followers or leaders alike (Kuepers, 2011).

To accomplish the goal of transformation, all of these elements must be blended and incorporated together. Transformation, according to Kuepers (2011), is a tasteful response to the linking pattern that eventually directs these aspects towards creative involvement in redevelopment and emergency situations. As a result, when leaders and followers are seen as both reciprocally responsive and transactionally calculated, transformational practice can be realised.

Figure 1. Dimensions of Transformational Leadership

Source: (Transformational Leadership Style: How to Inspire and Motivate Simplypsychology.Org/What-Is-Transformational-Leadership.Html, n.d.)



Following a brief overview of the transformational leader and the aspects of his character that positively impact followers and the organisation, the following part addresses organisational innovation:

# 2.2.2 Organizational Innovation

By definition, innovativeness is the organizational-wide propensity to bring freshness and innovation via research and experimentation in the creation of new goods, services, and procedures (Dess and Lumpkin, 2005). According to what they said, innovation is the process of turning an old, creative concept into a brand-new good or service that can be traded for money. As stated by Gopalakrishnan and Damanpour (2000), the quantity of innovations that an organisation adopts over time is referred to as its organisational innovation. "The openness notion to new thinking as an aspect of a firm's culture" is what Hurley and Hult (2021, p. 44) defined as innovativeness.

According to Hage (2022), innovation has long been recognised as one of an organization's most significant resources. According to his argument, businesses need to be inventive in order to survive and expand in the market, given the rapid advancement of new technology, shifts in consumer preferences and expectations, and intense competition.

Research has demonstrated, according to Hage, that innovation can help businesses survive while also improving and generating profit. According to Chen and Ho (2002), innovation has been defined in a variety of ways in recent years, including that it has replaced quality as the benchmark for differentiation, that it is the only long-term source of competitive advantage, or that it is essential to organization's ability to survive over the long term. Regardless of how the idea has been articulated, the majority of modern businesspeople recognise its crucial importance to the success of any enterprise. For this reason, the idea is still essentially accepted as a crucial instrument in the erratic business climate (Subramaniam & Youndt, 2005). Furthermore, innovation has long been seen as a necessary component of an organization's ability to survive (Khan et al., 2009).

Innovation, as defined by Calantone et al. (2002), is the creation, acceptance, and application of novel concepts, procedures, goods, or services. They also pointed out that the process of innovation involves the gathering, sharing, and application of new information as well as the effective application of original concepts inside a company. "An object or an idea that is assumed as new by an agency or an individual " is how Rogers (1995, p. 35) described innovation, while Tyler (2001) pointed out that an innovation is a specific technical understanding of how something can be done more effectively than the current state of the art. According to Robertson and Yu (2001), the concept of innovation is established once an idea appears novel to the individual. They further defined innovation as the perceived novelty of the idea from an individual's point of view that impacts his or her attitude to it.

Neely et al. (2001) defines organisational innovation as the adoption of novel strategies for running or setting up a business. The introduction of any new system, procedure, or product into an organisation is another definition of organisational innovation given by Suranyi-Unger (2019). Innovation is the "creation and application of ideas that are new to the company to brink additional value, either indirectly for the customers or directly for the enterprise," according to Weerawardena and O'Cass (2004, p. 421). This definition holds in respective of whether the added value and the newness are embodied in processes, products, work management or organisation, or system of marketing.

The consensus therefore continues to be that innovation is associated with novelty, or, to put it another way, something that is thought of or perceived as newly introduced or created. All of the aforementioned definitions support the claim that organisational innovation, regardless of has been constantly referred to as the application of a behaviour or an idea that is new to the

company. However, innovation can also refer to new technologies, services, goods, or administrative procedures (Wineman et al., 2009).

The notion of innovation is examined from an organisational perspective, considering its technological and administrative aspects. To this purpose, the definition proposed by Gopalakrishnan and Damanpour (2000) is used. Although the definition of innovation has not changed significantly over time, the characteristics that have been studied have, including the types of issues surrounding the concept that have piqued people's interest.

Indeed, as noted by Damanpour and Gopalakrishnan (2018), there are several classifications for innovation, depending on the viewpoint used to study it. They pointed out that a number of these categories emphasise the importance of technological innovation. Because of this, many researches on innovation have emphasized mostly on technological innovation, despite the fact that research has shown that innovation is not always exclusively reliant on technology. For these reasons, administrative innovation in relation to an organization's core business operations has been the subject of recent research (Jaskyte, 2004). It is basically recommended that equal weight has been given to the technological and administrative components of innovation.

Moreover, Damanpour (2018) used the dual-core approach to differentiate between administrative and technical innovation. However, Tushman and Nadler (2017) contended that conceptual accumulation and technological advancement were the primary sources of most breakthroughs. Jaskyte (2004) also pointed out that administrative innovation encompasses new procedures, regulations, and organisational challenges, while technological innovation includes new products, services, and technology. In an attempt to provide an explanation for why companies want to innovate, Duygulu and Ozeren (2009) point out that companies may innovate in their business products, models, channels, processes and services in order to sustain or expand their market share, outperform rivals, or ensure their long-term survival and growth—specifically in extremely complex and volatile business surroundings. All of these justifications for innovation are thought to be essential to organisational overall strategy insofar as they have the potential to raise the organization's strategic worth.

Organisational innovation is the application of novel approaches to hiring staff, allocating funds, and organising responsibilities, authority, and rewards. It includes adjustments to organisational structure and personnel management (Damanpour, 2018, p. 677). The ultimate goal of any organisation is to improve performance continuously, yet the term "continuous" means nothing if there isn't any creative effort. Performance inside an organisation can be

enhanced with the aid of organisational innovation. According to empirical research, organisational innovation has a considerable impact on organisational performance. Huang, Wu, Lu, and Lin (2016) looked at the impact of innovation on organisational results.

# 2.2.3 Relationship between Transformational Leadership and Organizational Innovation

Organisational innovation has a close relationship with transformational leadership. Transformational leaders demonstrate traits and behaviours that are consistent with what is needed to cultivate an innovative culture in organisations. Transformational leadership inspires and motivates staff members to question the status quo, exercise creativity, and seek out novel solutions. An environment that is favourable for the generation and application of creative ideas is created by the emphasis on individual consideration and intellectual stimulation.

Furthermore, risk-taking, experimenting, and learning—all essential components of organisational innovation—are encouraged by the idealised influence and role-modelling of transformative leaders. Studies like this one, which looked at many sectors and organisational settings, have consistently shown how transformational leadership fosters innovation implementation, idea generation, knowledge sharing, and employee creativity. Transformational leadership and organisational innovation are positively correlated, according to a number of research findings. Transformational leadership has a good impact on organisational innovation, according to research done in 2009 by Gumusluoglu & Ilsev in Turkish software development organisations that are considered entrepreneurial.

In a similar vein, Prasad & Junni (2016) discovered that transformational leadership in the CEO had a favourable impact on organisational innovation, especially in dynamic contexts. Jia et al. (2018) emphasised the mediating function of openness in this relationship and further bolstered the beneficial impacts of transformational leadership on company innovation. The connection between organisational innovation and transformative leadership According to several studies, transformational leaders foster innovation in their followers' environments and empower them (Jung et al. 2003 and Jung and Sosik 2002). Organisational innovation was found to be boosted by transformational leaders, according to Gumusluoglu and Ilsev (2009).

Organisational innovation and transformational leadership have a beneficial association, according to research done in 2003 by Jung et al. on 32 Taiwanese enterprises. For organisational innovation, leaders should make use of intellectual stimulation and inspiring motivation (Elkins and Keller 2003). Innovation's commercial performance may benefit from

transformational leadership as well (Gumusluoglu and Ilsev 2008). According to Jung et al. (2003), leaders that possess a powerful and self-assured vision for innovation would actively work to secure the market success of their ideas and inspire their followers to do the same.

It may take more than just typical leadership abilities to manage professional staff, particularly in R&D environments where quality rather than quantity is the main performance standard (Keller 1992). In addition, the transformational leader may be successful in external responsibilities like championing and boundary-spanning in addition to their internal functions (Howell and Higgins, 1990). These roles may be crucial for both successfully promoting the innovation and comprehending the demands of the market. Consequently, this research suggests that transformational leadership and organisational innovation—which is defined in this work as encompassing both an organization's propensity for innovation and its track record of success—have a positive association.

# 2.2.4 Mediating Role of Organizational Learning and Innovation Climate

The connection between organisational innovation and transformational leadership is significantly mediated by innovation climate and organisational learning. CEO transformational leadership was determined by Zuraik & Kelly (2019) to have a direct positive effect on company innovation as well as an indirect influence through the innovation atmosphere. Similar findings were made by Hsiao & Chang (2011), who discovered that organisational learning mediated the connection between organisational innovation and transformative leadership (Hsiao & Chang, 2011).

# 2.3 Organizational Performance

Organisational performance is impacted by transformational leadership in addition to innovation. Arif and Akram (2018) discovered that the noteworthy influence of transformational leadership on organisational performance was mitigated by organisational innovation (Arif & Akram, 2018). This implies that inventive activity within the company is encouraged by transformational leadership, which also helps inventions succeed on the market.

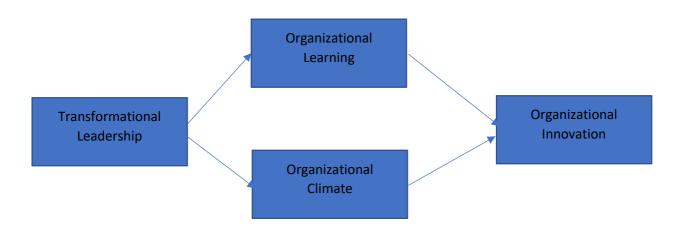
Performance, in the words of Abu-Mahfouz (2019), begins with comparing an output to an input in light of predetermined standards. When an organization's results are measured effectively, it guarantees that it has accurate metrics to show if it is making progress towards achieving its wide stakeholder goals. Manoharan and Singal (2019) observed that financial, visitor,

employee, and societal results were taken into account while evaluating organisational success in the hospitality industry. For example, cost effectiveness, budget performance, profitability, and occupancy rate would all indicate financial outcomes. Service ratings, feedback from guests, and room ratings would all indicate guest outcomes, and staff turnover, employee engagement surveys, staff feedback, staff trainings and staff promotions would all indicate guest outcomes.

# 2.4 Conceptual Framework

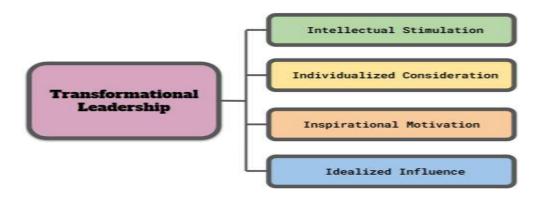
The conceptual framework demonstrates how these factors relate to one another, with transformational leadership serving as organisational innovation's primary catalyst. The ways in which transformational leadership impacts innovation are encapsulated in the mediating factors of organisational learning and innovation climate. The contextual factors that might help or impede the effect of transformational leadership on organisational innovation are highlighted by the moderating variables of internal and external support for innovation. All things considered, this conceptual framework offers a thorough grasp of the variables and connections involved in examining how transformational leadership affects organisational innovation.

**Figure 2**Source: *Navarro, J. G. (2021)*.



Source: Model of Transformational Leadership (Bass, 1985).

Figure 3.



The literature study concludes by emphasising the beneficial effects of transformative leadership on organisational innovation. Contextual factors like external and internal innovative support have an effect on the association between organisational innovation and transformational leadership. This relationship is further strengthened by mediating elements like innovation climate and organisational learning. Additionally, the outcome implies that organisational innovation acts as a moderator in the relationship between transformational leadership and organisational success. These observations offer insightful information to companies looking to promote creativity and boost output through capable leadership.

## 2.5 Theories and Models on Transformational Leadership.

Theoretical underpinnings of transformative leadership are derived from multiple viewpoints, such as organisational behaviour, leadership theory, and social psychology. Bass' full range leadership model and Burns' transformational leadership theory are two well-known theoretical frameworks that have had a big impact on how transformational leadership is understood.

# 1. Burns' Transformational Leadership Theory

According to this theory, transformational leaders participate in social interactions that transcend beyond business-to-business dealings. By appealing to their higher-order wants, like as self-actualization and personal development, they motivate their followers. This theory puts a huge focus on the transformational leader's ability to motivate and uplift their followers' motivation, principles, and goals.

# 2. Bass' Full Range Leadership Model

This Model adds to our understanding of leadership behaviours. Three leadership philosophies are distinguished by the model: transactional, laissez-faire, and transformative. With its idealised impact, inspiring motivation, intellectual stimulation, and personalised concern, transformational leadership is thought to be the most efficient approach.

The theory of contingencies Fred Edward Fiedler is credited with developing the contingency leadership theory. It says that there isn't just one ideal technique for managers to guide. diverse circumstances will call for diverse leadership philosophies from managers (Bolden et al., Goslings, Marturano & Dennison, 2003). Employee performance is impacted by leadership styles. According to the theory, leaders should think about three situational or contextual factors: positional power, task structure, and leader-member connections. In other words, a manager's ability to lead effectively is dependent on these crucial factors (Bolden et al., 2003; Fiedler, 1967; Killian, 2007). The association between a leader and employees, including the degree of trust these employees have and the leader's capacity to draw in new subordinates, is called the relationship of leader-member (Fiedler, 1996). The degree of fidelity, dependability, and support a leader receives from their staff is known as the leader-member relationship. It is an indicator of the manager's opinion of how well a team of workers gets along. In this relationship between leader and member, the manager possesses huge task structure and may conveniently discipline or reward staff members. Bolden et al. (2003); Killian (2007); Boachie-Mensah (2006); Fiedler, 1967).

The leader has minimal authority and the task is typically unstructured in a positive relationship. This is impacted by the clear and favourable specification of followers' responsibilities. When increased customer satisfaction and a positive business image are achieved, relationship-oriented executives perform best (Bolden, Gosling, Marturano & Dennison, 2003; Boachie-Mensah, 2006; Killian, 2007; Fiedler, 1967). Task structures explain how a leader wants their workforce to follow prescribed and systematised actions. This component discusses the nature of employees' employment, including those that are routine and those that are not (Fiedler, 1996).

Task structure leaders take pride and joy in completing tasks for the company, whereas relationship-motivated leaders aim to foster interpersonal associations and provide more support for team advancement within the organisation. A leadership style cannot be deemed good or terrible. Every individual has different tastes when it comes to leadership. According

to Bolden et al., 2003), Killian (2007), Boachie-Mensah (2006) and Fiedler (1967), task-motivated leaders work best when their group achieves achievement, such as setting a new sales record or surpassing a large competitor.

The amount of positional effect a supervisor has over their followers or subordinates is known as leader-positional power. According to Fiedler (1996), a person's position power is their leadership authority inside the organisation. Positioning power quantifies the degree of authority or influence a manager believes the company has granted him or her to guide, encourage, and discipline subordinates. The degree to which managers can reduce (positive) or increase (negative) an employee's ability to make decisions determines how powerful they are (Bolden et al., 2003; Fiedler, 1967; Killian, 2007).

According to Fiedler (1967), managing the situational elements that affect a leader's style is just as important as managing the leader's style if we want to boost staff performance. According to Fiedler, while choosing leaders, one should take into account their prevailing fixed style and the particular circumstances present in a given organisational unit. Either the situation fits the leader better, or the leader fits the situation better, can strengthen the organisation. Additionally, Fiedler (1961) stressed that any elements of leadership would be lye to a variety of external effects. Thus, he believes that a multitude of factors, some of which have nothing to do with personality traits and include leadership style heredity, may compel a man to assume a leadership role. As a result, he says, they are hard to pinpoint. Due to the possibility that one or more personality traits may influence one's capacity to influence or motivate others, Fiedler contends that evaluating the effectiveness of a leadership style would be very advantageous and sensible. This is consistent with the assertion of Peter Drucker that it is much simpler to elevate an ordinary worker to a star performance by utilising their inherent strengths in roles rather than attempting to strengthen their areas of weakness (Killian, 2007).

The rate in which a leader makes his or her group productive determines how efficient the leader is (Fiedler, 1961). The theory is pertinent to this study because it offers three dimensions: task structure, leader positioning power, and situational or contextual aspects that affect managers, leaders, and supervisors' ability to function. This idea is applicable since managers, supervisors, and leaders are accountable for supervising the organization's work process and choosing the right leadership style to achieve targets and effective employee performance. As per the theory, supervisors, leaders and managers are the ones who give employees direct control and impart knowledge about the highest standards.

The present study suggests that good leaders can adopt diverse leadership styles depending on the circumstances, and that this can impact the work output of their staff. Due to the exceptional core of every organisation, dealing with employees presents a variety of challenges for leaders, managers, and supervisors. Because of this, they must take into account a wide range of leadership philosophies in order to effectively manage various scenarios. According to Butler and Reese (1991), the idea acknowledges that leadership styles impact various outcomes, including job performance, goals, and the conduct of subordinates.

#### 2.6 Theoretical Framework

I will discuss leadership theories that are relevant to transformational leadership in this section of the literature review. Because of their connection to a leader's efficacy, I will focus on theories that are associated with transformational leadership, such as goal-setting theories and emotional intelligence theories. Most transformational leaders are successful ones.

A scientific or empirical approach to understanding leadership is called leadership theory. It includes ideas that may be tested and broadens our understanding of leadership. Theories of leadership provide "a reasonable coherent conceptual structure of the interactions between critical variables" (Hughes et al., 2008). Theoretically, academics can forecast for the general public how particular traits or actions of a leader will affect that leader's effectiveness.

# 1. Emotional Intelligence Theory

It is relatively recent to emphasise the importance of emotions in leadership. The term emotional intelligence was first used widely in 1995 by Daniel Goleman. There is a connection between a leader's feelings and how they affect teams and results, claims Goleman. The fundamental ideas of the theory date back to Salovey and Mayer (1990), two psychologists who investigated why certain intelligent individuals are not effective leaders. They discovered that it was mostly because they weren't sensitive to others around them. A set of mental skills that enable people to identify both their own and other people's emotions is what they referred to as emotional intelligence.

Bar-On (1996) further on this concept by claiming that emotional intelligence serves as a gauge for human efficacy and that there are fifteen skills required to function in daily life and in society. Aberman (2000) added that emotional intelligence is the degree of alignment between thoughts, feelings, and behaviours, which supports the criteria given above. He went on to say

that when a leader's emotions, ideas, and behaviour are all exactly in sync, they are more effective. According to Goleman (1995), an individual's potential to progress in life depends less on analytical intelligence (IQ) and more on their capacity for self-motivation, perseverance in the face of adversity, mood regulation, flexibility, and interpersonal empathy.

The theory of emotional intelligence aims to raise consciousness regarding the significant impact that emotions have on the efficacy and prosperity of leadership. Therefore, a successful and effective leader's life and work must be characterised by a strong sense of self-awareness, self-control, reliability, and empathy. The mixed model and the ability model are the two primary models identified by proponents of emotional intelligence theory.

"Ability model" refers to how leaders prepare, make decisions, act, and think (Goleman, 1995, p. 190). It encompasses the following skills: (a) accurately perceiving one's own emotions as well as those of others; (b) creating emotions to help with action and thought; (c) accurately understanding the origins of emotions and the meaning they convey; and (d) accurately controlling one's own emotions. The second model, the mixed model, was popularised by Goleman (1995) and Bar-On (1996). They contend that the ability model and other characteristics are components of emotional intelligence. The remaining qualities are communication skills, teamwork abilities, diversity, trustworthiness, flexibility, inventiveness, dedication, initiative, optimism, and conflict resolution.

This idea makes it easier to see how the situation, the followers, and the leader interact to form a leadership role. Emotions are always present in human connection, particularly when "situation" is also a key component of the leadership process. I hypothesise that many people would rather collaborate with emotionally intelligent (EQ) individuals than with highly intelligent (IQ) but emotionally unstable individuals.

Emotional intelligence has been linked to certain personality traits like empathy and other criteria traits like life pleasure, according to research on the subject conducted by Ciarrochi et al. (2000). Furthermore, they discovered a connection between emotional intelligence and mood regulation skills. However, Goleman (1995) and Bar-On (1996) are credited with popularising the notion that non-cognitive skills are significant predictors of leadership success, Hughes et al. (2008) contend that Bar-On (1996) and Goleman (1995) should also acknowledge the contributions of individuals who have conducted personality research and developed many of the traits they have employed in the mixed method.

Like other ideas, emotional intelligence theory is incomplete on its own. The premise of emotional intelligence is not a reliable tool for achieving leadership success. It can't address every issue or difficulty related to leadership. One of the weaknesses of the emotional intelligence theory, according to Goleman (1995), is that it does not recognise personality; in other words, personality traits are not included in the theory. However, emotional intelligence may be another model of personality traits, according to Hughes et al. (2008). Goleman (1995) suggested that if emotional intelligence traits constitute personality traits, they will be exceedingly hard to modify.

The theories of creative and practical intelligence, which focus on the creation of novel and beneficial goods (creative) and pertinent job knowledge (practical), can be used in addition to theories of emotional intelligence. Hughes et al. (2008) claim that cognitive skills, synthesis talents, analytic intelligence, and practical intelligence are all components of creative intelligence. Additionally, collaborative theory—which emphasises leaders with a variety of intelligences and strengths—can support emotional intellect. As leaders unite and share leadership of an institution or organisation, a pool of leadership skills may result.

A leader's efficacy is influenced by a number of characteristics, including their emotional intelligence. Leaders with emotional intelligence exhibit strong self-control, self-assurance, initiative, optimism, empathy, and teamwork. High emotional intelligence is a prerequisite for transformational leaders who inspire and motivate their team members and are prepared to help them become effective leaders.

# 1. Goal-Setting Theory

Ryan's (1970) theory of goal-setting was developed based on his claim that intentional goals influence behaviour. A goal is defined as "the object or aim of an action, such as to achieve a particular standard of proficiency, usually within a specified time limit (Locke and Latham, 2002). 35 years of empirical research on goal-setting theory were conducted by Locke and Latham. The main conclusions of the theory are covered, along with how objectives function as mediators of incentives and how they operate in the relationships between goals and fulfilment. They discuss the connection between goal-setting and other theories as well as recent developments in the field of goal-setting theory study.

According to Ryan (1970), "It seems a basic fact that plans, conscious purposes, tasks, intentions and the like affect human behaviour." The effects of various goal kinds on job performance were initially studied by British researcher Mace (1935) (quoted in Locke &

Latham, 2002), although his work was mainly disregarded. Based on this nearly 40-year span of research, goalsetting theory was developed. The association between conscious performance goals and task performance level was the main focus of the study. Predicting, explaining, and influencing performance on activities relating to organisations or the workplace was their main focus.

The association between performance and goal difficulty was the main finding of Locke and Latham's (2002) study. When a task is either very easy or very hard, the effort level is lowest, and when the work is somewhat tough, the effort level is highest. As a result, performance and goals have a favourable relationship. The hardest objectives yield the highest calibre of work and output. Higher expectations result in higher performance levels, and difficult goals are more difficult to achieve than easy ones.

The researchers discovered that setting precise, Providing demanding objectives often led to better performance than simply encouraging people to give it their utmost. People typically comply when asked to give it their all because these objectives lack an outside reference. The significance of self-efficacy in goal-setting theory was also discovered by the researchers. Individuals with higher levels of self-efficacy also tend to set higher goals. Compared to those with low self-efficacy, those with high self-efficacy are more likely to be dedicated to their goals, come up with and employ better task strategies to achieve their goals and react favourably to criticism (Locke & Latham, 2002).

Four mechanisms explain how goals influence performance. Objectives are first used as a guide. Focusing attention and energy on goal-relevant tasks while avoiding goal-irrelevant ones is made easier for the leader by the directive function. According to Locke and Latham (2002), in other words, there is no feeling of direction absent goals. According to the second mechanism, high objectives tend to elicit greater energy and enthusiasm than low goals since goals have an energising effect. Allowing participants to manage the amount of time they spend on an activity has an impact on persistence, according to the third mechanism. Setting and achieving goals is a sign of leadership, as team members strive diligently to achieve even the most difficult targets. It is possible to work more slowly and less intensely for a short while, or to work quicker and more intensely for a longer amount of time, depending on the goals specified. The final mechanism by which performance is influenced is that goals indirectly influence action by promoting the arousal, discovery, and/or application of strategy and information pertinent to

the job at hand. Goal-oriented persons instinctively apply their prior knowledge and abilities that are pertinent to achieving their objectives when faced with a task (Locke & Lathan, 2002).

Goal-performance relationships are strongest when individuals are dedicated to achieving their objectives, claim Locke and Latham (2002). Especially when aiming for challenging goals, commitment is crucial. If someone believes that they can, they can achieve their objectives. A leader's communication, an inspiring vision, public commitment to the objective, and support are just a few of the many strategies available to persuade individuals of the significance of achieving the goal. People must receive concise feedback that shows their progress towards the goals in order for them to be effective. A person feels satisfied when they accomplish their goals. The traits of transformational leadership include goal-setting, a shared vision, and inspirational motivation (specific to this study), which enable followers to dedicate themselves to working towards these goals. The success of the leader and transformational leadership are thus somewhat correlated with goal setting theory.

# 2.7 Empirical review

The relevant studies that have examined transformational leadership's impact in encouraging innovation inside government agencies are reviewed in this subsection.

Okoli et al., (2021) studied the effect of transformational leadership characteristics on organisational effectiveness in Southeast Nigeria's Anambra State's tertiary institutions. The results showed a substantial and positive association between organisational success and transformational leadership characteristics in the chosen postsecondary institutions. The study concluded that effective leadership has a relevant impact on success and has the power to transform both universities and their workforce. To maintain employees' optimism and enthusiasm, the study suggested that university administration at all levels create appropriate plans for self-development and foster teamwork.

Effiyanti et al., (2021) investigated the mediating impacts of openness and empowerment to change on the association between transformational leadership and organisational success. The study emphasized on understanding the differences in worker character, and the findings demonstrated the necessity for transformative leaders. This is necessary to promote improved performance through the empowerment of effective channels for the diffusion of high-quality knowledge and ongoing internal training initiatives.

Chau et al. (2021) investigated how results-oriented culture functions as a mediator in the association between results-oriented culture performance and transformational leadership in Vietnamese public service organisations. Their research showed that result-oriented culture and transformational leadership are positively correlated with organisational performance, and that result-oriented culture functions as a mediating factor to explain the relationship between transformational leadership and improved performance in public service organisations. The study offered proof that a results-oriented culture fostered by transformational leadership affects organisational performance both directly and indirectly.

Adnan et al. (2020) investigated the relationship that exists between organisational performance and quality innovation as a mediator between the effects of transformative leadership. The study found a strong relationship between transformative leadership and both innovation and organisational effectiveness. Additionally, innovation has a good effect on an organization's performance. Thus, the results showed that innovation is a key mediating factor in the relationship between organisational success and transformative leadership.

Arif and Akram (2018) examined the effect of transformative leadership on Pakistani organisations' performance. The mediating aspect was organisational innovation. The study found a substantial correlation between organisational performance and transformative leadership. It has also been observed that transformational leadership fosters a stronger emotional bond or sense of identity between the leader and the follower, giving the latter greater confidence to go above and beyond what is expected of them. As a result, leaders improve the performance of their followers.

Moreover, a leader's traits and style of leadership are important factors that influence creative behaviour in companies. Moreover, transformational leadership boosts intrinsic motivation, self-efficacy, and psychological empowerment in workers. Using exploratory leadership, the transformational leadership style in manufacturing businesses helps employees develop new products, increase profitability, and perform better.

Ammar et al., (2018) studied the impact of organisational innovation and transformational leadership in Yemeni higher education. According to the research, organisational innovation benefits from transformative leadership.

Aketch et al. (2017) examined the impact of transformational leadership style on Ugandan SMEs' performance. Specifically, the study aimed to determine the impact of every facet of the transformational leadership style, such as charisma, intellectual stimulation, and customised

consideration, on the success of small and medium-sized enterprises. According to the research, the performance of SMEs in Uganda was not considerably impacted by a transformative leadership style. The findings suggest that to increase performance, organisations should put more effort into developing charismatic leadership styles.

Abasilim (2014) examined the connection between organisational success and a transformative leadership style in the context of Nigerian work. According to the study's findings, organisational performance in the Nigerian work environment significantly benefits from a transformational leadership style. According to the study, companies that wish to guarantee or enhance optimal performance inside their organisation should choose a leadership style that is appropriate for the context in which their followers and leaders interact. Furthermore, it would be beneficial to promote training aimed at improving transformational leadership style in the Nigerian workplace.

# 3. METHODS USED (MATERIAL AND METHOD)

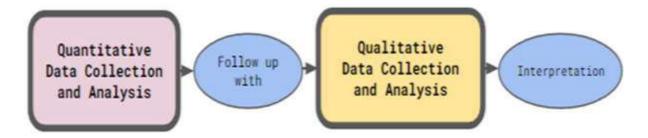
The different research techniques used for this study are summarised and discussed in this chapter. The objectives of the study, the methodology or design of the research, the categories or types of data to be collected, the planned sample plans, the data collection tools, and a synopsis of the methods or procedures utilised in the data analysis are all included here.

# 3.1 Research design

The methodical approach a researcher takes to produce reliable results is known as research design. The plan or approach for data collecting, analysis and measurement is known as the research design (Cooper & Schinder, 1999). Because the research questions were qualitative, the researcher used a qualitative research strategy to accomplish the goals of the study. The investigation questions need unnecessary narrative writing and an interview because of this. This is why a qualitative research design was chosen. The process of gathering, looking into, and deriving meaning from narrative data by closely examining what people say and do is known as qualitative research design. The primary methods of gathering data for a qualitative research design include focus groups, observation and individual interviews.

A structured questionnaire was also created to gather data. The Ghana Revenue Authority (GRA) personnel get the questionnaire. The Ghana Revenue Authority's publications and data were consulted by the study to expand and enhance the data.

Figure 4. Explanatory Sequential Design.



# 3.2 Research Approaches

Mixed research methods have been applied in this study. The procedures of gathering, evaluating, interpreting, and summarising study data are all part of mixed research approach

methodologies (Creswell, 2009). Both quantitative and qualitative data techniques were applied in this investigation. When two research methodologies are combined, information that one may have overlooked may be discovered by the other, leading to a more comprehensive and improved analysis.

# 3.3 Population of the Study

The target population for this study is all Ghana Revenue Authority officials in the Greater Accra Region because the survey's target population is the entire collection of units from which conclusions are to be drawn (Creswell, 2007).

# 3.4 Sample Size

According to Creswell (2007), a sample is a portion of a whole. However, when it comes to research, Sampling is not "just a portion of a whole"; rather, it is a large portion whose characteristics and opinions may be considered typical of the total, allowing generalizable inferences to be made about the population as a whole. Therefore, whenever sampling is discussed, the topic of how representative sample size is raised.

Two hundred and ten (210) Ghana Revenue Authority officials from the Greater Accra area made up the study's sample. Although the sample size was not established by any scientific approach, it was based on the researcher's ability (best effort) to administer the questionnaire in light of time and other resource constraints. The interviewees were chosen based on their level of knowledge regarding the commission's operations.

# 3.5 Sampling Techniques

The process of choosing the appropriate person, item, or event to represent the total population is known as sampling (Sekaran & Bougie, 2010). The researcher makes conclusions about the entire population based on a selection of certain population elements. Malhotra and Peterson (2006) assert that more accurate results are produced with larger sample sizes. A sample size of at least 50% of the population is sufficient for concluding relatively small populations, while 5% of the population is sufficient for very large populations (Nueman, 2007).

Thirty (30) key senior staff members and fourth (40) junior staff members each were chosen by the researcher using a purposive sample technique from the three departments of the commission: the Support Service division (SSD), the Customs Excise and Preventive Service Division (CEPSD), and the Domestic Tax Revenue division (DTRD). Babbie (1997) defined purposeful sampling as the act of selecting a sample primarily "based on your own knowledge of the population, its elements, and the nature of your research aims."

# 3.6 Research Survey

The survey data for this thesis was gathered from Ghana Revenue Authority in order to test the theoretical models under methodology. This is the structure of the data collection process. Firstly, a thorough summary of pertinent literature, fieldwork, in-depth interviews, and debate among the project team members formed the basis of the first survey.

Next, the preliminary survey was changed and eventually became the final version based on the findings of the pilot test (e.g., validity test, reliability test) and the expert opinions in the pertinent studies fields. The Ghana Revenue Authority employees were then given surveys. top, middle, and bottom managers as well as ordinary staff were all included in the study.

This thesis uses the Likert 5 scale to make broad selections and utilises mature scales that have been backed by prior research to assure validity and reliability. On the scale, 1 denotes "strongly disagree," and 5 denotes "strongly agree." Before the official inquiry, a structured questionnaire, respondent interviews, and scale modifications were carried out. Next, in conjunction with the size project analysis, through a pilot survey.

#### 3.7 Data collection

# 3.7.1 Source of Data Collection

**A. Primary data source:** was the first time the researcher had provided first-hand information. Thus, in order to gather exact data about the influence of transformational leadership on organisational innovation, the researcher used questionnaires and interviews: Ghana Revenue Authority Case Study.

**B. Secondary data source:** This study used a variety of secondary data sources, including government publications, books, journal articles, and document reviews from the Ghana Revenue Authority, to ensure that the findings were clearly expressed.

### 3.7.2 Data Collection Instruments

**A. Questionnaires:** is a set of written questions, to which responders record their responses (Kumar, 1999). In a similar vein, the author pointed out that open-ended questions are great for getting ideas, attitudes, and perceptions whereas closed questions are great for getting factual facts. A few of the quizzes are based on literature, particularly on organisational innovation and transformational leadership. The impact of transformational leadership on organisational innovation was examined in this study using both open-ended and closed-ended questionnaires: a case study of the Ghana Revenue Authority.

**B. Semi-Structured Interview:** Interviewing was a suitable method for gathering first-hand qualitative information. "Interviews provide in-depth details regarding participants' viewpoints and experiences regarding a particular subject." (Turner, 2010). This technique gives the interviewer more freedom to restructure questions as needed and aids in the collection of more detailed information (Kothari, 2004). In order to promote alternative approaches and gain insight into respondents' emotions, interviews were conducted with top specialists, team leaders, advisors, and directors.

# 3.8 Data Analysis

# 3.8.1 Quantitative Data Analysis

Quantitative techniques of data analysis were used to examine the unprocessed information obtained from the surveys. To find the questions that weren't correctly answered, the raw data that had been gathered was sorted and verified.

The gathered data were totalled, categorised, and the raw data were presented via tabulation. The data were presented using inferential statistical tools in order to do the quantitative analysis. Pearson correlation values, percentile, and Inferential were appropriate presentation methods for the explanatory type.

The quantitative data was gathered by questionnaires that were coded, tabulated, organised, and statistically processed for analysis and deduction. The primary focus was on addressing the core question and achieving the study's objectives.

#### 3.9 Model Specification

To display the cause-and-effect relationship between the independent and dependent variables, multiple linear regressions were used. Generally speaking, the data analysis technique model will be shown as follows.

$$Y_1 = \beta_0 + \beta_1 \times X_1 + \beta_2 \times X_2 + \beta_3 \times X_3 + \beta_4 \times X_4 + \beta_n \times X_n + E$$

Where Y is the dependent variable of Organization innovation

X1, X2, X3 and X4 are the independent) variables such as Idealized Influence, Inspirational Motivation, Intellectual Stimulation and Individualized Consideration.

The intercept term, denoted as  $\beta 0$ , represents the mean value of Y when the designated independent variables are set to zero. This not only gives the equation's mechanical meaning, but it also gives the mean or average effect on Y of all the variables that are removed.

The values of  $\beta$ 1,  $\beta$ 2, and  $\beta$ 3 indicate the coefficient of their respective independent variables, which quantifies the variations in the average value of Y for each unit change in those independent variables. E stands for error.

#### 3.10 Methods of Qualitative Data Analysis

According to the following protocol, open-ended questionnaires and interviews were used to gather the qualitative data. First, textual data was created from the captured data. For ethical and manageable concerns, the data was coded. Every piece of data was examined and verified against the numerical results. The data was then subjected to a thematic analysis.

#### 3.11 Ethical Consideration

Before the interview and questionnaire were finished for this study, the respondents' agreement was sought. The freedom to participate in the study project in any way they choose was explained to the respondents. Also, in order for them to provide an unbiased contribution, the participants were informed about the significance of the research and its value to the industry.

## 4. RESULTS AND THEIR EVALUATION (DISCUSSION)

This chapter presents the quantitative and qualitative data analysis and interpretation of the responses. Frequency distributions, tables, percentages, averages, and standard deviations were utilised in the analysis, presentation, and interpretation of the data obtained from the questionnaire and interview.

#### 4.1 Survey data presentation and analysis

84.8% of the 210 surveys that were sent out to different departments were returned. Just 178 (84.8%) of them, though, were truly suitable for this analysis. The thirty-two other questionnaires, nevertheless, were not returned. Likewise, all three of the top management candidates were used for interviews.

### 4.1.1 Respondents' demographic characteristics

The study participants' age, gender, educational level, and length of employment with the company are among their demographic details. The following is a brief discussion of each demographic variable.

**Table I. Distribution of Respondents Sex** 

Source: Field Survey, 2024

Sex	Frequency	Percentage (%)
Male	99	55.6%
Female	79	44.4%
Total	178	100(%)

Table 1 shows that 44.4% of respondents were women and 55.6% of respondents were men. For the objectives of the research, the responses from both sexes will be taken equally into account, as there is no discernible relationship between gender and how the study's subject is perceived. The nature of Ghana's conventional working environment, which promotes more men than women to pursue professional jobs, may account for the incidence of more men than women.

Table II. Age of the respondents in years

Source: Field Survey, 2024

Age	Frequency	Percentage (%)
18-25 years	21	11.8
26-35 years	76	42.7
36-45 years	51	28.6
46-55 years	19	10.7
56 years and above	11	6.2
Total	178	100%

The age distribution of respondents working for the Ghana Revenue Authority is displayed in Table 2. In response to this, 21 respondents, or 11.8%, stated that their ages span from 18 to 25. In the same way, 76 (42.7%), 51 (28.6%), 19 (10.1%), and 11 (6.2%) of the participants discovered that the age ranges were, respectively, 26–35 years, 36–55 years, 46–55 years, and 56 and above years. The bulk of respondents found that the age varies between 26 and 35 years old, as table 7.2 illustrates. This suggests that the organisation can deliver the promised services in a responsible manner when the respondents' ages rise.

**Table III. Educational backgrounds of the respondents** 

Source: Field Survey, 2024

Academic qualification	Frequency	Percentage (%)
Diploma	22	12.4
Degree	96	53.9
Masters	56	31.5
Other	4	2.2
Total	178	100%

The respondents' educational background is shown in Table 3. In light of this, 12.4 percent of the respondents indicated that their educational background was a diploma. Similarly, 53.9% of respondents indicated that they had a degree, 31.5% that they had a master's degree, and 2.2% that they had some other type of education. The accompanying statistic illustrates that the majority of respondents had an educational background that includes a degree. This

demonstrates how individuals with higher educational backgrounds are better able to understand organisational innovation and transformational leadership in general.

Table IV. Experience of the respondents in the Organization.

Source: Field Survey, 2024

<b>Working Experience</b>	Frequency	Percentage (%)
0-5 years	27	15.2
6-10 years	72	40.4
11-15 years	41	23.0
16-20 years	35	19.7
21 years and above	3	1.7
Total	178	100%

Table 4 presents the experience of the respondents during their tenure at the organisation. According to the respondents' responses, 15.2% of them indicated they had no experience, 40.4% that they had experience between six and ten years, and 23.0% that they had experience between eleven and fifteen years, while 19.7% and 1.7%, respectively, reported having work experience of sixteen to twenty years and twenty-one years or more at the Ghana Revenue Authority. The majority of respondents, according to the study's findings, had worked for the company for six to ten years. This demonstrated that responders' ability to comprehend the whole working environment of the organisation is advantageous.

#### **4.1.2 Descriptive statistics**

A Likert scale was provided to the study participants to indicate their level of agreement or disagreement with the following statements regarding the influence of transformational leadership on organisational innovation: Ghana Revenue Authority Case Study. The dimensions were four (inspirational motivation, Idealized Influence, individualized consideration and intellectual stimulation)

# Descriptive statistics on how Idealized Influence affects organizational innovation in Ghana Revenue Authority.

Creating ideas and persuading others to achieve the organization's intended mission and vision is the primary function of ideal influence, one of the dimensions of transformational leadership style. The research findings derived from the participants in this particular setting are as follows.

Table V. Perceptions of the respondent towards idealized influence and organizational innovation.

Source: Fieldwork 2024

S/N	Statement	Mean	Std. Dev
1	My leader is very professional and self-motivated.	3.37	1.00
2	My leader is dedicated to the task at hand and consistently works with passion.	3.54	1.33
3	My boss is someone who makes others feel good to be around.	3.82	1.09
4	I have total confidence in my manager.	3.56	1.17
5	I take great pride in being connected to my supervisor.	3.37	1.12
	Overall mean	3.53	1.14

The idealised impact of organisational innovation and transformational leadership style practices is depicted in Table 5 of the respondents' views. The average mean score (M=3.37, Sd=1.00) of the participants suggests that their leader possesses a great sense of professionalism and initiative in this respect. This indicates that the boss takes initiative and is very professional for the overall development of the company.

Table 5's item 2 requested respondents to express their opinion on whether or not their leader is dedicated to the task at hand and consistently works with passion. That's why the respondents' average mean score (M=3.52, Sd=1.33) indicated that their leader is dedicated to the job and always works with passion.

It can be inferred from Table 5 that, on average, respondents agree that their supervisor makes others feel good to be around them. The mean response for the statement, "My supervisor makes others feel good to be around him / her," is 3.82, or roughly 4, on the Likert scale.

Table 5 indicates that, on average, respondents agree that staff members have entire faith in their supervisor. This is based on the mean response of 3.56, or roughly 4, to the statement "I have complete faith in my supervisor."

Based on Table 5, it can be inferred that, on average, respondents agree that they are proud to be connected with their supervisor. The mean response for the statement "I am proud to be associated with my supervisor" is 3.57, or around 4 on the Likert scale.

## Descriptive statistics on how inspirational motivation affects organizational innovation in Ghana Revenue Authority.

Inspirational motivation typically goes hand in hand with charisma and is focused on a leader setting higher expectations so that they become a mark of reference. Bass (1985) asserts that followers look up to an inspirational leader who has the capacity to arouse powerful emotions in them in order to increase awareness and grasp of objectives that both sides can agree upon. Consequently, the following provides a succinct overview of the respondents' answers.

Table VI. Respondent's perceptions towards Inspirational Motivation and organizational innovation

Source: Fieldwork 2024

S/N	Statement	Mean	Std. Dev
1	The company keeps educating staff	3.20	1.10
	members on the value and		
	relevance of innovation.		
2	The business promotes liberty,	3.29	1.70
	transparency, and creativity.		
3	My boss sums up what we could	3.17	1.34
	and ought to achieve in a few		
	straightforward terms.		
4	My boss gives me eye-catching	3.32	1.09
	pictures of what we can		
	accomplish.		
5	My boss assists me in finding	3.51	1.31
	purpose in my work.		
	Overall mean	3.3	1.3

Table 6 presents the respondents' perspectives regarding transformational leadership style practices (inspirational motivation) organisational innovation. The average mean score (M=3.20, Sd=1.20) of the respondents suggests that the company is still teaching its staff

members the value and implications of innovation. As a result, respondents were in agreement that the "firm continues to educate employees about the significance and importance of innovation."

The respondents were asked in item 2 of table 6 to express if they believed that the company supported freedom, transparency, and innovation. The average mean score (M=3.29, Sd=1.70) of the respondents said that the company supports innovation, freedom, and openness as a result.

Table 6 shows that, on average, respondents agree that their supervisor conveys what we could and should do in a few simple words. The mean response for the question, "My supervisor expresses in a few simple words what we could and should do," is 3.17, or roughly 4 on the Likert scale.

According to Table 6, the average response to the question "My supervisor provides appealing images about what we can do" is 3.32, or roughly 3, on the Likert scale. This suggests that, on average, respondents don't agree that their supervisor does a good job of providing appealing images.

Based on Table 6, it can be inferred that, on average, respondents agree that their supervisor helps them find meaning in their job. The mean response for the statement "My Supervisor helps me find meaning in my work" is 3.51, which is roughly 4 on the Likert scale.

# To ascertain relationship between intellectual stimulation and organizational innovation in Ghana Revenue Authority

According to the literature, intellectual stimulation exposes followers to novel, thought-provoking concepts and pushes them to reject conventional wisdom (Bass, 1985). It describes a leader who cultivates intelligence, reason, logic, and careful problem solving. On the basis of this, the information gathered from the participants was succinctly reviewed as follows.

Table VII. Respondent's perceptions towards Intellectual Stimulation and organizational innovation

Source: Fieldwork 2024

S/N	Statement	Mean	Std. Dev
1	My leader improves understanding	3.56	1.08
	and proficiency about current		
	products.		
2	My boss enhances the current	3.48	1.04
	procedure for developing new		
	products.		
3	My boss helps others approach	3.90	1.29
	difficult issues in novel ways.		
4	My boss gives people fresh	3.61	1.34
	perspectives on perplexing issues.		
5	My boss persuades people to	3.46	1.14
	reconsider concepts they had never		
	given much thought to previously.		
	Overall mean	3.60	1.18

Table 7 details the respondents' opinions about organisational innovation and intellectual stimulation of transformational leadership style activities. based on the responses provided by the respondents, the average mean score (M=3.56, 1.08) showed that their leader improves knowledge and abilities pertaining to current items. This suggests that the leader improves their expertise in relation to current products.

With the phrase, "My leader improves existing product development process," respondents were invited to express their opinions. (See item-2 in table 7 According to this statement, the average mean score (M=3.48,Sd=1.04) indicated that their supervisor gives others fresh perspectives on perplexing issues. This indicates that the process of developing new products is enhanced by their leader.

The third question in Table 7 asks respondents if their boss encourages them to take a fresh approach to solving difficult problems. From this angle, the average mean score of the respondents (M=3.90, Sd=1.28) indicates that their supervisor assists others in approaching difficult problems in creative ways.

According to Table 7 the majority of respondents concur that their supervisor encourages people to reconsider concepts they had never given much thought to before. On the Likert scale, the mean response for the statement, "My supervisor gives others new perspectives on perplexing things," is 3.61, or about 4.

According to Table 7 most respondents said that their supervisor encourages people to think twice about ideas they had never really considered before. "My supervisor gets others to rethink ideas that they had never questioned before," had a mean Likert scale response of 3.46, or roughly 4.

# Descriptive statistics on how individualized consideration affects organizational innovation in Ghana Revenue Authority

"Individual consideration," the fourth pillar of transformational leadership, focuses on helping followers grow via mentoring and coaching. The leader acts as a mentor to the followers, taking particular note of the differences in each follower's personality. This led the respondents to summarise what they had learned from the respondents in the manner that follows.

## Table 8 Perceptions of the respondent towards Individual Consideration and organizational innovation

Table VIII. Perceptions of the respondent towards Individual Consideration and organizational innovation

Source: Fieldwork 2024

S/N	Statement	MEAN	SDV
1	My boss is creative and flexible.	3.77	1.12
2	My leader never stops learning new things to better himself.	3.59	0.33
3	My boss fosters personal growth in others	3.50	1.23
4	My boss shares with others his or her assessment of our performance e.g.,	3.63	0.87

5	My boss takes into account each	2.03	1.10
	subordinate's unique needs, skills,		
	and goals.		
	Overall mean	3.30	0.93

According to Table 8, the Ghana Revenue Authority's organisational innovation is impacted by individualised attention, according to the respondents. Their leader is creative and receptive, as seen by the average mean score (M=3.77, Sd=1.12). The leader appears to be creative and openminded from this.

Answers to a question on whether their boss keeps learning new things to better himself were solicited from the respondents. The respondents overwhelmingly agreed with the assertion that their leader is always learning new things to better himself, with an average mean score of M=3.59, Sd=0.33.

Table 8's third item presents the respondents' opinions regarding whether or not their boss fosters the personal growth of others. According to this perspective, the respondents' average mean score (M=3.50, Sd=1.23) suggests that their supervisor aids in the self-development of others.

It can be inferred from table 7.8 that, on average, respondents agree that their supervisor informs others about how they think we are doing. The mean response for the question, "My boss shares with others his or her assessment of our performance," is 3.63, or roughly 4, on the Likert scale.

According to Table 8, the average response to the question "My leader considers subordinate's individual needs, abilities, and aspirations" is 2.03, or roughly 2. This suggests that, on average, respondents disagree that their leader takes into account their subordinates' needs, abilities, and aspirations.

#### **Interview responses**

The following is a quick discussion of the data from the qualitative interview, in addition to the data from the questionnaire.

## 1. To what extent does Idealized Influence affects organizational innovation in Ghana Revenue Authority?

According to the respondents, transformative leaders are respected by their staff members and exhibit traits like power, confidence, honesty, integrity, and a sense of shared responsibility. The ability to instil trust in followers and behave honourably inside the organisation is known as idealised influence (attribute) in leaders.

## 2. To what extent does Inspirational Motivation affects organizational innovation in Ghana Revenue Authority?

The respondents said that high expectations for the group, expressing a vision, offering purpose and challenge to the task, and igniting excitement and optimism about the organization's future are all ways that transformational leaders inspire followers.

## 3. What is the relationship between Intellectual Stimulation and organizational innovation in Ghana Revenue Authority?

According to the respondents, transformational leaders foster followers' creativity and innovation by encouraging critical thinking to address issues, challenging presumptions, taking a fresh perspective to familiar circumstances, and requesting original solutions to issues.

## 4. To what extent Individualized Consideration affects organizational innovation in Ghana Revenue Authority?

According to the respondents, transformational leaders give careful consideration to each follower's unique needs in order to help them succeed and develop. They serve as a coach and mentor, identifying each person's potential and assets.

#### 4.2 Discussion and Implications

#### 4.2.1 Discussion

This section discusses outcome of analysis on the impact of Transformational Leadership on Organizational Innovation: A Case Study of Ghana Revenue Authority. Four dimensions—idealized influence, inspirational drive, intellectual stimulation, and individualised consideration—were presented by transformational leadership. This study presents its findings in light of the previously stated primary goals.

According to the findings of objective 1-4, transformational leadership fosters organisational innovation. The impact of transformative leadership on organisational innovation was substantial and beneficial, supporting the hypothesis. Previous empirical research demonstrates connections between creativity and transformational leadership. As an illustration, Sosik, Kahai, and Avolio (1998) asserted that transformational leaders foster original concepts that advance innovations inside businesses. Transformational leadership has been found by Gumusluoğlu & Ilsev (2009) to have a large and favourable impact on an organization's propensity for innovation. This is in line with research by Okoli et al. (2021) that looked at how much transformational leadership characteristics influence organisational success in tertiary institutions in Anambra State, Southeast Nigeria, and studies by Mokhber et al. (2015) found that transformative leadership significantly improves organisational innovation. In the selected postsecondary institutions, the results showed a strong positive correlation between transformational leadership characteristics and organisational success. Furthermore, a 2020 study by Adnan et al. looked at the relationship that quality innovation has as a mediator between organisational success and transformational leadership. The findings demonstrated a strong correlation between innovative practices and organisational effectiveness under transformational leadership.

#### **4.2.2** Theoretical Implications

The impact of transformational leadership on organisational innovation is the primary contribution of this research, with substantial theoretical contributions underscoring the role that transformational leadership plays in fostering organisational innovation.

This study offers proof of research that has integrated theories, concepts, and empirical data from numerous academic areas. It will add to the corpus of knowledge already in existence, particularly with regard to organisational innovation and transformational leadership, and it may pave the way for future research or development on this subject.

The theory's application to government agencies and developing nations has also been confirmed by this study, which will surely improve researchers' understanding and serve as a resource for future research. (Aldholay et al., 2018; Mutahar et al., 2017).

### 4.2.3 Practical implications

The direction of the transformative leadership of the Ghana Revenue Authority was the main subject of this study. Simultaneously, it aims to give leaders a thorough understanding of how to mould and influence the workplace in order to foster innovation (Aldholay et al., 2018). It illustrates how crucial organisational innovation is to an organization's growth and survival as well as its ability to gain a competitive edge.

### 5. CONCLUSION AND PROPOSAL

#### 5.1 Conclusion

This research has looked into the impact of transformational leadership on organizational innovation using the Ghana Revenue Authority as a case study. Entrepreneurial management innovation has been demonstrated to be propelled by the dynamics of transformational leadership. Creative and experimental environments are fostered by transformational leaders because of their capacity to inspire, motivate, and steer teams. Achieving present objectives is simply one aspect of this; another is influencing the organization's future via the development of fresh, capable leadership. Even with obstacles like change aversion, transformational leadership may get through them with good communication and trust-building. The conclusion drawn from the data related to this particular aim is that transformational leaders have long been regarded as boosting organisational creativity by pushing their followers to meet predetermined goals and instilling confidence in them to do so. Also, to pursue greater innovation, transformational leaders inspire people to strengthen their organisational and personal abilities.

#### 5.2 Recommendations

The following recommendations are required to maximise the impact of transformational leadership in fostering innovation at Ghana Revenue Authority:

- i. First and foremost, training programmes that emphasise transformational leadership components are essential for identifying and nurturing prospective leadership talent inside the organisation.
- ii. Managing resistance to change requires leaders to effectively communicate their vision and actively include team members in the innovation process. Effective communication is essential to this process.
- iii. Giving team members credit for their unique efforts can boost their enthusiasm and support an innovative workplace culture.
- iv. Management must design precise metrics to gauge the level of creativity throughout the organisation. This will help to quantify the beneficial effects of transformational leadership and highlight areas that need more attention,

v. To increase employees' dedication and job happiness, leaders and management of Ghana Revenue Authority (GRA) must make sure that all employee needs are given the desired priority to enhance innovation.

### 5.3 Limitations and Suggestions for Future Work

There are several limits to this work despite its theoretical and practical contributions. First, the analysis in the paper was limited to the Ghana Revenue Authority and did not incorporate data from other governmental agencies. This restriction suggests that more public sectors in Ghana should do a replication of the analysis. The majority of the literature pertaining to transformational leadership and organisational innovation has been directed towards other nations; this constraint could result in variations in the findings and interpretations. Future scholars should therefore gather information from Ghana's and other countries' public sectors. A more thorough grasp of organisational challenges and leadership philosophies may result from this wider focus.

### 6. Bibliography

- Abbas, H., & Ashgar, M. (2010). Transformational leadership and organizational performance. *Journal of Management Development, 29(4), 405-421.*
- Abasilim, U.D. (2014). Transformational Leadership Style and its Relationship with Organisational Performance in Nigerian Work Context: *A Review. IOSR Journal of Business and Management (IOSR-JBM), 16*(9) e-ISSN: 2278-487X, pISSN: 2319-7668.

  .Ver. VI. PP 01-05 www.iosrjournals.org www.iosrjournals.org
- Aberman, R. (2000). Emotional intelligence. Paper presented at the Quarterly Meeting of the Minnesota Human Resource Planning Society, Minneapolis, MN.
- Abd-Elaziz, M. E., Aziz, W. M., Khalifa, G. S., & Abdel-Aleem, M. (2015). Determinants of Electronic word of mouth (EWOM) influence on hotel customers' purchasing decision. *International Journal of Heritage, Tourism, and Hospitality*, 9(2/2), 194–223.
- Abou-Shouk, M. A & Khalifa, G. S. (2017) 'The influence of website quality dimensions on e-purchasing behaviour and e-loyalty: a comparative study of Egyptian travel agents and hotels', *Journal of Travel and Tourism Marketing*, 34(5). doi: 10.1080/10548408.2016.1209151.
- Abu-Mahfouz, S. S. (2019). TQM practices and organizational performance in the manufacturing sector in Jordan mediating role of HRM practices and innovation. *Journal of Management and Operation Research*, 1(22), 1-12.
- Adnan, M. R., Mohammad, S. A., Eiad, B. A., & Firas, R. (2020). Examining the Effect of Transformational Leadership to Organizational Performance through Quality Innovation: A Developing Country Perspective. *International Journal for Quality Research*, 15(1) 353–368 ISSN 1800-6450. https://www.researchgate.net/publication/349168789

- Afsar, B., & Umrani, W. A. (2020). Transformational leadership and innovative work behaviour. *European Journal of Innovation Management*, 23(3), 402–428. <a href="https://doi.org/10.1108/ejim-12-2018-0257">https://doi.org/10.1108/ejim-12-2018-0257</a>
- Aketch, E.A., Basheka, B. C., &Bagire, V. (2017). Transformation leadership style and performance of the hotel sector in Uganda: A cross-sectional survey. *International Journal of Technology and Management*. *II* (II) pp. 1-17. ISSN 2518-8623
- Alblooshi, Mohamed, Mohammad Shamsuzzaman, and Salah Haridy. 2020. The relationship between leadership styles and organisational innovation: A systematic literature review and narrative synthesis. *European Journal of Innovation Management*, 24, 338–70.
- Aldholay, A. H., Abdullah, Z., Ramayah, T., Isaac, O., & Mutahar, A. M. (2018). Online learning usage and performance among students within public universities in Yemen. *Int. J. Services and Standards*, *12*(2), 163–179.
- Al-Obthani, F., & Ameen, A. (2018). Towards Customized Smart Government Quality Model.

  \*International Journal of Software Engineering & Applications, 9(2), 41–50.

  http://doi.org/10.5121/ijsea.2018.9204
- Amankwaa, A. Gyensare, M. A. & Susomrith, P. (2019). "Transformational leadership with innovative behaviour," *Leadership & Organization Development Journal*, 40(4), pp. 402–420, Jun. 2019, doi: 10.1108/LODJ-10-2018-0358.
- Ammar, A., Roshidi, H., Osama, I., & Yassien M. (2018). The Effect of Transformational Leadership on Organizational Innovation in Higher Education: The Case of Developing Countries. *International Journal of Management and Human Science (IJMHS)*, 2(4), 25-37. EISSN: 2590 3748. <a href="http://www.ijmhs.org/index.aspx">http://www.ijmhs.org/index.aspx</a>
- Ameen, A., Almulla, A., Maram, A., Al-Shibami, A. H., & Ghosh, A. (2018). The Impact of Knowledge Sharing on Managing Organizational Change within Abu Dhabi National Oil Organizations. *International Journal of Management and Human Science (IJMHS)*, 2(3), 27–36.

- Arif, S., & Akram, A., (2018). Transformational Leadership and Organizational Performance. SEISENSE Journal of Management, 1 (3). Pgs. 60 – 75
- Aarons, G.A., & Sommerfeld, D.H. (2012). Leadership, innovation climate, and attitudes toward evidence-based.
- Avolio, B. J., & Yammarino, F. J. (2002). *Transformational and charismatic leadership: The road ahead. In K. S. Cameron, J. E. Dutton, & R. E. Quinn (Eds.)*, Positive organizational scholarship: Foundations of a new discipline (pp. 243-270). San Francisco, CA: Berrett-Koehler.
- Bar-On, R. (1996). The emotional quotient inventory (EQ-i). Toronto, Ontario, Canada: Multi-Health Systems.
- Bass, B. M., & Bass, R. (2008). *The Bass Handbook of Leadership*: Theory, Research, and Managerial applications (4th ed.). New York: Free Press.
- Bass, B. M. (1985). *Leadership and performance beyond expectations*. New York, NY: Free Press.
- Bass, B.M. (1999). Two decades of research and development in transformational leadership. European journal of work and organizational psychology, 8(1),9-32
- Ben Hador, B., & Klein, G. (2019). Act your age? Age, intrapreneurial behaviour, social capital, and performance. *Employee Relations*, 42(2), 349-365. <a href="https://doi.org/10.1108/er-01-2019-0059">https://doi.org/10.1108/er-01-2019-0059</a>.
- Burns, J.M. (1978). Leadership. New York. Harper & Row
- Bass, B.M. (1999). Two decades of research and development in transformational leadership. European journal of work and organizational psychology, 8(1)9-32.
- Birasnav, M., Rangnekar, S., & Dalpati, A. (2010). Transformational leadership and human capital benefits: the role of knowledge management. *Leadership & Organization Development Journal*, 32 (2), 106-126.

- Cacioppe, R. (1997). Transformational leadership: An alternative to transactional leadership.

  Leadership & Organization Development Journal, 18(6), 271-282.
- Chau, T.H.P, Le T. D., & Tran Y. T., (2021. Transformational Leadership and Organizational Performance: The Mediating Role of Results-Oriented Culture in Vietnamese Public Organizations. Advances in Economics, Business and Management Research. Volume 196. Proceedings of the International Conference on Emerging Challenges: Business Transformation and Circular Economy. (ICECH 2021). pg.164-175. Atlantis Press International
- Ciarrochi, J. V., Chan, A. C., & Caputi, P. (2000). A critical evaluation of the emotional intelligence construct. *Personality and Individual Differences*, 28(3), 539-561.
- Cooper, D. R. & Schindler, P. S. (1999) Business research methods, Tata McGraw-Hill Publishing Company Limited, New Delhi.
- Creswell, J.W. (2003). Research design; quantitative, qualitative and mixed methods approaches, (2nd ed.). Sage Publications, London, UK
- Damirch, Q., Rahimi, G., & Seyyedi, M. (2011). Transformational Leadership Style and Innovative Behavior on Innovative Climate at SMES in Iran. *Kuwait Chapter of Arabian Journal of Business and M Anagement Review*, *1*(4), 119–127.
- Dele, A., Adegboyega, A., & Taiwo, S. (2015). Leadership styles and their effect on employees' performance of Banks in Ado Ekiti, Nigeria. Journal of Management Policy and Practice, 16(2), 83-94.
- Effiyanti, E., Lubis, A. R., Sofyan, S., & Syafruddin, S. (2021). The Influence of Transformational Leadership on Organizational Performance: A Case Study in Indonesia. *Journal of Asian Finance, Economics and Business*, 8 (2). Pg.0583–0593. ISSN: 2288-4637

- Gil, f. J., Rodrigo-moya, J., & Cegarra-navarro, J. G. (2021). Transformational leadership and knowledge management: A systematic review and future research agenda. Journal of Knowledge Management, 25(6), 1631-1657.
- Goleman, D. (1995). Emotional intelligence. New York, NY: Bantam Doubleday Dell.
- Goleman, D., Boyatzis, R., & McKee, A. (2002). Primal leadership: Realizing the power of emotional intelligence. Boston, MA: Harvard Business School Press.
- Gregory, B., Moates, K., & Gergory, S. (2011). An exploration of perspective taking as an antecedent of transformational leadership behaviour. *Leadership of Organization Development Journal*, 32 (8), 807-816.
- Gumusluoğlu, L., & Ilsev, A. (2009). TRANSFORMATIONAL LEADERSHIP AND ORGANIZATIONAL INNOVATION: THE ROLES OF INTERNAL AND EXTERNAL SUPPORT FOR INNOVATION. *Journal of Product Innovation*
- Hughes, R. L., Ginnett, R. C., & Curphy, G. J. (2008). *Leadership*: Enhancing the lessons of experience (4th ed.). Boston, MA: Irwin/McGraw-Hill.
- Humphreys, J., & Einstein, W. (2003). Nothing new under the sun: Transformational leadership from historical perspective. *Management Decision*, 41 (1), 85-95.
- Hussain, H. K., Talib, N. A., & Shah, I. M. (2015). Application of Structural Equation Modelling to Evaluate Relationship between Dimensions of Transformational Leadership and Organizational Innovation: in Iraq public universities. *Global Journal of Business and Social Science Review (GJBSSR)*, *I*(1), 107–115.
- Judge, T., & Piccolo, R. (2004). Transformational and transactional leadership: a meta-analytic test of their relative validity. *Journal of Applied Psychology*, 89, 755-768
- Jia, X., Jin C. Liang M., & Qian W.. (2018). How leadership matters in organizational innovation: A perspective of openness. *Management Decision*, 56, 6–25.

- Jung, D. I., Chow, C., & Wu, A. (2003). The effects of transformational leadership on organizational innovation: The mediating role of organizational learning. Academy of Management Journal, 46(6), 525-536.
- Karacsony, P. (2021). Relationship between the leadership style and organizational performance in Hungary. *Economic Annals-XXI*, 190, 5-6(2), 128-135.
- Kuepers, W. (2011). "Trans-+-Form" Leader- and followership as an embodied emotional and aesthetic practice for creative transformation in organizations. *Leadership of Organization Development Journal*, 32 (1), 20-40.
- Kumar, R. (1999). Selecting a Method of Data Collection'. Research Methodology: a step by step guide for beginners
- Lai, C. K., Wang, D., Cheng, X., & Zhang, Y. (2020). Transformational leadership and employee creativity: The mediating role of psychological empowerment. Journal of Organizational Behavior, 41(8), 1029-1045.
- Lamm, K., Sapp, R., Randall, N. & Lamm, A. (2021). Leadership development programming in higher education: an exploration of perceptions of transformational leadership across gender and role types. *Tertiary Education and Management*, 27, 297–312. <a href="https://doi.org/10.1007/s11233-021-09076-2">https://doi.org/10.1007/s11233-021-09076-2</a>
- Locke, A. E., & Latham, G. P. (2002). Building a practical useful theory of goal setting and task motivation. *American Psychologist*, *57*(9), 705-717.
- Lorinkova, K., & Perry, S. J. (2019). Transformational leadership and employee extra-role performance: The mediating role of organizational identification. *Journal of Leadership & Organizational Studies*, 26(2), 197-210.
- Martin, J. (2015). Transformational leadership: A critical perspective. London, UK: SAGE Publications.

- Manoharan, A., & Singal, M. (2019). Organizational effectiveness in hospitality: Managers perspectives. *International Journal of Hospitality Management*, 80, 123-125
- Metcalf, L., & Benn, S. (2012). The corporation is ailing social technology: Creating a 'fit for purpose' design for sustainability. *Journal of Business Ethics*, 111(2), 195-210.
- Mokhber, M., Vakilbashi, A., & Ismail, W. K. bin W. (2015). Effect of Transformational Leadership and its Components on Organizational Innovation. *Iranian Journal of Management Studies (IJMS)*, 8(2), 221–241.
- Moriano, J. A., Molero, F., Topa, G., & Mangin, J. L. (2011). The influence of transformational leadership and organizational identification on intrapreneurship. *International Entrepreneurship and Management Journal*, 10(1), 103-119. <a href="https://doi.org/10.1007/s11365-011-0196-x">https://doi.org/10.1007/s11365-011-0196-x</a>
- Mostashari, S. (2009). The impact of organizational leadership on organizational performance.

  Leadership & Management in Engineering, 9(3), 108-116.
- Mutahar, A. M., Daud, N. M., Ramayah, T., Isaac, O., & Alrajawy, I. (2017). Examining the intention to use mobile banking services in Yemen: an integrated perspective of technology acceptance model (TAM) with perceived risk and self-efficacy. *Asian Journal of Information Technology*, 15(12).
- Neuman, L.W. (2007). Social research; qualitative and quantitative approaches, (2nd Ed.). Person, Allen & Beacon publishers, U.S.A.
- NicholsonII, W. (2007). Leading where it counts: An investigation of leadership styles and behaviours that define college and university presidents as successful fundraisers.

  International Journal of Educational Advancement, 7 (4), 256-270.
- Ngo, H. Y., Zhang, Z., Teo, H. H., & Chan, K. F. (2022). Transformational leadership and organizational innovation: A meta-analytic review. Journal of Organizational Behaviour, 43(2), 233-257

- Maxwell, J. A. (2005). *Qualitative Research Design*: An Interactive Approach (2nd Ed.). Thousand Oaks, CA: Sage Publications.
- Mokhber, M., Vakilbashi, A., & Ismail, W. K. bin W. (2015). Effect of Transformational Leadership and its Components on Organizational Innovation. *Iranian Journal of Management Studies (IJMS)*, 8(2), 221–241.
- Muhamad, L. F. Bakti, R., Febriyantoro, M. T. & Ausat, A. M. A. (2023). "Do Innovative Work Behavior and Organizational Commitment Create Business Performance: A Literature Review," *Community Development Journal: Journal Pengabdian Masyarakat*, 4(1), pp. 713–717, 2023, doi: 10.31004/cdj.v4i1.12479.
- Qoura, O. & Khalifa, G. S. (2016). 'The Impact of Reputation Management on Hotel Image among Internal Customers: The Case of Egyptian Hotels', *International Journal of Heritage, Tourism, and Hospitality*, 7(2), pp. 261–274.
- Okoli, I. E. N., Nnabuife, E. K., Adani, N. I., Ugbo, I. E. (2021). Transformational Leadership and Organizational Success: Evidence from Tertiary Institutions. *The Asian Institute* of Research Journal of Economics and Business, 4,(1), 170-182 ISSN 2615-3726
- Ozer, E., & Tinaztepe, E. (2014). The effect of strategic leadership style on firm performance.

  Journal of Business Research, 67(11), 2229-2235.
- Ryan, T. A. (1970). International behaviour. New York: Roland Press.
- Sandbakhen, A. K. (2006). *Relationships between leadership practices and organizational performance. Journal of Management Development*, 25(8), 739-756.
- Salovey, P., & Mayer, J. D. (1990). Emotional intelligence. *Imagination, Cognition, and Personality*, 9(3), 185-211.
- Sethibe, M. M., & Steyn, W. (2018). The impact of transformational leadership on organizational innovation: A study of the South African retail banking industry.

  South African Journal of Business Management, 49(3), 1-13.

- Sosik, J. J., Kahai, S. S., & Avolio, B. J. (1998). Transformational leadership and dimensions of creativity: Motivating idea generation in computer-mediated groups. *Creativity Research Journal*, 11(2), 111–121. <a href="https://doi.org/10.1207/s15326934crj1102">https://doi.org/10.1207/s15326934crj1102</a> 3
- Suifan, T. S., Abdallah, A. B., & Al Janini, M. (2018). The impact of transformational leadership on employees' creativity: The mediating role of perceived organizational support.

  \*\*Management Research Review, 41(1), 113-132.\*\*
- Sung, J. Y., & Kim, S. H. (2021). The relationship between transformational leadership and organizational innovation: The mediating role of learning orientation. Leadership & Organization Development Journal, 42(3), 396-411.
- Suresh, S., & Rajini, G. (2013). Transformational leadership: A review. Journal of Management Research, 5(1), 1-11.
- Turner III, D. W. (2010). Qualitative Interview Design: A practical guide for novice Vander Meulen, P.R.H. and G. Spijkerman (1985), "The Logistics Input Output Model and its Application, "International Journal of Physical Distribution and Materials Management, 15(3),pp.17-25.
- Van der Gaag, M., & Webber, M. (2010). Measurement of individual social capital: Questions, instruments, and measures. In I. Kawachi, S. V. Subramanian, & D. Kim (Eds.), Social Capital and Health (pp. 29–50). New York: Springer.
- Voon, M., Lo2, M., Ngui, K., & Ayob2, N. (2011). The influence of leadership styles on employee job satisfaction in public sector organization Malaysia. *International Journal of Business, Management and Social Sciences*, 2 (1), 24-32.
- Waite, Alina. 2014. Leadership's influence on innovation and sustainability: A review of the literature and implications for HRD. *European Journal of Training and Development*, 38, 15–39.
- Wang, X.-H., & Howell, J. M. (2012). Transformational leadership and employee creativity: A multilevel study. Academy of Management Journal, 55(4), 863-882.

7. Appendixes

Dear Sir/Madam: I appreciate your assistance in completing this academic survey. This

questionnaire's primary goal is to explore the impact of Transformational Leadership on

Organizational Innovation: A Case Study of Ghana Revenue Authority. Your cooperation

is essential to my research endeavours and a requirement for the outcomes of our studies. I

guarantee that all of your personal information will be kept completely private. Feel free to

complete it, please. I want to thank you again for your aid despite your busy schedule.

Thank you!

Best Regards

Section A: Personal Background

1 Gender distribution A. Male B. Female

2. Age in years A.18-25 B. 26-35 C.36-45 D.46-55 E.56 and above

3. Educational Level A. Diploma B. Degree C. Masters D. Other

4. years of experience A.0-5 B. 6-10 C. 11-15 D.6-20 E.21 and above

Section B: Transformational Leadership and Organizational Innovation

The following claims are intended to gauge your esteemed organization's leadership style. By

checking the box next to the statement, you agree with the most, please indicate how much you

agree with each of the following assertions. Please indicate how much you agree or disagree

with the following organisational culture dimension that was utilised at their previous agencies

on a scale of 1 to 5.

Where 1=strongly disagree, 2=disagree, 3=neutral, 4=agree, 5= strongly agree

To what extent does Idealized Influence affect organizational innovation in Ghana Revenue

Authority?

55

		1	2	3	4	5
S/N	Statement					
1	My leader is very professional and self-					
	motivated.					
2	My leader is dedicated to the task at hand and					
	consistently works with passion.					
3	My boss is someone who makes others feel					
	good to be around.					
4	I have total confidence in my manager.					
5	I take great pride in being connected to my					
	supervisor.					

To what extent does Inspirational Motivation affect organizational innovation in the Ghana Revenue Authority?

		1	2	3	4	5
S/N	Statement					
1	The company keeps educating staff members					
	on the value and relevance of innovation.					
2	The business promotes liberty, transparency,					
	and creativity.					
3	My boss sums up what we could and ought to					
	achieve in a few straightforward terms.					
4	My boss gives me eye-catching pictures of					
	what we can accomplish.					
5	My boss assists me in finding purpose in my					
	work.					

What is the relationship between Intellectual Stimulation and organizational innovation in Ghana Revenue Authority?

S/N	Statement	1	2	3	4	5
1	My leader improves understanding and proficiency about current products.					
2	My boss enhances the current procedure for developing new products.					
3	My boss helps others approach difficult issues in novel ways.					
4	My boss gives people fresh perspectives on perplexing issues.					
5	My boss persuades people to reconsider concepts they had never given much thought to previously.					

To what extent Individualized Consideration affects organizational innovation in Ghana Revenue Authority?

		1	2	3	4	5
S/N	Statement					
1	My boss is creative and flexible.					
2	My leader never stops learning new things to					
	better himself.					
3	My boss fosters personal growth in others					
4	My boss shares with others his or her assessment of our performance.					
5	My boss takes into account each subordinate's unique needs, skills, and goals.					

### **Interview guiding questions**

- i. To what extent does Idealized Influence affect organizational innovation in the Ghana Revenue Authority?
- ii. To what extent does Inspirational Motivation affect organizational innovation in the Ghana Revenue Authority?

- iii. What is the relationship between Intellectual Stimulation and organizational innovation in the Ghana Revenue Authority?
- iv. To what extent Individualized Consideration affect organizational innovation in the Ghana Revenue Authority?

Thank you for your contribution!

## LIST OF TABLES AND FIGURES

Table I. Distribution of Respondents Sex	32
Table II. Age of the respondents in years	33
Table III. Educational backgrounds of the respondents	33
Table IV. Experience of the respondents in the Organization.	34
Table V. Perceptions of the respondent towards idealized influence and organizational innovation	35
Table VI. Respondent's perceptions towards Inspirational Motivation and organizational innovation	ı 36
Table VII. Respondent's perceptions towards Intellectual Stimulation and organizational innovation	1 38
Table VIII. Perceptions of the respondent towards Individual Consideration and organizational	
innovation	39
Figure 1. Dimensions of Transformational Leadership	11
Figure 2	16
Figure 3.	17
Figure 4. Explanatory Sequential Design.	27

### **8 DEDICATIONS**

This Research is dedicated to the Government of Ghana, My family, and friends. Thank you, my father, **Simba Kofi Boateng** and Mother **Akua Adoma Agyei Angelina**, for your unwavering support and for believing in me. You started this journey with me, and, ideally, you see the end of this journey likewise.

And to my Godfather **Asante Tuah Jnr. (PhD)**, who has been a constant source of inspiration and motivation, I would not fail to mention your name. Thank you for constantly checking up on me. I am grateful for your presence in my life.

This achievement is not just mine, but also yours, and I dedicate it to you all with all my heart.

### 9. ACKNOWLEDGEMENT

I am thankful to Almighty God for his unending kindness in providing me with support throughout my life to get to this point. I write to express my deepest gratitude and appreciation to my thesis supervisor, Dr. Rudnak Ildiko, for her guidance, support, and mentorship throughout my master's thesis journey. Your invaluable insights, feedback, and encouragement have been instrumental in the successful completion of my thesis.

I am grateful for the countless hours you have spent reading and reviewing my work, providing me with constructive feedback, and helping me refine my ideas. Your expertise in the field of Management and Leadership has been a constant source of inspiration and motivation, and I am truly fortunate to have had the opportunity to work with you.

I would also like to extend my thanks to the faculty and staff of the Department of Management and Leadership for their contributions and support during my studies. Their commitment to academic excellence and dedication to helping students succeed have been critical to my academic and personal growth.

Finally, I want to acknowledge my family and friends for their unwavering love, support, and encouragement. Their belief in me and my abilities has been a constant source of strength and inspiration, and I am truly grateful for their presence in my life.

### Annex 1

## DECLARATION ON AUTHENTICITY AND PUBLIC ASSESS OF MASTER'S THESIS

Student's name: Elvis Duah-Boateng

Student's Neptune: KPOIAK

Title of the document: Master's Thesis

Year of publication:

Department: Management and Leadership

I declare that the submitted final master's thesis is my own, original individual creation. Any parts taken from another author's work are marked and listed in the table of contents.

If the statements above are not true, I acknowledge that the final examination board excludes me from participating in the final exam, and I am only allowed to take the final exam if I submit another final master's thesis/portfolio.

Viewing and printing my submitted work in a PDF format is permitted. However, the modification of my submitted work shall not be permitted.

I acknowledge that the rules on Intellectual Property Management of the Hungarian University of Agriculture and Life Sciences shall apply to my work as an intellectual property.

I acknowledge that the electric version of my work is uploaded to the repository system of the Hungarian University of Agriculture and Life Sciences

Place and date: Gödöllő, 2024. 04. 16

Student's signature

#### STATEMENT ON CONSULTATION PRACTICES

As a supervisor of **Elvis Duah-Boateng** (student's name) **KPOIAK** (student's NEPTUN ID), I here declare that the master's thesis has been reviewed by me, the student was informed about the requirements of literary sources management and its legal and ethical rules.

I <u>recommend</u>/don't recommend the master's thesis to be defended in a final exam.

The document contains state secrets or professional secrets: yes <u>no</u>

Place and date: Gödöllő, 2024. 04. 16

**Internal supervisor** 

D. Q. L. (()