
# EFFECT OF ENTREPRENEURIAL LEADERSHIP ON EMPLOYEES INNOVATIVE WORK BEHAVIOR; MEDIATION ROLE OF JOB CRAFTING AND MODERATION ROLE OF ORGANIZATIONAL CULTURE

**By Kidist Getachew**

**A Research submmitted to Addis Ababa University, College of Business and Economics in Partial Fulfillment of the Requirements for the Degree of Master of Business Administration in Management**

**Advisor: Habtamu Endris (PhD)**

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**Addis Ababa**

# EFFECT OF ENTREPRENEURIAL LEADERSHIP ON EMPLOYEES INNOVATIVE WORK BEHAVIOR; MEDIATION ROLE OF JOB CRAFTING AND MODERATION ROLE OF ORGANIZATIONAL CULTURE: THE CASE OF ETHIO-TELECOM

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**ADDIS ABABA UNIVERSITY**

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## DECLARATION

This declaration is made by Kidist Getachew, who states that the study "Effect of entrepreneurial leadership on employees innovative work behavior; mediation role of job crafting and moderation role of organizational culture: the case of ethio-telecom" is entirely original with no previous presentations made at Addis Ababa University or any other university. Under the direction and assistance of my research adviser, Habtamu Endris(PhD), I investigated independently. Further participants and sources for the study have all been properly acknowledged.

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## STATEMENT OF CERTIFICATION

This statement is to confirm that Kidist Getachew's research study concerning the subject of "effect of entrepreneurial leadership on employees innovative work behavior; mediation role of job crafting and moderation role of organizational culture: the case of ethio-telecom." is unique to her and appropriate for submission toward the Master of Business Administration degree.

As the university adviser, I provide my consent for the research paper to be submitted for examination.

_____

**Habtamu Endris (PhD)** (Advisor)

January, 2024

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Kidist Getachew

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## Acronyms and Abbreviations

| | |
|---|---|
| A | Agree |
| AMOS | Analysis of moment structure |
| ANOVA | Analysis of variance |
| CFA | Confirmatory factor analysis |
| D | Disagree |
| EFA | Exploratory factor analysis |
| EL | Entrepreneurial leadership |
| JC | Job crafting |
| IWB | Innovative work behavior |
| N | Neutral |
| SEM | Structural equation modeling |
| SPSS | Statistical package for social sciences |
| SA | Strongly agree |
| SD | Strongly disagree |
| VIF | Variance inflation factor |

**Abstract**

*The purpose of this research is to examine how innovative work behaviors of employees are influenced by entrepreneurial leadership, with a focus on job crafting and organizational culture as mediators and moderators respectively. Due to the significant shortages of contextual knowledge on the issue under study and for the enrichment of empirical research, the study examined the empirical literature gap and contextual gap in this particular area of study. Using an explanatory research design and a cross-sectional study approach, data were gathered by random sampling technique. Primary and secondary sources of data were collected from human resource department documents and questionnaire response of randomly selected (369) employees of the ethio-telecom headquarters, of which 291 were found to be appropriate for analysis. The questionnaire item sources were literature related with the area and previous studies that are standardized. The study used structural equation modelling (SEM) and factor analysis (CFA) utilizing principal component analysis to test the proposed research model. SPSS version 20 and Amos version 26 tools were used for the various sorts of regression, moderation and mediation analysis. The findings suggested that job crafting plays a partially complementary mediation role in the link between entrepreneurial leadership and innovative work behavior. The moderating effect of organizational culture in between the predictor and variable is negatively significant. This study reveals how crucial entrepreneurial leadership is in encouraging creative work behavior among employees in the ethio-telecom headquarters. The study conclusions imply that managers can foster employees' initiation of creativity through job-crafting behaviors, which in turn encourages employees to exhibit innovative behavior and improves innovation at the organizational level.*

**Keyword: entrepreneurial leadership, innovative work behavior, job crafting and organizational culture**

# Chapter One

## Introduction

### 1. Introduction

Innovation is the process of finding solutions to problems; it may also be employed to address more focused and significant concerns (Fagerberg et al., 2021). Innovative countries comprise innovative organizations, which in turn are composed of innovative employees. Creating innovative employees is essential in securing a sustainable development for organizations. According to research by Newman et al, (2018) employees, account for about 80% of new ideas that are carried out the majority of organizations which makes them important grounds of innovation. This study analyzed the current perceptions of managers, supervisors and employees towards the influence of entrepreneurial leadership on employee's innovative work behavior and also the mediation and moderation role of job crafting and organizational culture respectively in selected public organization particularly, at ethio-telecom Head Quarter at Addis Ababa town.

This chapter is focused on the findings of the research's introductory component; it states the problem & its approaches, these include the background of the study, the statement of the problem, research questions and objectives of the study, the significance of the study, the scope of the study, the definition of key terms, research ethics and organization of the study. In addition, an overview of how design the methodology, schedule and budget of costs of this study also highlighted.

### 1.1. Background of the Study

Innovation is necessary in response to change in the external environment, including scarcity of resources, citizens' expectations of a more responsive and transparent government, and intentional internal decisions made to close performance gaps in the attempt of higher service standards (Walker, 2008). Examining the elements that encourage innovative behavior in public service provider employees is crucial since innovation in government organizations is consistently connected to achieve greater productiveness, competency, and public engagement (Salge & Vera, 2022).

The study of innovative work behavior is driven by the need to gain a better understanding of how to improve the knowledge and potential of successful employees and to determine the need for professional development for those who engage in their work roles (Shah & Gohary, 2022). Creating talented and innovative employees are relevant for the development of firms, for such

talent development and adaptability leaders play a great role by guiding through the leading process (Guo et al., 2022). Research studies on the topic of entrepreneurial leadership provide new frameworks to guide thinking and action for the successful transformation of the leading process to create ideal employees for firms (Pinela et al., 2022; Li et al., 2020; Renko et al., 2018). Since innovation is a requirement for both organizational and national economic development (Solhi & Koshkaki, 2016), this field of study is especially crucial from the perspective of a developing country. Exploring the topic of innovative employee behaviors in such a developing economy will also add a broader approach to the development of the evolving literature.

The researcher found that different literatures with other constraints such as, affective commitment, creative self-efficacy and psychological safety (Iqbal et al., 2022); innovation climate and employees' intellectual agility (Malibari & Bajaba, 2020); psychological empowerment (Mehmood et al., 2021); work engagement and gender (Pinela, et al., 2022) and firm's innovative environment and entrepreneurial self-efficacy (Li, et al., 2020) have been studied as potential mediators and moderators regarding the link between entrepreneurial leadership and employee innovative behavior. However, (Jason & Geetha, 2021) proposed studying job crafting as mediator to further explain the variance in innovative behavior and (Khan, 2021) proposed organizational culture as moderator for future studies. The present investigation discovered insufficient evidence from the literature indicating that job crafting mediation and the moderating effect of organizational culture within entrepreneurial leadership and employee innovative behavior. Therefore, there is a need to examine these constraints that might effectively foster employees' innovative work behavior as well as work-related creativity.

On the other hand, Ethiopia's goal of reaching a middle-income level by 2025 involves advancing for the innovation-driven stage, one of three distinct global economic growth stages as defined by Clarke & Gholamshahi, (2018); (1) factor-driven stage, (2) efficiency-driven stage, and (3) innovation-driven stage. The third stage of innovation is characterized by an increase in entrepreneurial endeavors. In the beginning, the economy's proportion of manufacturing declines during the innovation-driven stage. Second, postwar technical advancement has been unbalanced in favor of sectors where entrepreneurship is valued (Wolday et al., 2014). Returns on entrepreneurial investment may improve as a result of advancements in information technology fields like telecommunication. The Entrepreneurial Development Centre (EDC-Ethiopia) is a

further indication of Ethiopia's focus on entrepreneurship. The center is tasked with developing the ability of government organizations engaged in entrepreneurship development initiatives in addition to enhancing entrepreneurs' ability by offering cutting-edge Entrepreneurship education programs and specialized company development support. As a whole, further advancement and exploration of innovation is vital to reach for the intended goal as a nation.

### 1.2. Statement of the Problem

Working on innovative employee development is critical for the achievement of economic development in organizations (Fernandez & Moldogaziev, 2013). Numerous scholars have shown repeatedly that, across every indicator of innovation, leadership influences a crucial role in promoting and encouraging workforce (organizational) creativity (Echebiri & Amundsen, 2020; Li et al., 2020; Wang et al., 2020). Scholars also revealed that, styles for leadership (transformational leadership, servant leadership) can enhance the innovative behavior of employees directly and indirectly though job crafting (Hetland et al., 2018; Guo et al., 2022). It is evident that in order to comprehend, plan, and implement the most suitable change on the innovation capability of individuals in particular in organizations, leadership, specifically competent leadership, and comfortable work environment is required (Bartsch et al., 2021). The subsequent manifestation is what an entrepreneurial sort of talent, expertise, credentials, and resources a leader and the organization have to have in order to successfully foster an innovation culture among staff members and businesses.

The impact of leadership has been studied regarding its abilities and characteristics to handle different organizational difficulties mostly in Asian and European countries (AlEssa & Durugbo, 2021). However, the relationship among entrepreneurial leadership approaches and behavioral outcomes of organizational members has not been well examined (Li et al., 2022). As mentioned at background of study above, more than one decade’s Among different styles of leadership, entrepreneurial leadership (EL) continues to be an ongoing subject for debate and received considerable academic interest within the entrepreneurship and leadership areas in western countries. However, further study on EL in a variety of entrepreneurial and organizational settings (stage of growth, sector, and relative extent), with an emphasis on the organizational and innovative work environment, is required (Newman et al., 2018).

Numerous empirical researches has examined the factors that influence employees' innovative work behavior, and it has been discovered that job crafting attributes have an influence on this behavior (Tian et al., 2021; Supriyanto et al., 2020; Kim et al., 2018). Effective interactions between leaders and followers support for staff decisions and actions, openness to new information, creative and flexible thinking, problem-solving and decision making and confidence in leaders make employees more likely to seek out resources to set up and carry out changes and challenge the status quo with the goal to improve their perception of themselves (Gerbasi et al., 2023). Therefore, to what extent job crafting mediates the relationship between entrepreneurial leadership on employee's innovative work behavior; a research study specifically from the technological organization in developing country is very desirable.

Organizational culture has shown a big influence on employee behavior in many theoretical investigations around the globe (Khan et al., 2020; Wu et al., 2018; Park et al., 2017). Immature organizational climatic environment is identified as one of the reasons to prevent individual's effective and efficient work outcome (Shanker et al., 2017). The authors described an inappropriate work climate decreases the work mood of individuals and inspiration of exploring novel ideas to challenges facing in work place. Investigating the impact of organizational culture in the connection between leadership and employee behavior is vital specifically, from the stand point of immature working climate.

The development strategy of Ethiopia has encouraged significant investments in both labor and capital. Despite the fact that the Federal Democratic Republic of Ethiopia implemented a science, technology, and innovation policy, with a specific focus on increasing the technical capabilities of medium & higher production and service businesses. However, the extent of its implementation, combined with the leadership to create successful employees alongside innovative work behaviors, is not noteworthy (Ayinaddis, 2023). Besides, organizations that provide public services performance in Ethiopia identified several implementation flaws with regard to effectiveness and efficiency (Tadesse, 2019). Ethio-telecom is one of the public service providers that help the development strategy of the nation by improving effectiveness and efficiency in its service delivery. Although the management of the company is in a reform over the past 4 years, evidences suggest that the development of employee individual behavior like creativity is not sufficiently revised and well implemented (Ayinaddis, 2023). To be competitive in the industry employees

work behavior and the attachment of this behavior related to their work environment need to be revised (Zhang, 2021).

The present researcher additionally recognized that there aren't many empirical studies on the topic of this study in our country context. Although, the issue has been the subject of several researches around the globe, investigating on the topic of employee innovative behavior development specifically on technological industries like telecom service providers substantiate the empirical literature from different geographical area and it added a broader aspect to the knowledge. Since there are significant shortages of knowledge on the issue in our country Ethiopia, it was crucial to comprehend the processes by which entrepreneurial leadership impacts workers' innovative work behavior and encourages creative thinking for the outcome of the company. It was in this light that, this study carried out to assess the influence of entrepreneurial leadership on employee's innovative work behavior by examining the mediation and moderation effect of job crafting and organizational innovative culture respectively. Therefore, this study examined the empirical literature gap, contextual gap, and investigated the gap to the literature in this particular area of study. It built a structural equation model that connects the four latent variables indicated earlier.

### 1.3. Research hypothesis

1. Entrepreneurial leadership has a significant influence on employee innovative behavior.
2. Entrepreneurial leadership and job crafting have a significant relationship.
3. Job crafting and employee innovative behavior have a significant relationship.
4. Job crafting mediates in the relationship between entrepreneurial leadership and employee innovative behavior.
5. Organizational culture moderates the relationship between entrepreneurial leadership and employee innovative behavior.

### 1.4.Objective of the Study

#### 1.4.1. General Objective

The overall purpose of this research was to examine the effect of entrepreneurial leadership on employee's innovative work behavior by examining the mediation effect of job crafting and the moderation of organizational culture.

### 1.4. 2. Specific Objectives

1. To investigate the effect of Entrepreneurial leadership on employee innovative behavior.

2. To investigate the effect of Entrepreneurial leadership on job crafting.
3. To investigate the effect of job crafting on employee innovative behavior.
4. To examine the mediating role of job crafting regarding the relationship among Entrepreneurial leadership and employee innovative behavior.
5. To examine the moderating role of organizational culture regarding the relationship among Entrepreneurial leadership and employee innovative work behavior.

### 1.5. Scope of the study

The main focus of this research was to assess the impact of entrepreneurial leadership on employee's innovative work behavior through the mediation and moderation role of job crafting and organizational innovative culture: Case of ethio-telecom head quarter. Even though, there are many ethio-telecom districts in other parts of Ethiopia, this study was delimited only the mentioned study area.

Regarding the participants, the subjects of the study included different level managers, supervisors and technician employee who worked with their leaders more than one year of the selected areas (staffs) under study.

### 1.6. Significance of the study

The following three areas were where the research intends to come up to the literature. The study, first and foremost, added to the existing body of literature on the mediating role of job crafting from the standpoint of self-determination theory by including the influence of external contextual elements, particularly entrepreneurial leaders to individuals' innovative behavior. Second, by recognizing organizational culture as a crucial contingent factor on the interaction between entrepreneurial leadership and employee innovative behavior, the study enhanced the boundary conditions in the process of developing innovative behavior. Lastly examining the subject of creative employee actions in a developing economy like Ethiopia also gave the growing body of literature a more comprehensive perspective.

By providing feedback on the strength and weakness of the public sectors in general and Ethiopian telecommunication as one of them in particular in related with issues under this study, it played a crucial role for the betterment of public sector service provision. Additionally, it suggested useful mechanisms for bringing about the mediating and moderating role of job crafting and organizational innovative culture respectively under the relationship among entrepreneurial leadership and employee innovative behavior for the empirical literature.

Through an examination of a mediator latent variable, job crafting, that influences the relationship between entrepreneurial leadership and innovative work behavior among employees, this study brings an additional dimension to the field of entrepreneurial leadership theory. Last but not least the study also serves as a starting point for individuals interested in conducting additional research on the subject of this study under the topic.

### 1.7. Operational Definition of terms

- **Entrepreneurial Leadership** (EL) - a leader, who is also have the skills of /creation or extraction of economic value/ entrepreneurship.
- **Innovative Work Behavior** (IWB) - the behavior of employee to introduce new and useful ideas in organizational activities and services
- **Job Crafting -** the process of modifying self-position according to self-abilities and qualities
- **Organizational Culture** - beliefs, values, and attitudes of an organization and how they affect how its staff members behave
- **SEM** – structural equation modelling, a model that illustrates how different elements of an issue are believed to be causally related to one another which, facilitates the simple setup and reliable testing of theoretical construct links along with those connecting the constructs and their empirical evidence by researchers.

### 1.8. Organizations of the Study

The study is divided into five chapters. The first one consists of the introduction part including background of the study, statement of the problem, objectives of the study, significance of the study, scope of the study, operational definition of terms, ethical considerations and organization of the study. The second part consisted with the review of related literatures. The next chapter presented the research design and methodology including design of the study, sources of data, samples and sampling techniques. The fourth chapter consisted analysis of data and presentation. The fifth chapter includes research discussion, Findings and recommendations. Finally, at the end of the study report, appendices as well as references are included.

# Chapter Two
# Review of Related Literature

## 2. Introduction

This chapter conducts a literature review, authors' associated viewpoints, previously conducted research, and the main idea being studied in the research thesis, namely Entrepreneurial leadership, employee innovative behavior, job crafting, and organizational culture is assessed. The chapter is organized around empirical reviews regarding variables and theoretical foundations that will aid for the creation of a conceptual framework and fill in knowledge gaps.

### 2.1. Entrepreneurial Leadership

Entrepreneurial leadership incorporates organizing and motivating fellows to innovate, reduce risk, seize opportunities, and manage the dynamic organizational environment in order to achieve a common goal (Iqbal, et al., 2022). Renko et al. (2018) states that, entrepreneurial leadership involves motivating and directing team members to work towards organizational objectives, which call for the identification and exploitation of business possibilities.

Scholars are still trying to define entrepreneurial leadership in a way that is distinct from previous leadership and entrepreneurship theories (Leitch & Harrison, 2018). This definition is pretty close to those provided by Li et al. (2020). But this definition is different because it underlines entrepreneurial leadership as a specific kind of influence which complements the notion of entrepreneurial leadership as a personal talent.

A leadership philosophy called transformational leadership strongly resembles entrepreneurial leadership. Some say that EL is a concept that is unique from current leadership philosophies, despite the fact that transformational leadership (TL) theory has made a significant but unacknowledged influence (Ravet-Brown et al., 2023). Transformational leadership has additionally influenced most entrepreneurial leadership ideas, based up on research on leadership and entrepreneurship (Leitch & Harrison, 2018). The study also states that the measurement items for the two leadership styles are overlapped. On the other hand, Thornberry (2006) asserts that while entrepreneurial leadership and transformational leadership share many similarities, they also have some key differences that the first ever focused on opportunity, creativity, finds like-minded people and is a medium term strategy while the later focused on organization, changing attitude, and is long term strategy.

Entrepreneurial leadership attributes might consist of the following: Inspiration to succeed and challenge; Assuming responsibility along with being responsible; Exercising independence and self-direction; Getting receptive to fresh ideas, people, and methods; A tolerance for vagueness and unpredictability; Versatile and innovative problem-solving, judgment, and management; The capacity to recognize and seize chances; Being alert to the dangers associated with decisions and measures; The ability to control and, eventually, lessen hazards; Perseverance and tenacity in spite of difficulty or the absence of instant rewards; pondering, debating, and developing a vision; The power to have an effect (Johnson, 2001).

In order to appreciate the core concept of entrepreneurial leadership, it is required to know some theoretical developments according to the different meanings of the term (Kuratko, 2016). Wales et al. (2020) connected entrepreneurial theory and research with widely recognized leadership and management techniques. Furthermore, the author argued that conventional leadership theory contains many different notions used in the realm of entrepreneurship.

In earlier investigations, entrepreneurial leadership has undergone investigation with numerous related factors such as Impact of Entrepreneurial Leadership on Innovative Work Behavior (Li et al., 2020); The impact of entrepreneurial leadership on innovation management (Fontana & Musa 2017) and Entrepreneurial leadership and employee innovative behavior (Mehmood et al., 2020). Fontana and Musa's (2017) result showed that entrepreneurial leadership can substantially improve senior and talents of middle-level managers for the entire the innovation process, starting with generation, selection, and development of creative concepts, to the communication and application of the of the concepts in various industries.

The influence of entrepreneurial leadership on innovative work behavior (Li et al., 2020), the effect of entrepreneurial leadership on innovation management (Fontana & Musa, 2017), and entrepreneurial leadership and employee innovative behavior (Mehmood et al., 2020) are just a few of the prior studies that have examined this topic. According to Fontana and Musa's (2017) entrepreneurial leadership can substantially enhance superiors and middle managers' capacities for every aspect of the innovation process, starting with the generation, decision-making, and advancement of innovative concepts to facilitating the exchange and execution of those concepts in various industries.

## 2.2. Innovative Work Behavior

According to Janssen (2000), IWB is the deliberate creation, introduction, and application of new ideas with the workplace function, group, or organization in order to improve the job performance. Individual innovation, according to the opinion of Bagheri et al. (2022), emerged from employee creative thinking, which was frequently triggered by novel opportunities. There was no prior to follow individual innovative characteristics at work were utilized to modify oneself or the workplace to meet work objectives (Robbins et al., 2021).

IWB is complicated and multiple-stage work behavior, according to Scott and Bruce (1994), which includes idea generation, idea promotion, and idea implementation. These behaviors do not have to be carried out in a specific order, and employees are free to combine any of these behaviors at any time, which complicates the IWB process overall (De-Jong & Hartog, 2007).

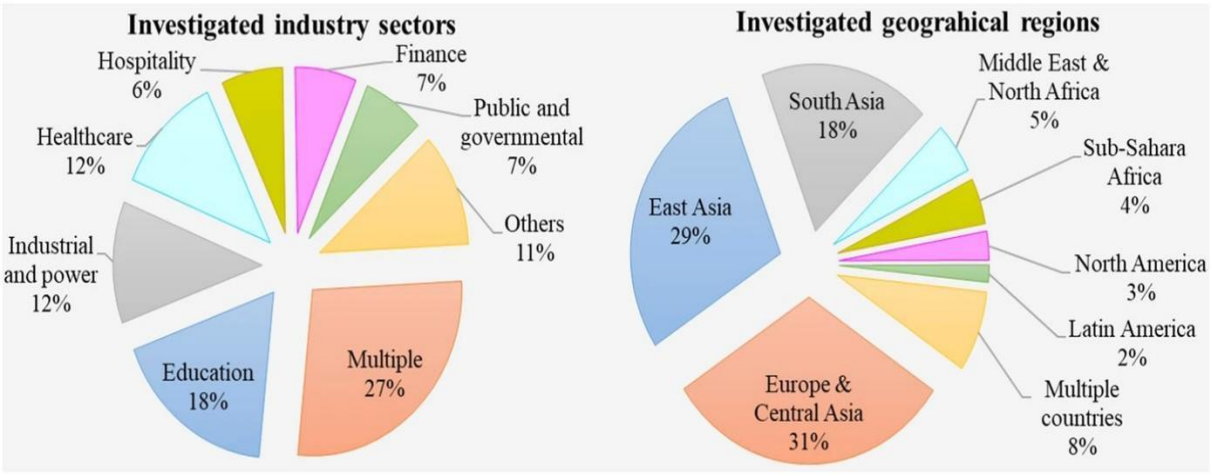
Innovation is the special instrument of the entrepreneur. Entrepreneurs may find opportunities in change to launch new businesses or provide distinctive services (Wu & Lin, 2018). Innovative behavior is defined as increasing creativity with the use of personal problem-solving strategies to create and implement fresh ideas for products and services (Khan et al., 2020). The term "innovative work behavior" (IWB) refers to a variety of behaviors, including creative behaviors such as exploring opportunities and coming up with innovative concepts, as well as behavior aimed at establishing change, integrating novel information, or streamlining procedures to improve personal or organizational performance (Purwanto et al., 2021). Individual innovation, according to Robbins et al. (2021), is characterized as distinct ideas and viewpoints on creativity and adjustments that could encourage organizational innovation or have favorable outcomes. Echebiri and Amundsen (2020) define Individual innovation is a person's deliberate introduction of novel and practical concepts, methods, goods, and procedures into the workplace and contemporary work environment. They state that to bring about major changes in businesses, new ideas are required. Some of these ideas include establishing new procedures, streamlining work flows, utilizing innovative tools, and fostering greater internal and external collaboration. Another author defines innovative work behavior of employees as an intentional approach by staff members to achieving the company's objectives and goals through the development, supervision, and use of creative ideas which can assist the business maintain its competitive edge and guarantee sustainability (Jason et al., 2019).

According to Li et al. (2020), in general, IWB resemble proactive personality, which is concerned with inclinations for participation in affecting their surroundings. An examination of various interpretations of innovative work behavior reveals that it is generally understood to be a multifaceted, complicated independently initiated behavior in which workers deliberately develop, introduce, and implement innovative ideas through intellectual inquiry, recognizing opportunities and approaches, understanding shortcomings in performance, and looking for out new techniques and procedures in order to improve organizational performance both internally and externally during the purposes of generating value, gaining a competitive advantage, and guaranteeing sustainability(Purwanto et al., 2021; Echebiri and Amundsen, 2020). Despite the fact that innovation and creation are sometimes used synonymously, innovation varies from creativity in that it places more emphasis on both the capacity to come up with new ideas and their implementation (Scott & Bruce 1994). As a result, innovation must include the creation of new ideas (Qi et al. 2019). Additionally, innovation does not emphasis starting anything from scratch, which includes utilizing items and procedures from unrelated industries (Scott and Bruce 1994). IWB has been found to have a favorable impact on the company's innovative performance (Sanz-Valle & Jiménez, 2018).

Employees who exhibit IWB have higher levels of job satisfaction (Hunsaker & ding, 2022) and superior performance, which promotes and encourages IWB among workers. Considering numerous scholar discoveries innovations allow public service organizations to provide more effective services and bolsters their abilities to confront and solve the worsening challenges facing society, research studies regarding innovation within the public sector become more and more popular (Chen et al., 2020; Bartsch et al ,.2021; Pradana et al., 2020). Due to the changing environment brought on by globalization and the growing level of corporate competitiveness, creative work behavior needs to be implemented (Woods et al., 2018). This kind of social behavior, critical for the sustainability of organizations (Kim & Koong, 2018), demonstrates the additional benefit that employees provide to the workplace (Supriyanto, 2019). Additionally, the mindset is widespread in businesses that prioritize providing outstanding technological public service, such as telecom service providers, where it's important for staff members to keep up with technology advancements and to continually think creatively.

Research studies on the topic of innovative work behavior in the last ten years have seen a massive increase in the world. The review graphically describes the Breakdown of IWB publications

according to industry sectors and geographical regions. The variation in the industry sectors investigated shows public and governmental institutions are among the least areas. Furthermore, there is variation in the industry sectors and regions that this topic has been investigated as described by AlEssa & Durugbo (2021).




Source: (AlEssa & Durugbo, 2021, P 1177)

***Figure 1. IWB Investigated countries and sectors***

The figure indicates that, in terms of IWB article publishing, Europe and Central Asia have the greatest rates, followed by East and South Asia, the Middle East and North Africa, Sub-Saharan Africa, North America, and Latin America, which have the lowest rates.

### 2.3. Job Crafting

The phrase "job crafting" describes self-driven, proactive strategies to change elements of one's career to better suit their needs, objectives, and abilities. According to Wrzesniewski and Dutton (2001), job crafting is a proactive work practice in which employees adjust the task, relationship, and cognitive constraints of their jobs. Job crafting involves modifying and redesigning a job to keep them demanding, and interesting and encourage employees to complete them (Kim & Koong, 2018; Supriyanto et al., 2020). Job crafting is clearly defined as the cognitive and physical modifications that employees generate within the task or interpersonal bounds of their work in ways that enable them to reinterpret the work's objective and have a deeper, more meaningful experience of it (Wrzesniewski & Dutton, 2001).

When applied from the leadership stage to motivate employees, employee-initiated job crafting tends to be more favorable for the workers and the organization than traditional job-enhancing methods (Dubbelt et al., 2019). Job crafting comprises altering and reorganizing responsibilities in order to sustain effort and promote employee performance (Patiar & Wang, 2016; Kim & Koong, 2018).

**Why job crafting needed?**

The self-determination theory (SDT) based research has offered empirical evidence for the job crafting theory's needs-based approach. Self-determination theory (Ryan & Vansteenkiste, 2023), a well-researched needs-based theory (Ryan & Deci, 2020), claims that individuals have fundamental requirements for autonomy, competence and relatedness. Competence and relatedness are defined as the need to feel a sense of accomplishment from using one's personal abilities and qualities in one's actions.

Basic needs satisfaction via job crafting is associated to psychological and personal well-being (Tims et al., 2022) and meaningfulness of work (Byrne et al., 2017). Based on the theory, there are several presumptions on the ways in which human needs influence behavior in different ways. According to SDT (Ryan & Vansteenkiste, 2023), everyone has the same fundamental needs (such as the desire for competence, relatedness, and autonomy), but how well those needs met determines how people behave. However, needs are insufficient to account for variations in employee behavior, and more particularly, needs do not account for all variations in how employees create their jobs (Tims et al., 2022).

Job Crafting Theory, as previously described, asserts that the path to purposefulness at work is influenced by how much control people have over their tasks (task crafting), how they view their work's purpose (cognitive crafting), and how they interact with others (relational crafting) (Wrzesniewski & Dutton, 2001). The theory does not take into account how the work environment or leadership affects how employees craft their jobs.

According to Tims and Bakker (2010), job crafting may be carried out in four distinct dimensions: - (1) increasing structural job resources, (2) social job resources, (3) Increasing challenging job demands, and (4) decreasing challenging job demands. According to Wrzesniewski and Dutton (2001), job crafting is a proactive work behavior in which employees initiate modifications to the task, relationship, and cognitive constraints of their employment. The job demand and resource model (JD-R) was used to define job crafting from the standpoint of job needs and resources in

order to address the challenge of creating a single scale to measure job crafting across industries (Tims & Bakker, 2010).The JD-R model defines job demands as those aspects of a profession that require certain physical or mental effort and are therefore associated with certain costs, both psychological and physical (Demerouti et al., 2001). The authors explained that, employees can use this model to their advantage when they design their jobs through increasing challenging job demands and lowering hindering job demands (Demerouti et al., 2001). When employees design their jobs, they increase a structural and/or social resource, which improves job performance (Tims & Bakker, 2010). Therefore, having a lot of job resources at work is really important. When a staff member feels that what they do isn't giving them adequate opportunity, they look for job difficulties; they strive to tailor their employment by adding more difficult tasks. Regular job enrichment measures, which are imposed from above to motivate staff, are less beneficial for employees and the company than employee-initiated job crafting (Dubbelt et al., 2019).

When particular job crafting dimensions are taken into account, different outcomes are obtained. According to Rudolph et al. (2017), higher demanding job demands were linked to further assessed job performance, whereas decreased impeding job demands were linked to turnover intention. Additionally, the outcomes of the relative weight meta-analysis show the distinctive connections between the four job crafting characteristics and various job outcomes (Rudolph et al., 2017).

### 2.4. Organizational culture

According to (Repetti & Wang, 2017), organizational culture is the shared value of all organizational members. This includes a team-oriented emphasis, human orientation, member commitment, unit integration, control, risk tolerance, conflict tolerance, reward standards, an open system focus and means-target orientation. Organizational culture is a group's standard for shared values and conduct (Azeem et al., 2021). Organizational culture is defined by Schein (1993) as, “a set of common fundamental beliefs that a group developed as it worked through issues of internal and external integration. These beliefs have proven to be effective enough for the group to consider them legitimate and, as a result, to be taught to new members as the proper way to view, consider, and feel about those issues. Advances in Social Science, Education and Humanities Research, volume 344 466”.

Based on research on the relationship between organizational culture and creativity and innovation, it appears that innovative behavior between employees of an organization can be most effectively stimulated by this factor (Khan et al., 2020). On the other hand, the behavior of a leader is adopted

by the followers, who eventually make it their organization culture. The leader may also be dominated by the organizational culture thus adapt their leadership style as a result. Consequently, according to Zheng et al. (2019), both the leader and the organization's culture have an impact on each other. Therefore, there is a bidirectional interaction among leadership and culture; leadership shapes organizational culture, which subsequently supports specific behaviors of leaders (Khan et al., 2020).

The organization's dedication to a collaborative atmosphere, a free restriction environment, the development of a strategic plan, a strong technical group; and sufficient finance are all related to culture aspects (Azeem et al., 2021). Such an influencing constraint in organizational job process has been investigated and result a significant effect with its different orientations. While conventional culture moderates the relationship between the demand for influence and imaginative thinking, innovative culture moderates the relationship among the need for achievement and creativity (Krishnakumar, 2017). Cooperative culture moderates the relationship between the demand for affiliation and innovation (Hon & Leung, 2011).

One of the purposes of this study is to analyze the effects of an entrepreneurial leader on inventive work behavior by utilizing the concept of person-culture fit to investigate when and how much cultural orientation affects entrepreneurial leadership and employee creativity correlation. To investigate this topic, the researcher creates an integrated theoretical framework with the goal of comprehending how entrepreneurial leadership interacts with specific organizational cultures in order to achieve the best congruence on innovative behavior. The concept of this framework is that as employees' work environment in the form of organizational culture corresponds with their leaders' entrepreneurial orientation, they are more likely to be influenced and more willing with their job and have the capacity to find creative ideas (Kim et al., 2009). As a result, the researcher believes that an employee's motivation to be creative is affected by organizational culture that meets their basic requirements.

### 2.5. Theoretical Framework

**Social exchange theory**, which postulates that value creation is contingent upon social interaction, is the most frequently applied theory in IWB studies. It is used in over half of the research findings that employ social theories (Cook et al., 2013). Interest in IWB scholarship is also sparked by theories related to work and organizations (Cropanzano et al., 2017). Interesting framings for IWB

can also be found in leadership theories. Motivational theories typically focus on aversion or desire and offer strategies for inspiring workers to achieve specific goals (Meira & Hancer, 2021).

"A theory of individual creative action in multiple social domains" states innovative and repetitive actions are illustrations for contrasting behavioral possibilities which might be impacted by several social action categories at once (Ford, 1996). This theory adds to the existing research on innovation by demonstrating the ways in which deliberate activity and the mechanisms for adaptation which justify activity combine to promote creativity and innovation.

**Self-Determination Theory**, formulated by Deci and Ryan (Deci & Ryan, 2022), is a social-cognitive theory of motivation that is frequently applied in organizational research. Deci and Ryan (1985) proposed that essential demands of the workforce are need for relatedness, need for autonomy, and need for competence. When an employee is fulfilled with these needs, it creates feelings of happiness at work that initiate autonomous motivation, which generates a creative work behavior (Deci & Ryan, 2022). According to the theory, everyone has an innate need to feel competent—the ability to use one's own abilities and skills to achieving objectives establish relationships and connections with other people—and to exercise personal experience in life, determinations, and thinking. The self-determination point of view describes the impact on the employee inspiration from external factors like leaders; it generates peculiarity and attracts creative thinking among staff members, which inspires to reveal innovative behavior (Zhang & Yang, 2020).

Self-determination theory (SDT) is an explanation of human motivation and personality in social situations that is obtained from experiments (Deci & Vansteenkiste, 2023). It makes a distinction between controlled and autonomous motivation. SDT represents a broad framework for the study of human motivation and personality. Research studies have applied SDT in many domains, including education, organizations, sports, physical activity, and so on (Olafsen & Deci, 2020).

In the context of organizational and work theories According to job crafting theory, workers are driven to switch jobs for two reasons: (1) innate needs, like self-determination, social contact, and a positive self-image; and (2) a desire to develop one‘s identity and sense of purpose through activities and experiences (Wrzesniewski & Dutton, 2001). Empirical evidence bolsters the theory by demonstrating the positive correlation between job crafting behavior competence and self - determination needs like (Liu et al., 2023; Bakker & Oerlemans, 2019; Holcombe, 2016).

## 2.6. Empirical Studies

### 2.6.1. Entrepreneurial leadership and innovative behavior

Entrepreneurial leaders serve as the primary planners and administrators who identify opportunities, gather supplies needed to look for alternatives, establish an innovation approach to coordinate supplies for the exploitation of advantages, and create an organization suited to carrying out a strategy for innovation (Iqbal et al., 2022). Scholars propose numerous leadership theories and approaches to leadership to deal with and oversee various organizational scenarios (Luu et al., 2019; Guo et al., 2022; Wang et al., 2017). While defining and discussing various characteristics of leadership authors also note that some of these attributes are essential and that a leader must have these skills to successfully address a phenomenon in employee creative behavior for organizational change (Arikan, 2020). The study shows that leaders inspire employees to generate their staff to investigate ambitious ideas with new perspectives and allow them to discuss them thoroughly for improvement.

Entrepreneurial leadership boosts creativity, according to Different empirical and theoretical evidence across the business industries (Bagheri et al., 2022; Echebiri & Amundsen, 2020; Fontana & Musa, 2017). According to Fontana & Musa (2017) EL has to be capable to inspire people to constantly see possibilities and seize them, as well as to be imaginative and quick to respond to change. According to Bagheri et al. (2022), EL is a powerful motivator for fostering and enhancing workers' innovative work practices in a competitive business environment. By assisting their team members in developing and implementing fresh ideas, an entrepreneurial leader can successfully manage the innovation process in a difficult business climate (Iqbal et al., 2022). According to the leadership theory, entrepreneurial leaders encourage and enable their group members to abandon the traditional method of doing a task in favor of putting their energy into the execution of creative and entrepreneurial actions depending on their functional abilities (Kadwa & Barnard, 2019). By integrating people in the creation of fresh, original ideas and boosting their confidence to put these ideas into practice, entrepreneurial leaders also alter their followers' perspectives of their members' competencies (Malibari & Bajaba, 2022).

As stated by Leitch et al., (2013), Entrepreneurial leadership (EL), in association to other leadership styles, has received a lot of academic research in the last twenty years in the fields of business and entrepreneurship. In addition, a study by Amankwaa et al. (2019) provided an in-depth entrepreneurial leadership theme, suggesting that this leadership directs and influences group

members' synergistic performance toward achieving organizational goals related to identifying and taking advantage of uncertainties, which has an impact on EL's success. A number of research studies have identified EL as one of the most significant variables influencing innovative behavior, and pointed out how crucial it is in encouraging and developing innovation in an extremely evolving and competitive business settings, based on a concept of "cast enactment" in EL theory suggested by Leitch et al. (2013). As a result, it is vital to comprehend the mechanisms whereby EL affects workers' inventive work behavior and boosts organizational performance in innovation (Iqbal et al., 2022).

On the other hand, Researchers have debated the viability of various leadership styles within the workplace enhancing innovation, primarily because broad leadership styles (e.g., transactional/ transformational) they do not intend expressly to foster and support employees' innovative work behavior (Herrmann & Felfe, 2013). In addition, this method of leadership does not specify the particular qualities and behaviors; leaders must exhibit in order to steer the procedure for creativity with new idea formation and execution in the process at the organization (Akbari et al., 2021 & Douglass, 2018). Leaders must learn creative leadership capabilities to inspire innovative behaviors and steer the innovation procedure within the organizations (West & Anderson, 1996).

The scientific research on EL has also recognized that Entrepreneurial leaders do more than just generating novel concepts on their own moreover they also enable and motivate their staff to establish their expertise in tackling difficult problems and accomplishing demanding tasks in innovative means (Bagheri et al., 2022). Again, Echebiri and Amundsen (2020) suggested that, Employee innovation cannot be constructed on its own, but leaders may build it by assisting and motivating their team members during the process of innovation. Although numerous researches have examined the crucial role that leadership plays in fostering innovation, little is known about the various leadership ways that might successfully foster employees' innovative work behavior and creativity at work (Hansen & Pihl-Thingvad, 2019). Further, research on leadership is inconsistent because some of it claimed an excellent association among various leadership ways and employee's innovative behavior (Wu et al., 2018). While a literature by Pieterse et al. (2009) suggested a relationship amongst the two parameters is low or negligible.

Empirical evidence, Fontana and Musa (2017) suggests that entrepreneurial leadership enhances innovation of the employees across the business industries. The literature indicated that EL must be able to inspire individuals to consistently spot and seize chances, to be imaginative, and to

adjust quickly to changing circumstances. The authors state that by fostering idea generation, idea selection, idea development, and idea diffusion—commonly known as the innovation management—through its aspects, entrepreneurial leadership improves the creative and inventive work of an organization (Fontana & Musa, 2017). The numerous facets of an organization's interaction to its environment have to be in harmony with innovation and entrepreneurship for creativity to flourish (Fontana & Musa, 2017).

In this regard, leaders act as a source of the power and a significant factor affecting workers' inventive behavior (Miller & Miller, 2020). As a result, the nature of connections and engagements between leaders and employees is related to the creation and execution of creative projects (De Jong & Den Hartog, 2007). Entrepreneurial leaders create an inviting and stimulating atmosphere that encourages all employees to view innovation as an integral part of their daily work and to be resilient in the face of the challenges that innovation-related endeavors bring (Akbari et al., 2021). According to Bagheri's research from 2018, EL significantly influences how inventive employees behave. Bagheri & Akbari (2022) found evidence that EL significantly influences nurses' development of innovative behavior in hospitals. According to Newman et al. (2018), managers who use the EL method in their work performance greatly encourage innovative behavior in their staff members. In conclusion, a business leader who encourages the creation and adoption of creative concepts among their team members can effectively guide the innovation activities.

Invention, originality, and the creation of fresh ideas constitute a few of the most enticing traits of entrepreneurial leaders. To be useful and, in the case of business, capitalized on, these concepts have to be capable to be transformed into beneficial goods or services (Drucker, 1985). Otherwise, they stay just that—ideas. Very few studies have looked at the type of managerial approach which is most successful at improving innovation (Hansen & Pihl, 2019; Walker et al., 2015; Herrmann & Felfe, 2013), despite the significance of exploring which managerial approaches and behaviors successfully improve innovation and chances for awareness both at the individual stage and organization stage (De Jong & Den Hartog, 2010). However, an increasing amount of research (Bagheri et al., 2022; Fontana & Musa, 2017) demonstrates that entrepreneurial leadership is a management approach and behavior which strongly encourages and fosters innovation.

According to (Bagheri et al., 2022 & Douglass, 2018), entrepreneurial leaders' operational abilities encourage followers to purposefully inspire and stimulate their staff members to act in a novel way, which affects them to become more receptive to that creative environment produced by their

leaders. By allowing them to openly contribute original and creative company ideas, entrepreneurial leaders help others gain confidence (Li et al., 2020). As an illustration, (Sendze, 2019) claimed that there is a substantial connection between EL behavior and an organization's innovative surroundings. This environment has a contextual impact on employees' behavior in their jobs, supports employees in their innovative challenges; and inhibits them from becoming reactive (Shanker, 2017). As a result, entrepreneurial leaders create an environment that is potentially inventive and encourages their followers to be creative and come up with new solutions to problems they encounter at work (Gupta et al., 2004).

### 2.6.2. Entrepreneurial leadership and job crafting

Different researches have investigated the connection that exists among various leadership styles and job crafting that proves a related hypothesis. For example, Naeem et al. (2020) and Wang et al. (2017) discovered that transformational leadership is a substantial indicator of job crafting. A study by Guo et al. (2022) also discovered Inclusive leadership is positively related to employees' job crafting in the form of (a) increasing structural job resources; (b) increasing social job resources; (c) increasing challenging job demand. Another study by Luu et al. (2019) discovered that an entrepreneurial orientation, which is an antecedent of ambidextrous leadership, is a predictor of job crafting. According to prove studies, conducted by Khan et al. (2022) servant leadership which is, indeed relation-based leadership, impact on employee work crafting behavior.

Based on a research study conducted by Holcombe (2016), leadership qualities must be considered as essential theoretical prerequisites for job creation. The transformational leadership idea (Amankwaa et al., 2019) states that managers can encourage employees to act on effort by considering their unique situation and sharing their ultimate goal. In accordance with the social exchange theory (Cook & Rice, 1995) and behavioral support, receiving help from leaders fosters employee innovation (Pieterse et al., 2009), organizational citizenship practices (Patiar & Ying, 2016), and implementation of ideas (Ravet-Brown et al., 2023).

The environments and cultures required for effective job crafting can be fostered by leaders (Guo et al., 2022). It's even possible for managers to provide guidance and instruction to staff employees as they go about creating productive jobs with their team members (Holcombe, 2016). According to the author, managers can encourage motivation and opportunities for work crafting by creating

conducive environments through empowerment and trust. Spreitzer (2007) asserts that a leader can inspire subordinates by instilling in them an understanding of worth, proficiency, independence, and significance. Employees thus only decide to behave in a specific manner when they are aware of how their bosses will respond and are comfortable about this anticipated reaction. Innovativeness, adaptability, a willingness to learn, and inspiring spirits are traits and behavior of entrepreneurial leaders who offer their team members the freedom and empowerment to create their own jobs (Naeem et al., 2021).

Research has shown that employees' innovative behavior is positively impacted by entrepreneurial leadership, since it increases their sense of significance and influence (Miao et al., 2017). Entrepreneurial leaders encourage follower's opinions; allow them to participate in decision-making, and offer them with appropriate a resource, which increases followers' power over the task (Hetland et al., 2018). According to Malibari and Bajaba (2022), entrepreneurial leadership influences Self-perception of members, which subsequently drives them to develop feeling of ourselves towards their profession. Entrepreneurial leaders may assist staff members bring about improvements, generate new ideas, and link particular activities or positions to the overall goal of the company. The company's goals and challenges are always changing and need to be crafted within the organization due to the rising unpredictability (Tuan et al., 2019). Thus, based on these discussions.

During the previous few decades, the Ethiopian Federal Government has launched a series of public-sector development programs. Preliminary research and findings, however, suggested that such initiatives were falling far short of their goals of increasing the functional effectiveness and productivity of the public sector at its intended level (Tadesse, 2019). Bartsch et al. (2021) states that the traditional way of involving employees, who engage in public service organizations, complicated procedures and rules of the service which can cause long delays and unproductive outcomes. The necessity for a workforce that is adaptable, problem-solving, forward-thinking, and creative is critical, and leadership that can foster the development of those people to deliver high-quality services to the public is essential (Wu et al., 2018). Exploring the topic of innovative employee behavior on the mechanisms and constructs to provide new frameworks to guide thinking and action for the successful and ideal employees of public firms is relevant (Jason & Geetha, 2019). Few researchers have specifically addressed the problem from the standpoint of a developing country (Harrison et al., 2017). A research study by Sendze (2019) states that the

requirement of a qualified and competent workforce is enormous, and there is an urgent need for a leadership development program to prepare leaders to offer the public high-quality services.

### 2.6.3. Job Crafting and Innovative Work Behavior

Employee innovative behavior encompasses both the development and application of ideas. Employees become dependent to mental activities in the initial stages of innovative work behavior. Employees must be fully engaged within the sociopolitical procedure in order to engage in innovative work behavior in the subsequent stage. Through job crafting, employees carefully contemplate job opportunities that promote professional results and improve those workplace demands that exhaust their potential and make them anxious (Tian et al., 2021). As side to increasing the reservoir of cognitive resources, job crafting may also encourage the desire for personal development (Dubbelt et al., 2019). Accordingly, Wrzesniewski and Dutton (2001) contend that participation in job-crafting activities is encouraged in order for employees to create and maintain a good self-image. Entrepreneurial leaders' fundamental behaviors may increase the likelihood that those who follow them will take an active role in building up structural job resources in order to preserve the organization's goals by emphasizing engagement in decision-making and supporting the exploitation of novel ideas. This is in line with the needs of members for a potential self-image for a favorable future.

The relationship between job crafting and creativity has been demonstrated by earlier empirical research and meta-analyses (Lee & Lee., 2018; Zhang & Parker., 2019). As anticipated, job crafting encourages workers to put in effort to advance projects and generate fresh concepts for enhancing workflows (Tian et al., 2021). The author states employees who craft their jobs modify tasks or relationships, build different resources for the job, and lessen demands that are impediments. Employees could search for challenges (such as taking on a new project), increase resources (such as requesting more information), and decrease demands (such as minimizing demanding aspects of the job) in order to better suit their individual needs and abilities. Job crafters can modify their demands or resources accordingly (Tims et al., 2012). Job crafting behavior is suggested to encourage the social and political process, which in turn helps motivate and promote innovative work behavior. The research conducted by Khan et al. (2022) indicates that the resultant favorable feelings acquired from components of job crafting (increasing both job resources and challenging job demands) and permits the employees to preserve resources.

Additionally, the authors found that employees with more resources will be less stressed compared to those with fewer resources. Job designing fosters good feelings by boosting both job resources and demanding job expectations (Costantini & Sartori., 2018), which expand the employee's toolkit of thought-action combinations.

Employees actively seek out job prospects using job crafting that enhance job objectives and reduce the work environment that reduce their mental capacity and cause individuals' distress (Tian et al., 2021). Employees that participate in job crafting activities increase both structural and social job resources, as demonstrated by the research Guo et al. (2022). Job crafting can stimulate an urge for individual advancement as well as expanding the pool of mental capacities (Dubbelt et al., 2019). Workers can use resources to proactively search for opportunities to transform change into an effective and engaging experience as they don't feel trapped in the current processes as the authors explained. In conclusion, it is claimed that job crafting conduct can support the sociopolitical process since the resultant positive feelings and resource preservation enable workers to be inspired and create innovative work behavior. Thus, it is logical to suppose that job crafting motivates employees to demonstrate dedication to further work and generate novel concepts for improving work processes.

### 2.6.4. The Mediating Role of job crafting

The causal stages approach is a statistical mediation analysis technique that draws from the seminal work of Baron and Kenny (1986). The dependent variable must first be considerably impacted by the impartial variables. Then, the proposed mediating variable is significantly impacted by the independent variable. After adjusting for the independent variable, the mediating variable should have a substantial impact on the dependent variable. Lastly, when the mediating variable is included in the model, the relationships between the independent and dependent variables ought to be reduced (Baron and Kenny, 1986).

Recent research (Li et al., 2023; Guo et al., 2022; Supriyanto et al., 2020; Dubbelt et al., 2019) shows a consequent rise in the association among job crafting and work engagement, creativity, performance, and innovative work behavior. Despite the good impact on the lives and well-being of employees as well as the success of the company, research on job crafting has raised questions about how to further the practice (Supriyanto et al., 2020). The relationship between other forms of leadership, such as servant leadership (Khan et al. 2020), inclusive leadership (Guo et al., 2022)

and spiritual leadership (Supriyanto et al., 2020), and innovative work behavior is found to be mediated by job crafting. However, there is no evidence to support the idea that entrepreneurial leadership and innovative work behavior are also mediated by job crafting.

According to research by Naeem et al. (2020), team leaders were more likely to model work craft behavior for team members since they existed in close communication to them, making it easier for team members to copy their actions and being persistent to their job. Workplace diligence will complement the traits of the leader who leads, resulting in creative work practices (Mahendri et al., 2022). Based on these results of research, the study hypothesis is supported by the idea that better leader-follower connections result in more positive results (Atwater & Carmeli., 2009). Employees are also exceptionally driven to engage in extra-role behaviors which produce, promote, and implement innovative ideas when they have positive interactions with their leaders (Tian et al., 2021). With the development of job crafting (VanWingerden et al., 2015), leaders have a crucial role in motivating staff members, changing work practices, improving performance, and enhancing task enjoyment. Thus, it creates positive environment for the employee to inspire and engage in innovative activities.

A study that combined the self-determination theory with the self-leadership model discovered that the favorable impact of self-leadership over autonomous motivation could be strengthened and job crafting further encouraged by leader empowering conduct (Li et al., 2023). According to the study, investigating the connection between job crafting and self-leadership—which is defined as "a self-influence process through which individuals achieve the self-direction and self-motivation necessary to perform" (Neck & Houghton, 2006) has significant theoretical and practical ramifications. Therefore, the authors hypothesize that self-leadership may have a positive impact on job crafting, a particular type of proactive work behavior (Khan et al., 2021). In light of that notion, this study makes the case that a worker under the direction of an entrepreneurial leader, leaders need to make sure that their staff members have the skills necessary to lead their own businesses, investigate ideas that can stimulate innovation (Fontana & Musa, 2017), can help individuals to become more self-directed and motivated, which allows them to adjust their work and be innovative.

According to Wrzensniewski and Dutton (2001), each of the SDT demands for autonomy, relatedness, and competence are strongly connected to the desire to participate in work crafting. According to Dubbelt (2019) and Wrzensniewski and Dutton (2001), employees are inspired to

take part in job crafting because they want to feel like they have some influence on their work (autonomy), form lasting, positive relationships with each other (relatedness), and look for challenges and activities that will allow them to demonstrate their skills and become their full selves at work, including reaching their innovative and intellectual potential. It is expected that spirituality could boost employees' natural drive to participate in job crafting in regards to achieving the goal of the fulfillment of all three SDT needs, which eventually results in the improvement of work efficiency and creativity. This is based on the link between job crafting and each of those SDT needs.

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### 2.6.5. The Moderating role of organizational culture

Success measured from the impact of organizational culture, which fosters an apparent social force that motivates workers and propels the business toward outstanding results (Shanker et al., 2017). Both the organization and the leader are impacted by organizational culture (Zheng et al., 2019). As a result; there is a reciprocal relationship between leadership and culture. According to Giritli et al. (2013), leadership shapes organizational culture, which in turn supports specific leader behaviors.

According to Reference (Krishnakumar, 2017), culture has an impact on innovation since it defines models related to uniqueness, separate efforts, group actions, and perceptions and behaviors around possibilities and risks. The study discovered the fact that interaction within the independent and criterion variables is weakly moderated by organizational culture, and that the relationship among human resource practices and innovation is inversely correlated with the degree of strength and non-flexibility of the organizational culture.

Human resource management and corporate behavior have both made extensive use of person-environment (PE) fit theories (Pudjiarti & Hutomo, 2020; Kristof-Brown & Guay, 2011). The relationship within a person and their workplace is referred to as the PE fit (Kristof-Brown & Guay, 2011). The authors determined various types on PE fit, comprising person-job, person-culture, and person-career fit, are influenced by the workplace environment. Although an organization's culture is able to improve or inhibit workforce innovation, this research focused on person-culture fit as one from a number PE fit components used in this research (Pudjiarti & Hutomo, 2020). An individual's social paradigm or interactions may have a major impact on the

person's behavior, according to the essential premises that support the application towards the person-culture fit concept (Lounsbury et al., 2021).

**Employee Creativity as a Result of Person-Culture Fit**

According to reviews of creativity research, organizational culture should be a crucial component in determining employees' levels of inspiration for creative idea (Zhou et al., 2022; Woodman et al., 1993). In this context, we look at the three types of organizational culture mentioned earlier: creative culture, cooperative culture, and traditional culture. In the most general sense, an innovative culture embodies a results-oriented, risk-taking, exciting, challenging, and entrepreneurial work environment (Scaliza et al., 2022). This culture is thought to encourage creativity by means of the significant signals it provides out concerning norms and values that demonstrate it is secure for employees to engage in the exploratory, risky, and error-prone activities related to creativity (Zhou et al., 2022).

Different cultural orientations give different outcome as examined by several literatures. A research study by Hon and Leung (2011) demonstrates that the relationship between the passion for success and creativity is moderated by innovative culture, the relationship between the demand for power and creativity is moderated by traditional culture, and cooperative culture moderated the relationship between the desire for attachment and innovation. Another research study by Krishnakumar (2017) indicates that a collaborative culture does not have a substantial function as a moderator in the relationship between entrepreneurial leadership and project innovative thinking.

The desire to investigate and implement novel concepts across the business is also encouraged by the innovation atmosphere, according to studies by Wang et al. (2017), and Park and Lee (2017). Employee impressions of an organization's environment that encourages risk-taking behavior, provides adequate resources, and stimulates competition can all be included under the umbrella term "climate for innovation" (Scott & Bruce, 1994). Additionally, Sendze (2019) suggested that there exists a positive association amongst EL behavior and an organization's creative climate, which influences workers' behavior in the work environment situational, supports employees' inventive challenges, and hinders their ability to remain proactive. Because of this, Entrepreneurial leaders create an atmosphere that is supportive of innovation, which not only motivates but also enables their employees to come up with original solutions to challenges at work (Mehmood et al., 2020).

According to self-determination theory, exterior contextual elements have an influence on how individual factors affect employee motives and behaviors (Deci & Ryan, 2022). The authors explained that external contextual influences typically have an impact on the development of autonomous motivation by meeting people's basic psychological needs. Organizational culture is a contextual aspect that is significant because it can help create a supportive, autonomous work environment that has been shown to produce beneficial work behaviors and outcomes of innovation (Azeem et al., 2021). Hence, as a subset of interpersonal inspiration, autonomous motivation describes people's psychological need to act based on their own free will and decision.

This study also responded to the call for studies (Zhang & Yang, 2020) to investigate how and when organizational culture moderates the relationship between entrepreneurial leadership and employee innovative behavior in the SDT perspective (Zhang & Yang, 2020). As a result, this study proposes that organizational culture moderates in the relationship between the two variables.

### 2.7. Conceptual Framework

A conceptual model created to address the research objectives, which included the following: employee inventive behavior as the dependent variable, job crafting and organizational culture as the mediating and moderating variables, and entrepreneurial leadership as the independent variable. The model is created to help to direct and ground researchers, depending on diverse theories that mentioned on the theoretical review and practitioner understanding facets, and also based on the researcher would argue will be appropriate and significant to explore regarding a study problem (Lester, 2005)

The conceptual framework presents a visual flow chart of the crucial components in the argument of the research based on the theories previously discussed in the theoretical review and the empirical reviews. In this study, Entrepreneurial leadership is the independent variable; Employee innovative behavior is a dependent variable; Job crafting is mediating and Organizational culture is moderating variable. As a result, the structured variables that are apparent below are the basic significant, independent variables that could directly influence innovative work behavior, indirectly through the mediating role of job crafting, and the moderating influence of organizational culture measurement.

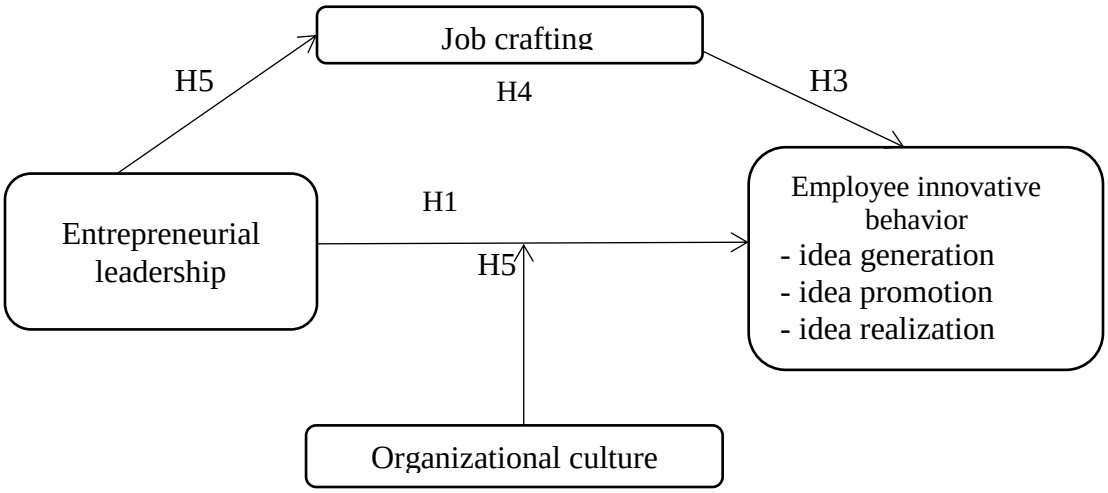



***Figure 2. Conceptual model***

***Source: self developed, (2023)***

# Chapter Three
# 3. Research Methodology

## Introduction

This chapter covers the research design, approach, data sources, sample sizes and sampling methods, data collection tools, data collection processes, and data analysis methodologies.

### 3.1. Research Design

The main purpose of this study was to assess the effect of entrepreneurial leadership on employee's innovative work behavior through the mediation and moderation role of job crafting and organizational culture respectively in ethio-telecom head quarter at Addis Ababa. To establish the causal connections between those variables, the study applied an explanatory research design. This design adopted to examine and investigate how and why Entrepreneurial leadership influences employee innovative behavior through job crafting (Babbie, 2016; Saunders et al., 2018).

The research used a structural equation model (SEM) to show how the four key factors, including Entrepreneurial Leadership, employee Innovative Work Behavior, Job crafting, and Organizational culture, are connected to each other. The SEM path analysis explained the relationships between variables (Areaway, et al., 2018).

### 3.2. Research Approach

The study applied a quantitative approach, which is used to demonstrate the connections among and impacts on the variables within the study. By analyzing the relationship between factors, this research approach can be used to test objective ideas in the research (Anderson et al., 2018). By looking at a sample of the population under investigation, the survey offered a numerical or quantitative picture of population dynamics.

### 3.3. Sampling Design

#### 3.3.1. Target Population

The total population for the study was 6474 as of the human resource office data of the ethio-telecom. However, due to the inconvenience to take the sample from the whole population, the researcher targeted the population according to the field divisions and management levels of the organization in the head quarter.

There are three primary fields in ethio-telecom, including commercial, technical, and support fields, also the management levels in to five, such as, the level of the CEO, Director, Manager, and

Supervisors. The study's target population consists of managers of the staff 130, supervisor's level of 580 and the technical level employees of 3978 as the human resource office of the organization inform on. Therefore, the target population for this study became 4688.

*Table 1:Target Population*

| target | Employee level | Employee Number |
|---|---|---|
| 1 | CEO, CO & Director | 130 |
| 2 | Manager and Supervisor | 580 |
| 3 | Technical level employees | 3978 |
| Total | | 4688 |

### 3.3.2. Sample Size and Sampling Determination

Daniel's priori Sample Size Calculator, an instrument useful for the appropriate sample size calculation of Structural Equation Models (SEM) was applied to determine the amount of sample in this study. Both the minimum sample size needed to distinguish the desired effect with the minimal sample size needed given the model's structural complexity was provided by the calculator. Based on these calculations the minimum sample size for this research study was 200.

The study also used Yamane's (1967) formula that provides a simplified method to calculate the sample size.

Sample size (n) = N

$1+N\,(e)^2$

=369

Therefore, 369 people from the total population were selected to participate for the survey.

### 3.3.3. Sampling Techniques

The Techniques employed to select the study area and research participants was cluster sampling and random sampling techniques. As mentioned above the researcher selected one governmental organization (Ethio-Telecom) headquarters. Hence the management level of the organization was selected by using cluster sampling technique according to the availability of the respondents and the best suited sample helped to get a reply to the survey instrument. The total population within the selected study organization (Ethio-Telecom) was relatively large, therefore to manage the researcher time properly and well, except main managers, the other respondents and key informants was selected by using random sampling technique from the target population.

### 3.4. Sources and Methods of Data Collection

As to achieve the stated objectives of this study, the sources of data in this study were employed primary and secondary sources. The sources of primary data were managers, supervisors and technical employees of the selected study area. The sources for secondary data were related documents of Ethio-telecom, research documents, on line sources and any written documents those related with issue under this study.

For the purpose of collecting appropriate data, a questionnaire data collection tools were implemented:

**Questionnaire:** "A questionnaire is widely used as one of data collection tools, in particular to collect data on phenomena which are not easily observed, such as attitudes and self-concepts" ( Selinger and Shohamy, 1989). The questionnaire was used to collect information from supervisors and other staffs (employees). The questionnaire item sources were literature related with the area and previous studies that are standardized.

### 3.5. Measurement scale

All the items in the questionnaire was measured by a five-point Likert frequency scale ranging from 1 to 5: 1 ("strongly disagree"), 2 ("disagree"), 3 ("neither agree nor disagree"), 4 ("agree"), and 5 ("strongly agree").

***Instrument Design and Measurement***

Employees received the questionnaire in hard copy format. This made it possible to include more workers which have no access to soft copy or on-line formats.

- **Entrepreneurial Leadership**

This study employed an eight-item ENTRELEAD measuring scale developed by Renko et al., (2015). The test questions assessed how well the leaders could inspire and guide employees to become innovative. "My manager challenges and pushes me to act in a more innovative way," is an example of one of the items.

- **Innovative Work Behavior**

Employees' innovative work behavior assessed by a nine-item measuring scale developed by Janssen (2000), which assesses by using 3 dimensional items: (1) idea generation, (2) idea promotion and (3) idea realization each with three items. The test questions assessed how well the employees could come up. Both the participants (self-reports) and their leaders (supervisor-reports) will answer the 9-item IWB measure.

- **Job Crafting**

A four-dimensional scale created by Tims et al., (2012) was employed in the study to assess particular behaviors: 1) Increasing job resources in a structural way (e.g., "I try to develop my capabilities"); 2) Increasing job resources in a social way (e.g., "I ask colleagues for advice"); 3) Increasing job demands that are challenging (e.g., "If there are new developments, I am one of the first to learn about them and try them out"); and 4) Reducing job demands that are impeding an employee's ability to perform their job (e.g. "When there is not much to do at work, I see it as a chance to start new projects".

- **Organizational Culture**

There is no question that culture and climate are related ideas because they both define employees' interactions with their organizations (Patterson et al., 2005). The literatures on culture and climate essentially address the same phenomenon (Denison, 1996); Climate relates to a scenario and is related to organizational employees' behaviors, thoughts and feelings.

As this research study emphasized on behavior of individual employees, organizational cultures that observed in this research was according to Organizational Climate Measure (OCM) drawn by Patterson et al., (2005). For this research relevant organizational culture measurement items were used from Open System Model of 3 dimensions: Innovation & Flexibility, Outward Focus and Reflexivity. A sample item is "New ideas are readily accepted here". The model was preferred according to the eagerness, change, and innovation, while values and principles are related with growth, acquiring resources, creativity, and adaptability (Patterson et al., 2005).

**Control variables**: this research took, demographic variables such as age, education level, gender, and job position, controlled as such variables affect the creativity and innovative behavior of individuals (Shalley & Gilson, 2004).

### 3.6. Method of Analysis

The information from the instruments gathered was encoded. The coded data examined through descriptive statistics (mean, frequency, and percentage) as well as structural equation model (SEM) path analysis approaches.

To identify possible inconsistencies common method bias, outliers, assumption for linearity, assumption for multi-colinearity, multivariate normality, and reliability analysis has been checked and resulted appropriate for further analysis

### 3.6.4. Reliability and Validity

The degree that a study instrument item subsequently yields similar outcome when employed in the exact same scenario again and again is called reliability (Heale & Twycross, 2015). The Cronbach alpha coefficient indicator uses assess the research's reliability. The alpha determined if the components of the instruments under test the same hypothesis consistently and coherently.

The degree whereby a notion is exactly measured in a quantitative study is identified as validity (Heale & Twycross, 2015). Therefore, the validity of this study was tested using an established valid and standard instrument. Confirmatory factor analysis (CFA) is a technique for determining the relationship among the variables.

The researcher conducted the Cronbach alpha test to examine the response of 291 employees in order to properly identify the overall research result which is 0.89. Since the final conclusion would only depend on the respondents' responses, reliability analysis is only used to determine the significance of the questionnaire's questions. This indicates that the gathered information was quite trustworthy.

*Table 2: reliability analysis result*

| | Cronbach's Alpha | No. of Items |
|---|---|---|
| Entrepreneurial leadership | **.822** | **8** |
| Innovative Work Behavior | **.778** | **9** |
| job crafting | **.835** | **21** |
| organizational culture | **.876** | **12** |
| | | |
| **Overall reliability result** | **.894** | **50** |
| | | |

***Source: own survey, [2023]***

### 3.7. Research Ethics

In order to comply with the standards of the ethical standards of conduct, the ethical concerns of this research will involve gaining informed authorization to perform this study and protecting anonymity, secrecy, privacy, and avoiding the acts of treason and fraud.

The responders who took part in the study had a right to dignity treatment, free permission, and privacy in order to guarantee that participants would not suffer injury or needless stress.

# Chapter Four

## 4. Data Presentation and Analysis

### 4.1 Introduction

This chapter presents and analyzes the data gathered from the survey questionnaire findings from etho-telecom headquarter participants. The part afterwards discusses the research's response rate, the demographics of the respondents, and the description and analysis of the data that was collected from the survey.

**Response rate of Respondents**

369 close ended survey questionnaires were given out to the random selected employees at etho-telecom headquarters. Out of the survey questionnaires that were provided, 291(78%) were filled out correctly and returned. According to Saunders et al., (2009) response rates of 70% or more response rate is acceptable for analysis.

### 4.2 Descriptive Analysis of Variables

#### 4.2.1. Demographic Characteristics of Respondents

The respondent profile is displayed, including their gender, age, the educational level, and job position distribution in the table respectively. In addition to providing information about research participants, the demographic features of respondents are used to establish how well the study's participants represent an adequate proportion of the target population for generalization purposes and to determine in what sample type of sample the result of the outcome is represented.

| Character | Category | Frequency | Percentage (%) |
|---|---|---|---|
| Gender | Female | 113 | 38.8 |
| | Male | 178 | 61.2 |
| | Total | 291 | 100.0 |
| Age | 20-30years | 74 | 25.4 |
| | 31-40years | 108 | 37.1 |
| | 41-50years | 87 | 29.9 |
| | 51-above | 22 | 7.6 |
| | Total | 291 | 100.0 |
| Education level | Diploma | 6 | 2.1 |

| | | | |
|---|---|---|---|
| | Bachelor degree | 200 | 68.7 |
| | Master’s degree | 78 | 26.8 |
| | Doctorate | 7 | 2.4 |
| | Total | 291 | 100.0 |
| Job position | Technicians /Strategy & innovation department/ | 149 | 51.2 |
| | Supervisor | 87 | 29.9 |
| | Manager | 37 | 12.7 |
| | Other/ Director, CEO & CO / | 18 | 6.2 |
| | Total | 291 | 100.0 |

*Source: own survey, [2023]*

In general, the gender composition numbers show that men make up the majority (61.2%) of the participants' demographic profile, with women accounting for the remaining 38.8%.

As we look at the age distribution of the study's target participants, we find that middle aged individuals dominate of ages 31 - 40. In ethio-telecom Head Quarter, the age group between 20 and 30 makes up 25.4% of the workers, followed by the age group between 31 and with 37.1%; age group 41 - 50 accounted for 29.9 % of the participants and the remaining 7.6% are of ages 51 and above.

Regarding the educational level of respondents from the target group, there are 2.1 % of the participants who have diploma and the majority of staff members 68.7% possess a bachelor's degree, with 26.8% holding a master's degree and additionally 2.4% of the respondents are PhD holders. Thus, the highly concentrated bachelor degree holders integrated with youngster are included in the sample.

The job position classification and leadership level at Ethiopian Telecom Head Quarters is another factor that could influence innovative work behavior. Of the staff members, the majority work in the technical employee that also serve as a team leader accounted 51.2%, followed by supervision positions 29.9%, managers 12.7%, and Director, CEO & CO 6.2%.

### 4.3. Descriptive and Inferential Analysis of the Constructs

#### 4.3.1. Entrepreneurial leadership Assessment

| NO. | ITEM | Frequency in percentage | | | | | Mean | Std. Deviation |
|---|---|---|---|---|---|---|---|---|
| | | SD% | D% | N% | A% | SA% | | |
| 1 | My manager often comes up with radical improvement ideas for the products/services we are selling | 10.7 | 15.8 | 14.4 | 36.1 | 23 | 3.45 | 1.292 |
| 2 | My manager often comes up with ideas of completely new products/services that we could sell | 10.3 | 16.8 | 7.9 | 47.1 | 17.9 | 3.45 | 1.251 |
| 3 | My manager takes risks | 10 | 10.7 | 16.2 | 42.6 | 20.6 | 3.53 | 1.215 |
| 4 | My manager has creative solutions to problems | 3.4 | 10.7 | 29.2 | 36.4 | 20.3 | 3.59 | 1.034 |
| 5 | My manager demonstrates passion for his/her work | 3.1 | 12 | 26.8 | 44 | 14.1 | 3.54 | .980 |
| 6 | My manager has a vision of the future of our business | 3.3 | 13.4 | 26.1 | 46.7 | 10.7 | 3.48 | .959 |
| 7 | My manager challenges and pushes me to act in a more innovative way | 7.2 | 13.7 | 13.4 | 47.1 | 18.6 | 3.56 | 1.153 |
| 8 | My manager wants me to challenge the current ways we do business | 8.9 | 17.9 | 15.5 | 40.9 | 16.8 | 3.39 | 1.214 |
| | Total average | 7.11 | 13.9 | 18.8 | 42.5 | 17.7 | 3.50 | 1.37 |

*Table 3: Summary of Entrepreneurial Leadership assessment*

A description of entrepreneurial leadership measurement items regarding the entrepreneurial leadership style of participant's managers and supervisors' rate by each ethio-telecom randomly chosen employee has been presented in tabulated format above. 36.1% of the participant agreed on their manager improvement ideas for the services; 47.1% of the participants agreed on how their manager comes up with new ideas; 42.6% of the participants agreed on their manager taking risks; 36.4% of the participants agreed on their manager has creative solutions to problems; 44% of the participants agreed on their manager demonstrates passion on work; 46.7% agreed on their manager has a vision of the future plans; 47.1% of the participants agreed on their manager challenges and pushes them to act in a more innovative way and 40.9% of the participants agreed on their manager wants them to challenge the current ways they do business. Thus, more than half of the participants conform that their manager leading style is entrepreneurial and it shows some sort of entrepreneurial leadership is applicable in the organization.

The result of total average mean which is 4.3 reveals the respondents' predominant agreement on the inspiration and guidance from their leaders. All the items standard deviation value is less than half of its mean, which predicts that the data collected is normally distributed. The total average maximum percentage of response which is 42.5% of the respondents also indicates their agreement on the items that characterizes entrepreneurial leadership style while, 7% of respondents strongly disagree on the items. The average standard deviation of the items which is 1.37 described how much the responses are spread from the mean on a normality curve which means more of the participants tend to reveal the practicability of entrepreneurial leadership style of their leader.

### 4.3.2. Innovative Work behavior Assessment

| NO. | ITEM | Frequency in percentage | | | | | mean | Std. Deviation |
|---|---|---|---|---|---|---|---|---|
| | | SD% | D% | N% | A% | SA% | | |
| 1 | Wonder how things can be improved? | 7.9 | 14.1 | 19.2 | 28.5 | 30.2 | 3.59 | 1.268 |
| 2 | Search out new working methods, techniques or instruments? | 6.5 | 17.9 | 7.9 | 38.5 | 29.2 | 3.66 | 1.250 |
| 3 | Generate original solutions for problems? | 9.3 | 10 | 11.3 | 45.7 | 23.7 | 3.65 | 1.210 |
| 4 | Find new approaches to execute tasks? | 4.8 | 8.6 | 22 | 42.6 | 22 | 3.68 | 1.058 |
| 5 | Make important organizational members enthusiastic for innovative ideas? | 3.1 | 11 | 18.6 | 38.8 | 28.5 | 3.79 | 1.071 |
| 6 | Attempt to convince people to support an innovative idea? | 1.4 | 17.9 | 26.8 | 39.2 | 14.8 | 3.48 | .994 |
| 7 | Systematically introduce innovative ideas into work practices? | 7.6 | 14.4 | 21.3 | 37.1 | 19.6 | 3.47 | 1.178 |
| 8 | He/she contribute to the implementation of new ideas? | 7.6 | 14.4 | 16.5 | 40.9 | 20.6 | 3.53 | 1.187 |
| 9 | Put effort in the development of new things? | 6.5 | 14.8 | 12.4 | 42.3 | 24.1 | 3.63 | 1.186 |
| | Total average | 6.07 | 13.6 | 17.3 | 39.3 | 23.6 | 3.60 | 1.15 |

*Table 4: Summary of Innovative Work Behavior assessment result*

A description of Innovative Work behavior measurement items regarding the innovativeness of participant's under their control has been rate by each ethio-telecom randomly chosen employee. The measurement items applied to assess innovative work behavior of their fellow employee. Each participants rate the measurement items related to the innovative characteristics of individuals under their supervision. 30.2% of the participant strongly agreed on their fellows wonder how things can be improved; 38.5% of the participants agreed on their fellows Search

out new working methods; 45.7% of the participants agreed on their manager generate original solutions; those first three items shows that managers and supervisors agreed on the idea generating characteristic of the individuals under their control. 42.6% of the participants agreed on their fellows find new approaches to execute tasks 38.8% of the participants agreed on their fellows makes important organizational members enthusiastic for innovative ideas; 39.2% of the participants agreed on their fellows attempt to convince people to support an innovative idea; those three item responses determine that managers and supervisors mostly agreed on the idea promoting characteristic of the individuals under their control. 37.1% agreed on their fellows systematically introduce innovative ideas into work practices; 40.9% of the participants agreed on their fellow contribute to the implementation of new ideas and 42.3% of the participants agreed on their fellow put effort in the development of new things. Thus, the participants are mostly agreed on idea realizing characteristic of the individuals under their control.

The respondents' modest agreement on the innovativeness is demonstrated by the total average mean of the items which is 3.6. The normality of the data distribution was verified by the standard deviation results for every item as the values are less than half of its mean. The total average standard deviation which is 1.15 determines how much each response deviated from the mean value. The maximum percentage of response which is 39.3% of the respondents agreed on the items that characterizes innovative characteristics of individuals while, 6% of respondents strongly disagree on the items. The overall result of this section reveals moderate alignment of the innovative work behavior of individuals under their management. The responses given on innovative work behavior is shown in Table above.

### 4.3.3. Job crafting assessment

| NO. | ITEM | Frequency in percentage | | | | | Mean | Std. Dev.n |
|---|---|---|---|---|---|---|---|---|
| | | SD% | D% | N% | A% | SA% | | |
| 1 | I try to develop my capabilities | 4.5 | 9.3 | 6.5 | 41.6 | 38.1 | 4.00 | 1.106 |
| 2 | I try to develop myself professionally | 4.1 | 13.4 | 5.5 | 39.2 | 37.8 | 3.93 | 1.158 |
| 3 | If there are new developments, I am one of the first to learn about them and try them out | 7.2 | 5.5 | 8.2 | 46.7 | 32.3 | 3.91 | 1.128 |
| 4 | I make sure that I use my capacities to the fullest | 5.8 | 12.7 | 11.7 | 38.5 | 31.3 | 3.77 | 1.189 |
| 5 | I decide on my own how I do things | 4.1 | 12 | 12.4 | 51.2 | 20.3 | 3.71 | 1.049 |
| 6 | I make sure that my work is mentally less intense | 4.1 | 12 | 16.5 | 41.9 | 25.4 | 3.73 | 1.095 |
| 7 | I try to ensure that my work is emotionally less intense | 5.5 | 10 | 13.4 | 42.6 | 28.5 | 3.79 | 1.128 |
| 8 | I manage my work so that I try to minimize contact with people whose problems affect me emotionally | 3.4 | 12.4 | 10.3 | 40.9 | 33 | 3.88 | 1.107 |
| 9 | I organize my work so as to minimize contact with people whose expectations are unrealistic | 2.7 | 6.5 | 8.9 | 44.3 | 37.5 | 4.07 | .985 |
| 10 | I try to ensure that I do not have to make many difficult decisions at work | 1.4 | 4.8 | 12.4 | 48.1 | 33.3 | 4.07 | .878 |
| 11 | I organize my work in such a way to make sure that I do not have to concentrate for too long a period at once | 0.7 | 2.7 | 10.7 | 51.2 | 34.7 | 4.16 | .775 |
| 12 | I ask my supervisor to coach me | 0.3 | 5.5 | 9.6 | 44.3 | 40.2 | 4.19 | .847 |
| 13 | I ask whether my supervisor is satisfied with my work | - | 5.2 | 11 | 39.5 | 44.3 | 4.23 | .842 |
| 14 | I look to my supervisor for inspiration | 0.3 | 4.8 | 12.4 | 34.4 | 48.1 | 4.25 | .876 |
| 15 | I ask others for feedback on my job performance | 0.3 | 4.8 | 5.2 | 50.5 | 39.2 | 4.23 | .784 |
| 16 | I ask colleagues for advice | 0.7 | 3.8 | 8.9 | 54.3 | 32.3 | 4.14 | .780 |
| 17 | When an interesting project comes along, I offer myself proactively as project co-worker | - | - | 2.4 | 54 | 43.6 | 4.41 | .540 |
| 18 | If there are new developments, I am one of the first to learn about them and try them out | - | - | 2.4 | 51.9 | 45.7 | 4.43 | .543 |
| 19 | When there is not much to do at work, I see it as a chance to start new projects | - | - | 1.7 | 43.6 | 54.6 | 4.53 | .533 |
| 20 | I regularly take on extra tasks even though I do not receive extra salary for them | - | - | 1 | 45.4 | 53.6 | 4.53 | .520 |
| 21 | I try to make my work more challenging by examining the underlying relationships between aspects of my job | - | - | 1.4 | 48.8 | 49.8 | 4.48 | .527 |
| | Total average | 2.14 | | 8.2 | 4.4 | 38.2 | 4.12 | 0.87 |

*Table 5:Summary of Job crafting assessment result*

Each participant self-rated the measurement items related to their crafting characteristics. The first 5 items of the job crafting measurement questions represents the dimension of how much each

participant are expanding their effort to increase their job performance structurally. As the result shows on the table below, high percentage of the participants agree on increasing their structural job resources. The next 6 items measured the dimension of how much the participants are decreasing hindering job demands that would make them decline to put effort to their job. On average 44.8 % of the participants agree on decreasing hindering job demands. The next 5 items represent increasing social job resources dimension that makes them improve their effort to job from social interactions. Most result (44.6) shows that they agree on the increasing social job resources. The last 5 items represent the dimension of increasing challenging job demands which are stimulants to try new things. Most of the responses show that (49.6%) they strongly agree on increasing challenging job demands.

The result of total average mean which is 4.12 reveals the respondents' predominant agreement on their inspiration and job enhancement. All the items standard deviation value is less than half of its mean, which predicts that the data collected is normally distributed. The average standard deviation of the items which is 0.87 described most of the participants tend to reveal their agreement on overall job crafting measurement items. The maximum percentage of response which is 38.3% of the respondents strongly agreed on the items that requested about their job pro-activeness. While, 2.14% of respondents strongly disagree on the items which suggested that most of the participants tend to practice job enhancement and inspiration.

### 4.3.4. Assessment result for Organizational culture

| NO. | ITEM | Frequency in percentage | | | | | Mean | Std. Dev.n |
|---|---|---|---|---|---|---|---|---|
| | | SD% | D% | N% | A% | SA% | | |
| 1 | New ideas are readily accepted here | 4.1 | 13.1 | 11 | 40.5 | 31.3 | 3.82 | 1.135 |
| 2 | This company is quick to respond when changes need to be made | 3.8 | 14.1 | 8.6 | 46.4 | 27.1 | 3.79 | 1.105 |
| 3 | Management here are quick to spot the need to do things differently | 7.2 | 7.9 | 9.6 | 45.7 | 29.6 | 3.82 | 1.154 |
| 4 | This organization is very flexible; it can quickly change procedures to meet new conditions and solve problems as they arise | 2.7 | 7.2 | 15.8 | 47.4 | 26.8 | 3.88 | .976 |
| 5 | Assistance in developing new ideas is readily available | 3.4 | 4.1 | 16.2 | 50.9 | 25.4 | 3.91 | .940 |
| 6 | People in this organization are always searching for new ways of looking at problems | 1.4 | 8.2 | 22 | 42.3 | 26.1 | 3.84 | .954 |
| 7 | This organization is continually looking for new opportunities in the market place | 1.7 | 8.2 | 16.8 | 44.7 | 28.5 | 3.90 | .965 |
| 8 | In this organization, the way people work together is readily changed in order to improve performance | 4.5 | 10.7 | 14.1 | 47.1 | 23.7 | 3.75 | 1.071 |
| 9 | The methods used by this organization to get the job done are often discussed | 5.5 | 11 | 13.7 | 47.8 | 22 | 3.70 | 1.098 |
| 10 | There are regular discussions as to whether people in the organization are working effectively together | 6.9 | 11.7 | 9.3 | 38.8 | 33.3 | 3.80 | 1.215 |
| 11 | In this organization, objectives are modified in light of changing circumstances | 7.9 | 7.6 | 12 | 36.4 | 36.1 | 3.85 | 1.216 |
| 12 | In this organization, time is taken to review organizational objectives | 4.5 | 8.9 | 18.2 | 37.8 | 30.6 | 3.81 | 1.103 |
| | Total average | 4.5 | 9.4 | 13.9 | 43.8 | 28.4 | 3.82 | 1.07 |

*Table 6:Summary of Organizational Culture assessment result*

Each participant was asked to rate the innovative environment of ethio-telecom headquarter with 12 measurement items. Open system model of the first dimension which is innovation and flexibility is represented by the first six items. The result shows that on average 45.5% of respondents agree on the innovativeness and flexibility of the organization culture. Whereas the second dimension is which is outward focus is represented by one item, “This organization is continually looking for new opportunities in the market place”. The responses show that 44.7% of

the participants agree that their company is good in outward focus. The last 5 items measure the third dimension of Open system organizational culture model reflexivity. On average 41.58% of participants agree on the items the company is flexible.

The grand mean of the items 3.82 reveals the respondents' agreement on the innovative support for the employee in their organization. All the items standard deviation value is less than half of its mean, which predicts that the data collected is normally distributed. The total average standard deviation which is 1.07 determines how much deviation is there from the total average mean of the items. The highest percentage of response which is 43.8% of the respondents agreed on the items that requested about their organization strong innovative culture activeness while, 4.5% of respondents strongly disagree on the items. Which suggested that the company has adhocratic culture orientation (Vargas & Yagüe, 2023) which, we expected it to affect the independent and dependent variable relationship by moderation.

### 4.4. Precondition for Analysis

***Common Method Bias***

Podsakoff et al. (2012) refer to the systematic variation among the variables as frequent method bias, which is based on the theory that one factor accounts for most of the variance. If neglected, it could become a problem because it is believed to be the main source of dimension error. According to Carlson et al., (2000), any measure that regularly demonstrates procedure bias inflates the correlation, producing findings that are theoretically ambiguous. Podsakoff et al., (2003) state that, so as to be out of CMB, the initial un-rotated factor evaluation problem using Harman's Single Factor Test (SPSS) should be significantly less than 50%. (See Appendix A)

***Outliers***

According to Kline (2005), the existence of outliers will affect how data findings are interpreted and evaluated. Uni-variatS outliers, which are those with unusual values for a single variable, and multivariate outliers, which are those with unusual values for many variables together, are the two main categories of outliers. To find un-variety outliers, a p-value of less than 0.001and a Z score of absolute value more than 3.29 can be used to identify the existence of a uni-variety outlier (Tinsley & Brown, 2000). Nevertheless, this thesis did not find any variety outliers relying just on the aforementioned value. The multivariate outlier's assessment was conducted by applying the Kline (2010) recommended criterion that must be $p < 0.005$. All of the data was utilized in the SPSS result because none of the results were significantly less than 0.02. (See Appendix B)

***Linear relationship***

Ordinary multiple regressions can be used to evaluate relationships effectively when there is a linear relationship between the independent and dependent variables. The dependent variables' linear function is used to express the independent variable. Conversely, the regression analysis's results would have understated the true link and generated erroneous statistical conclusions (Jensen & Ramirez, 2013).

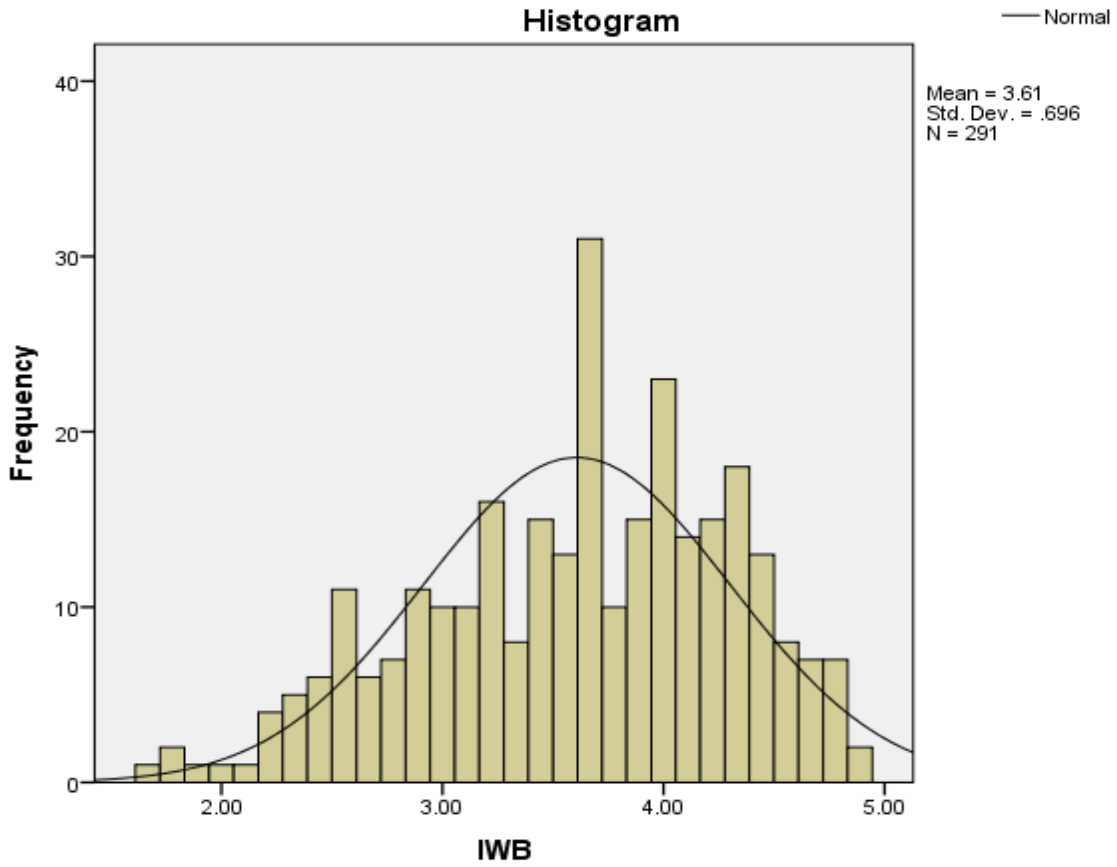
SPSS Amos 26 was used since it is particularly convenient for undertaking a variety of various sorts of regression studies that incorporate moderation and mediation analysis.

### 4.4.1. Assumption for multi-Collinearity

Tolerance indicates how much of a predictor variable's variability is no longer determined by the additional variables that predict in the model and the variance rise problem (impact of independent variable correlations on the precision of regression estimates is known as VIF). According to Liu (2010) a tolerance fee of less than 0.1 almost certainly implies a significant issue with collinearity, while a VIF value more than 10 may imply even more serious multi-collinearity. This study utilized a standard cutoff price of 0.10 for tolerance and a VIF value of 10, per the recommendations of Sekaran and Bougie (2013), to determine whether there was a multi-Collinearity issue. It was found to be within the appropriate range. (See Appendix C)

### 4.4.2. Multivariate Normality

Prior to performing the regression, the normality of the input data was examined with skewness, an indicator of symmetry, and Kurtosis, an indicator of how strongly or slightly the data is tailed to the normal distribution. This is due to the fact that independent variables in the multiple regressions must be normally distributed. As a general guideline, skewness and kurtosis for properly distributed data should lie between -2 and +2. Additionally, as the chart below illustrates, the data of the independent variable is normally distributed as recommended by Hair et al., (2006). (See Appendix D)




***Source: own survey, [2023]***

***Figure 3. Normality distribution***

**4.5. Factor Analysis**

The interaction among a set of latent variables and observed variables is explained by factor analysis, which may additionally be employed to establish a reduced number of hidden variables from a wider collection of visible variables, evaluate the validity of measurements, and develop or validate a theory by examining the observed variables (Tinsley & Brown, 2000; Thompson, 2004). By using derived variables to describe the correlated variables, factor analysis eliminates complexity from the set of correlated variables and lowers their number. There are two factor analysis techniques: Confirmatory Factor Analysis (CFA) and Exploratory Factor Analysis (EFA). By reducing the amount of data into a more manageable set of precise variables, EFA helps researchers examine the essential theoretical form of the phenomena. It helps determine the nature of the link between the responses and the variable. CFA is a method for assessing measurement models' effectiveness when the quantity of variables and the relationship between them are established.

CFA is applied in this study to verify how much a researcher's perception of the attributes of a construct corresponds to the methods used to assess it. Principal component analysis (PCA) is an analytical technique that is used in this study to minimize the number of parameters and modify data to get a reduced representation, which can be used to interpret meaningfully. So that, the big set of data can be categorized in to components that can account for precisely corrected variances.

### 4.5.1. Factor extraction

The extraction for factors in this study is done by using principal component analysis (PCA), which is relevant for this study as our data is multidimensional that make the analysis and representation easier without retaining the majority of variance and reducing the number of dimensions and to prevent possible correlated items from further analysis.

This thesis employed Vari-max rotation method to perform out factor analysis after using the principal component technique to extract components using the outcomes of the un-variety analysis. The vari-max rotation method is the most commonly employed rotation approach in the social sciences; however, there are others as well. It aims to arrange the factor loadings uniformly such that each variable explicitly corresponds to one component, creating the optimal condition for understanding the factors. Bartlett's test of sphericity and SPSS 20 Kaiser-Meyer-Olkin (KMO), It establishes whether there are minimal partial correlations between variables, were also used to assess sample suitability and adequacy.

According to Kaiser's (1974) a KMO value of 0.7–0.8 is recognized as good which suggests that component or factor analysis will be helpful for these variables. Moreover, Bartlett's test of sphericity demonstrates that the variables are interrelated and so inappropriate for structure discovery in addition to KMO. Bartlett's Test suggests the items in the set of variables do not form an identity matrix thus, appropriate for factor analysis if it yields a significant result (usually with a p-value less than a selected significance level, for instance 0.05).

The result showed that the KMO value of 0.702 is considered appropriate for factor analysis using this data is guaranteed to be beneficial. Furthermore, Bartlett's Test of Sphericity results (< 0.05) imply that factor analysis may be effective with the data we have.

*Table 7:KMO and Bartlett's Test*

**KMO and Bartlett's Test**

| | | |
|---|---|---|
| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. | | .702 |
| Bartlett's Test of Sphericity | Approx. Chi-Square | 3728.022 |
| | df | 231 |
| | Sig. | .000 |

***Source: own survey, (2023)***

***Communality***

In order to measure the percent of variance how much the indicator variable explained its latent variables communality estimates has been done. Communality is the proportion of variance in the variables that can be attributed to the factors. All of the components combined account for the variance's existence, and communality measures it. It is the percentage of variance in every factor that the principal components can account for. Priority factor analysis starts with a few common factors and variables. It starts off assuming that every variation is the

ee methods: varimax, quartimax, and equamax. Among these currently, factor analysis is commonly conducted using the varimax method, which is the most popular.

As recommended by Field (2005), the study employed an absolute charge of 0.50 to ensure that values greater than 0.5 were noted. As a result, each item significant to its corresponding e factor increases. The factors were split into twelve factor groups by the rotated component matrix. The items that load on two or more factor groups has been omitted from further analysis as they might lead to wrong interpretation. (See Appendix G)

**Factor Rotation**

A method for evaluating and enhancing factor interpretability is factor rotation. The two fundamental rotational approaches are oblique and orthogonal. In social science, variables are considered frequently highly correlated with one another; however, in this study, variables are thought to have no significant correlations. Orthogonal rotations assume that the various variables are not correlated with one another. For orthogonal rotation, there are three methods: varimax, quartimax, and equamax. Among these currently, factor analysis is commonly conducted using the varimax method, which is the most popular.

As recommended by Field (2005), the study employed an absolute charge of 0.50 to ensure that values greater than 0.5 were noted. As a result, each item significant to its corresponding e factor

increases. The factors were split into twelve factor groups by the rotated component matrix. The items that load on two or more factor groups has been omitted from further analysis as they might lead to wrong interpretation. (See Appendix G)

### 4.5.2. Confirmatory Factory Analysis (CFA) and Structural Equation Modeling (SEM)

A specified factor model's ability to fit a particular set of observed data is evaluated using CFA. Furthermore, it can be used to assess the validity of a model, contrast the two unique models' capacity for validating an equal set of data, examine for the importance and relationship between two or more aspect loadings and assess the convergent and discriminant validity of a set of measures (Brown, 2015). Structural equation modeling and CFA are closely associated.

Structural equation modeling (SEM) looks at the connections between observable and latent variables. While latent variables are assessed via making connections to the identified during the process of collecting data, variables and observed variables are measured. In research, multivariate statistical frameworks such as SEM are employed. It simulates complex, concurrently and indirectly determined (latent) correlations between variables. It's a multi-phase process that includes correctly solving linear equation problems as well as incorporating structures and methods (Barrett, 2007)

The main purpose of applying structural equation modeling (SEM) in this study is to estimate the parameters for an automated system of concurrent equations. Model in shape indices are used to evaluate the assembly validity by CFA after the necessary design was identified using PCA (Tabachnick et al., 2007).

Similar to factor analysis, SEM is a potent multivariate analysis method. Holmes & Smith (2007), claim that, SEM mostly provides a condensed description of the relationship between variables. Byrne (2001) distinguished between two models using the SEM approach: the size model, which uses variables to describe the CFA model and is intended to measure the idea. The links among the `latent variables are described by the structural model. Each set of models that can be produced by imposing parameter constraints on the other is examined by SPSS Amos.

#### *Measurement Model*

According to Paschke (2009), the measurement model yields an economical, accurate, and reliable model. Mostly on the basis of convergent and discriminant validity, it is employed to confirm construct validity. A strong

Theoretical basis for the upcoming structural model will result from a complete and dependable structural model that uses clearly defined constructs and principles for the measuring model.

***Construct Validity***

To prevent the risk of losing accuracy in this research, unintentionally measure irrelevant or separate constructs construct validity has been checked. As we looked at assessments of construct validity that were convergent and discriminant. For the entire dimension model, an evaluation had been conducted (Sounders et al, 2009). This section provides a summary of model construct validity as well as convergent and discriminant validity.

***Convergent validity***

To ascertain the relationship between the latent and located variables, convergent validity has been employed in this research. Convergent validity is attained when factor loadings are significantly different from zero and the necessary ratios are outside the -1.96 to +1.96 z-value range (Holmes-Smith, 2007). This is when the p-values ($p<0.05$) are met.

***Discriminant Validity***

To get accurate conclusion drawn about the relationships among the investigated constructs discriminant validity has been checked. The extent to which latent variables are distinct from to one another is measured by discriminant validity. It is an indicator among variables and in this research; it is contrasts Average Variance Extracted (AVE) with squared correlation. Here the AVEs exceed the Squared Correlation values; the model no longer violates the discriminant validity criterion (Zaiţ & Bertea, 2011; Holmes-Smith, 2007).

***Goodness of Fit***

Goodness of fit indices determine whether a measurement model is valid (GOF) Goodness of fit (GOF) indices, which show how well the model represents the data, are used to assess the validity of measurement models (Hair et al., 2006). GOF indicators come in three different forms: parsimonious fit, incremental, and absolute metrics. To guarantee consistency in the empirical assessment, several GOF indexes are employed (Kline, 2005).

There is a range of >0.5 allowed for the fit indices. At P values less than 0.001, all standardized regression parameters (predictions) are significant. This proves convergent validity and item reliability is not affected.

The structural equation model fit is evaluated to determine a model's ability to replicate the data before a hypothesis test is performed. Three fitness indices are used to assess model fit. The

absolute fit index was calculated using $x^2$(CMIN) p and RMSEA. The incremental fit index makes use of the NFI (Normed Fix Index), NNFI, and CFI (Comparative Fit Index), whereas the parsimony fit index makes use of the PCFI and PNFI, as noted in the appendix and discussed in the table. The outcome demonstrates that every acceptance is satisfied by the model fit index. (See Appendix H)

### 4.6. Structural model without mediation

All of the major Multivariate linear regression presumptions are satisfied, according to the discussion provided in the test of the model fit in chapter 3.

**ANOVA[a]**

| Model | | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|---|
| 1 | Regression | 33.388 | 1 | 33.388 | 97.882 | .000[b] |
| | Residual | 98.579 | 289 | .341 | | |
| | Total | 131.967 | 290 | | | |

a. Dependent Variable: IWB

b. Predictors: (Constant), EL

Although the analysis of variance does not give information about the direction of cause relationship, the ANOVA test has been applied to arbitrarily check the statistically significant difference between the means of independent variable. The result shows that F (1, 289) = 97.882, p< .001.

SPSS Amos generated output shows there is a significant positive relationship between the independent and dependent variable in the table above.

The regression weight for the recorded data corresponds to the influence of observations on the model parameters. As the table above illustrated entrepreneurial leadership affects innovative behavior of the employee at 0.199 estimate level at a statistically significant p = 0.001 < 0.05 level.

### 4.7. Structural Equation Model with Mediation Analysis

The fit indices of Amos v.26 result indicates that there is good fit between the models implied data and observed data.

| Fit index | Indicator | Desirable criteria | Decision |
|---|---|---|---|
| X2 (CMIN)P | 0.000 | P≤0.05 | OK |
| CMIN/DF | 3.372 | 1≤CMIN/df ≤ 5 | OK |
| GFI | 0.904 | ≥0.95 | OK |

| | | | |
|---|---|---|---|
| RMSEA | 0.076 | ≤ 0.08 | OK |
| CFI | 0.896 | ≥0.9 | OK |
| PNFI | 0.669 | ≥0.6 | OK |
| PCFI | 0.697 | ≥0.6 | OK |

*Table 8:SEM analysis Model fit test*

After checking the adequateness of the fit indices mediation analysis was done in different stages depending on the Amos output result. Testing the independent variable's significance level in relation to the dependent variable was the first stage. The "P value" can be used to gauge the significance of the relationship between variables. If the P value is less than 0.05, then the link is significant.

Testing the substantial association between the independent variable and the mediator was the second stage. The third step involves evaluating the mediator's significance to the dependent variable in the absence of the independent variable. Their association is legitimate and has a significance level below 0.05, as the table illustrates.

The last step involves comparing the value of the direct effect of independent to dependent variable and the value of the total effect, which is the independent to mediator effect (a) * mediator to dependent effect (b) + the direct effect of independent to dependent effect. If the total effect increased than the direct effect, it demonstrates that the data for the mediation analysis is consistent.

Testing of the hypotheses is done in light of the mediation analysis presented above.

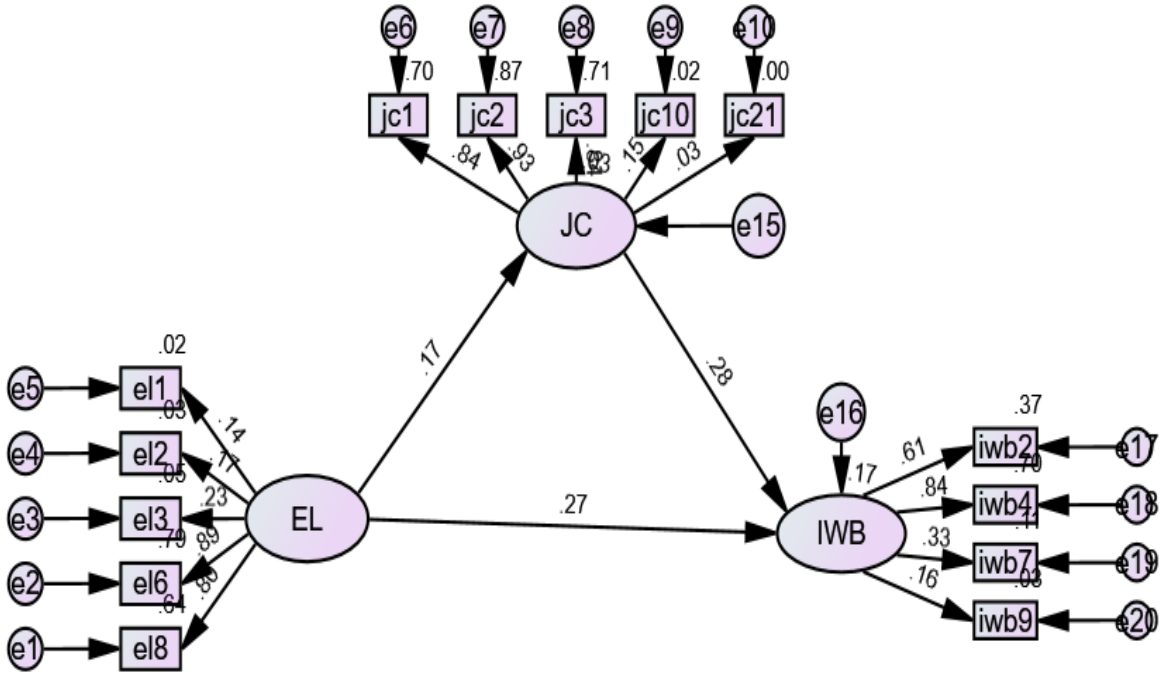



*Figure 4; Amos CFA graphic output*

***Source: own survey, [2023]***

Full or complete mediation occurs when the independent variable has no effect on the dependent variable when the mediator is controlled, according to Baron and Kenny's (1986) three-step mediation experiments. However, partial mediation is awarded in cases where the mediating variable facilitates some of the independent variable's influence on the dependent variable. According to Baron and Kenny's perspective, there are three types of mediation that may be rejected: Direct-only non-mediation, no mediation at all, and competitive mediation.

Parameter estimates of the output shows the efficient confidence intervals to measure the effect size and uncertainty of the estimates.

Regression Weights: (Group number 1 - Default model)

| | | | Estimate | S.E. | C.R. | P | Result |
|---|---|---|---|---|---|---|---|
| JOBCRAFT | <--- | ENTREPRENEURIAL LEADERSHIP | .138 | .065 | 2.134 | .033 | significant |
| INNOVATIVE WORK BEHAVIOR | <--- | JOBCRAFT | .229 | .063 | 3.648 | *** | significant |
| INNOVATIVE WORK BEHAVIOR | <--- | ENTREPRENEURIAL LEADERSHIP | .199 | .061 | 3.243 | .001 | significant |

Standardized Regression Weights: (Group number 1 - Default model)

| | | | **Estimate** |
|---|---|---|---|
| JOBCRAFT | <--- | ENTREPRENEURIAL LEADERSHIP | .136 |
| INNOVATIVE WORK BEHAVIOR | <--- | JOBCRAFT | .285 |
| INNOVATIVE WORK BEHAVIOR | <--- | ENTREPRENEURIAL LEADERSHIP | .243 |

Table 9: Regression Weights

### 4.8. Hypothesis Testing and Discussion

**H1**: Entrepreneurial leadership has a significant influence on employee innovative behavior.

The above table show that entrepreneurial leadership has positive and significant relationship with Innovative work behavior from the P- value result of 0.001which is less than 0.05.

**H2**: entrepreneurial leadership and job crafting have a significant relationship.

The above table show that entrepreneurial leadership has positive and significant relationship with job crafting from the P- value result of 0.033 which is less than 0.05.

**H3**: job crafting and employee innovative behavior have a significant relationship.

From the above table job crafting has positive and significant relationship with Innovative work behavior from the P- value result of 0.011 which is less than 0.05.

**H4**: job crafting mediates in the relationship between entrepreneurial leadership and employee innovative behavior.

The impacts, both direct and indirect, are significant and heading in the same way. The relationship between entrepreneurial leadership and Innovative work behavior performance was found to be mediated in part by job crafting, as per this study.

**Moderation analysis**

H5: organizational culture moderates the relationship between entrepreneurial leadership and employee innovative behavior.

For the moderating effect to be observed, three requirements must be fulfilled: the dependent variable and the moderator must have a statistically significant relationship and also the moderator must transition from an independent to a dependent variable.

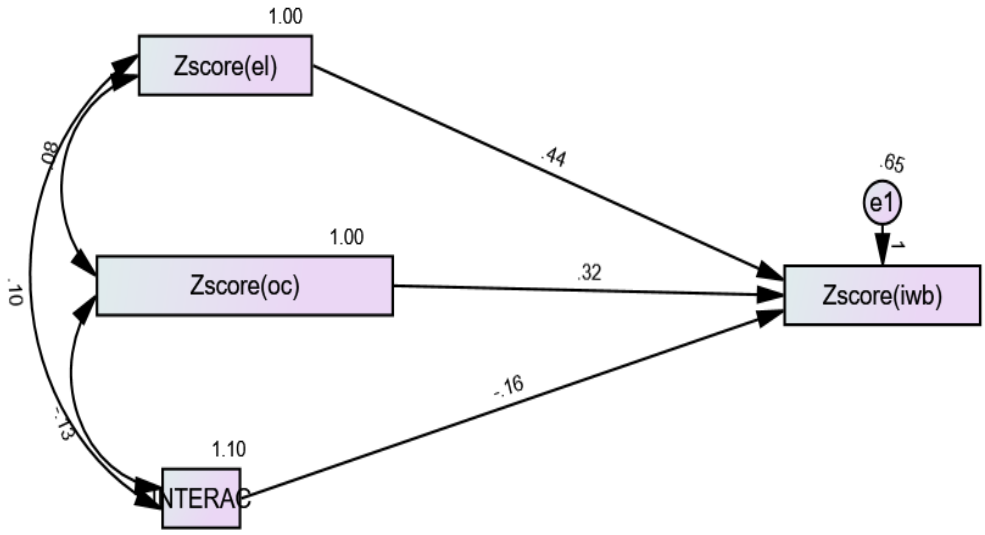



*Figure 5; Amos moderation output*

***Source: own survey, [2023]***

Regression Weights: (Group number 1 - Default model)

| | | | Estimate | S.E. | C.R. | P | Label |
|---|---|---|---|---|---|---|---|
| ZIWB | <--- | INTERAC | -.163 | .046 | -3.559 | *** | |
| ZIWB | <--- | ZEL | .439 | .048 | 9.163 | *** | |
| ZIWB | <--- | ZOC | .320 | .048 | 6.657 | *** | |

*Table 10:Moderation effect*

The above table's regression weight result shows that Independent variable, entrepreneurial leadership, positively and significantly affected the dependent variable, innovative work behaviour at significance level less than 0.05 and also the moderator variable organizational

culture significantly affected the dependent variable, innovative work behavior at a value less than 0.05, and interaction of the two, dependent and independent is negatively affecting the dependent variable at a recommended p level, suggesting that organizational culture inversely moderate the relationship between entrepreneurial leadership and innovative work behavior.

**Coefficients[a]**

| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|---|---|---|---|---|---|---|
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | .459 | .338 | | 1.357 | .176 |
| | ENTREPRENEURIAL LEADERSHIP | .511 | .056 | .439 | 9.115 | .000 |
| | ORGANIZATIONAL CULTURE | .387 | .058 | .320 | 6.622 | .000 |
| | INTERAC | -.053 | .015 | -.171 | -3.540 | .000 |

a. Dependent Variable: iwb

***Source: own survey, [2023]***

A Statistical Package for the Social Sciences software could not automatically create the conditional influences of the main predictor at moderator values, incorporating a (linear) interaction term onto a multiple regression model is the typical technique for determining out how much a moderating influence exists. The result of this output also suggests that the relationship between entrepreneurial leadership and innovative work behavior is negatively interacted by organizational culture in ethio-telecom headquarter.

**Summary of Maximum Likelihood Regression Estimates (Total Effect) Regression Weights: (Group Number 1 - Default Model)**

| Hypothesis | Path | | | Estimate | S.E. | C.R. | P | Result |
|---|---|---|---|---|---|---|---|---|
| H1 | INNOVATIVE WORK BEHAVIOR | <--- | ENTERLEADER | .199 | .061 | 3.243 | .001 | Accepted |
| H2 | JOBCRAFT | <--- | ENTREPRENEURIAL LEADERSHIP | .138 | .065 | 2.134 | .033 | Accepted |
| H3 | INNOVATIVE WORK BEHAVIOR | <--- | JOBCRAFT | .229 | .063 | 3.648 | *** | Accepted |
| H4 | INNOVATIVE WORK BEHAVIOR | <--- | ENTREPRENEURIAL LEADERSHIP | .282 | | | *** | Accepted |
| H5 | ZIWB | <--- | INTERAC | -.163 | .046 | -3.559 | *** | Accepted |

### 4.9. Discussion

The analysis result of structural model without mediation shows that entrepreneurial leadership has a direct positive significant effect on employee innovative behavior. The result confirmed many empirical evidences that show there is a direct relationship between the two variables (Iqbal et al., 2022; Li et al., 2020; Malibari & Bajaba, 2022). As a leader has high entrepreneurial leading competencies it is more effective to inspire employee's innovative behavior.

Structural equation model with mediation analysis result depicts that entrepreneurial leadership has a positive significant effect on job crafting. Hence, leader with high entrepreneurial leading competencies becomes more effective in improving self-driven; proactive strategy of individuals. The last direct effect analysis result also shows job crafting has a positive significant effect on employee innovative behavior. Thus, self-driven; proactive strategy of individuals is effective in increasing the creativity of employees'. The result validates previous finding by Khan (2022) and Tian (2021) thus, an individual with self-driven proactive strategy competencies becomes more effective in exercising and improving his/her innovative work behavior.

**Mediation of job crafting between entrepreneurial leadership and employee innovative behavior**

The result indicates that job crafting has a positive mediation effect in the relationship between the predictor and outcome variables. This study empirically proves the model supported by self-determination theory. Earlier finding by Khan (2022) have proved job crafting mediation between servant leadership and innovative behavior and also Supriyanto et al., 2020 found job crafting mediation role between spiritual leadership and innovative work behavior whereas, this study found job crafting mediation role between entrepreneurial leadership and employee innovative work behavior. Thus, in practice, entrepreneurial leadership can inspire and guide job crafting abilities which in turn help to improve innovative work competency of employees'. The indirect effect of entrepreneurial leadership on employee innovative behavior is complimentary partial because direct and indirect effects are both on the same directions.

**Moderation of organizational culture between entrepreneurial leadership and employee innovative behavior**

The last research result shows moderation analysis part. The analysis result shows that the interaction between the predictor and outcome variable is moderated negatively by organizational culture. This means that, when the competencies in an organizational culture are adhocratic, it affects to weaken the effect of entrepreneurial leadership to innovative work behavior. Thus, the more adhocratic the organizational culture is the less the stronger the relationship between the cause and effect variable. Earlier finding on the moderation of adhocratic culture between the similar leadership style, transformation leadership and creativity and innovation shows that there is a positive significant effect (Golden, 2016). This different outcome might be due to the cultural difference of our country with western nations. This study result implies that, employees in ethio-telecom are more able to explore novel concepts while leading with entrepreneurial leaders when there is less risk-taking and the external focused nature of organizational orientation.

# CHAPTER FIVE

## 5. SUMMERY, CONCLUSION AND RECOMMENDATION

### 5.1. Introduction

This thesis' primary goal was to determine how entrepreneurial leadership affects innovative work behavior and to determine the mediating effect of job crafting and moderating effect of organizational culture in that relationship. The study analyzed those relationships using the data acquired from ethio-telecom management, technical and supervision level workers. The following summary, conclusion, recommendation and suggestion for future study are based on the examination and interpretation carried out in the fourth chapter.

### 5.2. Summary of Major Findings

- In order to accomplish the goal of this thesis, five research questions were posed from this thesis. 78% of the questioner's response of ethio-telecom participants yielded valid answers. The combination of the employees' age, education, and work experience made the study more dependable because it is thought to provide more understanding for filling out and returning the questionnaires. Additionally, structural equation modeling (SEM) was used for the analysis. The programs AMOS version 26 and SPSS version 20 were utilized.
- Measures of Cronbach alpha, discriminant, convergent validity, and internal consistency were assessed, along with hypothesis testing. The research also revealed a positive and substantial association between entrepreneurial leadership and innovative work behaviour, as well as a positive and significant relationship between the two that is mediated by job crafting.
- Organizational culture has statistically significant moderating effect in the relationship between the independent and dependent variable mentioned above. The study demonstrated that the relationship between entrepreneurial leadership and innovative work behavior is correlated with the non-flexibility and degree of rigidity of organizational culture. It also found that recognizing organizational culture as crucial contingent factor has no major effect on the interaction between entrepreneurial leadership and employee innovative behavior according to the sample in ethio-telecom headquarter.

## 5.2. Conclusion

The following conclusions and suggestions are derived from the data's summarized analysis: the impact of job crafting mediation and moderating influence of organizational culture and the role of entrepreneurial leadership on innovative work behavior in etho-telecom headquarters.

The study evaluated the direct effect in order to address the first three research questions, which ask how entrepreneurial leadership affects innovative work behavior and job crating and also how job crafting affects innovative work behavior. The bootstrapping indirect effect evaluated the fourth research question of the research. Those questions have resulted positively to the hypothesis from the research investigated. Based on the result it can be concluded that, leaders have a crucial role in motivating staff members, changing work practices, improving performance, and enhancing task enjoyment. Thus, it creates positive environment for the employee to inspire and engage in innovative activities.

The Meanwhile fifth research hypothesis of the research, which evaluated effect modification between the independent and dependent variable, result a negative statistical effect. This might be due to the possible reason that Ethiopian overall culture differs from that of other western nations. In contrast, when there is less risk-taking and the external focused nature of organizational orientation, employees are more able to explore novel concepts while leading with entrepreneurial leaders.

## 5.3. Recommendation

- Innovation is important and helps leaders come up with fresh ideas and approaches to problems in the organizations. A leader with an entrepreneurial leadership character can help to inspire fellows for fresh ideas and unconventional creativity; yet, the investigation reveals that most leaders lack to inspire the innovative mindset of their fellows, or that their innovative qualities were minimal. Leaders must therefore understand how to use innovative thinking to create new products and face challenges to current issues for the benefit of their organizations.

- According to the findings, although employees are primarily responsible for self-driven job initiation; however, leader's entrepreneurial leading style can positively impact inattentiveness /fostering idea generation, idea selection, idea development/, adaptability, a willingness to learn, and inspiration of the employees under their lead. Entrepreneurial leading abilities encourage followers to purposefully inspire and stimulate their staff members as we can see from this study. For this reason, leader's ethio-telecom should make an effort to evaluate leader's entrepreneurial leading capability and employees' needs for being job crafters which in turn to make them innovative.
- Furthermore, the study verified that executive' and each employees' dedication and job crafting /self-driven, proactive job strategies/ have a significant impact on ethio-telecom employees' ability to be creative and innovative in the competitive business world. Thus, in order for organizations to promote innovative work behaviors, they require devoted employees; which are effective job crafters and can be fostered by leaders' entrepreneurial ability to manage the employee's creativity.
- The study's findings demonstrated the importance of boundary conditions, minimizing external focus in their organizational culture model, helps to strengthen the positive effect of entrepreneurial leadership for the development of innovative behavior in order to implement new ideas and practices. This includes acknowledging organizational culture as a critical contingent factor on the relationship between employee innovative behavior and entrepreneurial leadership.

### 5.4. Limitation and future research direction

The application of a cross-sectional design is this research's main weakness. However, considering the confirmatory character of our research, which is founded on reliable and widely recognized theories, it has merit in this study (Pierce, 2020). However, it is advised that future researchers gather data in various phases and revisit the suggested study paradigm in order to determine the causality of links and corroborate these findings.

Due to data availability, time constraints, and financial constraints, data for the current study were acquired from only one ethio-telecom headquarters. In the future, researchers should try to collect data from a wide range of districts in that company or other different organization in order to assess the cross-industrial effect.

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# Appendices

(Appendix A) CMB

**Total Variance Explained**

| Component | Initial Eigenvalues | | | Extraction Sums of Squared Loadings | | |
|---|---|---|---|---|---|---|
| | Total | % of Variance | Cumulative % | Total | % of Variance | Cumulative % |
| 1 | 8.612 | 17.223 | 17.223 | 8.612 | 17.223 | 17.223 |
| 2 | 4.543 | 9.086 | 26.309 | | | |
| 3 | 3.425 | 6.851 | 33.160 | | | |
| 4 | 3.106 | 6.213 | 39.373 | | | |
| 5 | 2.663 | 5.326 | 44.699 | | | |
| 6 | 2.569 | 5.139 | 49.838 | | | |
| 7 | 2.189 | 4.378 | 54.216 | | | |
| 8 | 1.970 | 3.939 | 58.155 | | | |
| 9 | 1.934 | 3.868 | 62.023 | | | |
| 10 | 1.568 | 3.136 | 65.159 | | | |
| 11 | 1.444 | 2.889 | 68.048 | | | |
| 12 | 1.369 | 2.737 | 70.785 | | | |
| 13 | 1.217 | 2.434 | 73.219 | | | |
| 14 | 1.000 | 2.001 | 75.220 | | | |
| 15 | .994 | 1.987 | 77.207 | | | |
| 16 | .888 | 1.777 | 78.984 | | | |
| 17 | .861 | 1.723 | 80.707 | | | |
| 18 | .768 | 1.536 | 82.243 | | | |
| 19 | .668 | 1.336 | 83.579 | | | |
| 20 | .631 | 1.263 | 84.842 | | | |
| 21 | .573 | 1.146 | 85.988 | | | |
| 22 | .523 | 1.046 | 87.034 | | | |
| 23 | .515 | 1.030 | 88.064 | | | |
| 24 | .479 | .957 | 89.021 | | | |
| 25 | .420 | .840 | 89.861 | | | |
| 26 | .397 | .793 | 90.654 | | | |
| 27 | .389 | .778 | 91.432 | | | |
| 28 | .355 | .710 | 92.142 | | | |
| 29 | .343 | .687 | 92.828 | | | |
| 30 | .318 | .636 | 93.464 | | | |
| 31 | .298 | .596 | 94.061 | | | |
| 32 | .286 | .571 | 94.632 | | | |
| 33 | .262 | .523 | 95.155 | | | |
| 34 | .247 | .495 | 95.650 | | | |
| 35 | .236 | .471 | 96.121 | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| 36 | .201 | .402 | 96.523 | | | |
| 37 | .194 | .388 | 96.912 | | | |
| 38 | .188 | .375 | 97.287 | | | |
| 39 | .168 | .336 | 97.623 | | | |
| 40 | .163 | .326 | 97.949 | | | |
| 41 | .151 | .301 | 98.251 | | | |
| 42 | .144 | .288 | 98.539 | | | |
| 43 | .132 | .264 | 98.803 | | | |
| 44 | .119 | .238 | 99.041 | | | |
| 45 | .115 | .230 | 99.271 | | | |
| 46 | .106 | .212 | 99.483 | | | |
| 47 | .083 | .166 | 99.649 | | | |
| 48 | .078 | .155 | 99.805 | | | |
| 49 | .070 | .140 | 99.945 | | | |
| 50 | .028 | .055 | 100.000 | | | |

Extraction Method: Principal Component Analysis.

(Appendix B.) OUTLIER

| | | | Statistic | Std. Error |
|---|---|---|---|---|
| IWB | Mean | | 3.6231 | .03954 |
| | 95% Confidence Interval for Mean | Lower Bound | 3.5453 | |
| | | Upper Bound | 3.7010 | |
| | 5% Trimmed Mean | | 3.6423 | |
| | Median | | 3.6667 | |
| | Variance | | .455 | |
| | Std. Deviation | | .67458 | |
| | Minimum | | 1.67 | |
| | Maximum | | 4.89 | |
| | Range | | 3.22 | |
| | Interquartile Range | | 1.00 | |
| | Skewness | | -.425 | .143 |
| | Kurtosis | | -.370 | .285 |
| EL | Mean | | 3.4807 | .04696 |
| | 95% Confidence Interval for Mean | Lower Bound | 3.3882 | |
| | | Upper Bound | 3.5731 | |
| | 5% Trimmed Mean | | 3.5094 | |
| | Median | | 3.5000 | |
| | Variance | | .642 | |

| | | | | |
|---|---|---|---|---|
| | Std. Deviation | | .80106 | |
| | Minimum | | 1.38 | |
| | Maximum | | 5.00 | |
| | Range | | 3.63 | |
| | Interquartile Range | | 1.13 | |
| | Skewness | | -.429 | .143 |
| | Kurtosis | | -.380 | .285 |
| JC | Mean | | 4.1190 | .02485 |
| | 95% Confidence Interval for Mean | Lower Bound | 4.0701 | |
| | | Upper Bound | 4.1679 | |
| | 5% Trimmed Mean | | 4.1384 | |
| | Median | | 4.1905 | |
| | Variance | | .180 | |
| | Std. Deviation | | .42396 | |
| | Minimum | | 2.62 | |
| | Maximum | | 5.00 | |
| | Range | | 2.38 | |
| | Interquartile Range | | .57 | |
| | Skewness | | -.730 | .143 |
| | Kurtosis | | .521 | .285 |
| OC | Mean | | 3.8018 | .03910 |
| | 95% Confidence Interval for Mean | Lower Bound | 3.7249 | |
| | | Upper Bound | 3.8788 | |
| | 5% Trimmed Mean | | 3.8347 | |
| | Median | | 3.9167 | |
| | Variance | | .445 | |
| | Std. Deviation | | .66693 | |
| | Minimum | | 1.92 | |
| | Maximum | | 4.92 | |
| | Range | | 3.00 | |
| | Interquartile Range | | .75 | |
| | Skewness | | -.773 | .143 |
| | Kurtosis | | .111 | .285 |

(Appendix D) Multicollinearity

**Coefficients[a]**

| Model | Unstandardized Coefficients | Standardized Coefficients | t | Sig. | Collinearity Statistics |
|---|---|---|---|---|---|

| | B | Std. Error | Beta | | | Tolerance | VIF |
|---|---|---|---|---|---|---|---|
| 1 (Constant) | .695 | .327 | | 2.128 | .034 | | |
| EL | .363 | .043 | .431 | 8.468 | .000 | .920 | 1.087 |
| JC | .404 | .081 | .254 | 4.984 | .000 | .920 | 1.087 |

a. Dependent Variable: IWB

(Appendix D) Normality Assumption

**Descriptive Statistics**

| | N | Mean | Std. Deviation | Skewness | | Kurtosis | |
|---|---|---|---|---|---|---|---|
| | Statistic | Statistic | Statistic | Statistic | Std. Error | Statistic | Std. Error |
| EL | 291 | 3.4807 | .80106 | -.429 | .143 | -.380 | .285 |
| IWB | 291 | 3.6231 | .67458 | -.425 | .143 | -.370 | .285 |
| JC | 291 | 4.1190 | .42396 | -.730 | .143 | .521 | .285 |
| OC | 291 | 3.8018 | .66693 | -.773 | .143 | .111 | .285 |
| Valid N (listwise) | 291 | | | | | | |

(Appendix E)

**Communalities**

| | Initial | Extraction |
|---|---|---|
| el1 | 1.000 | .749 |
| el2 | 1.000 | .855 |
| el3 | 1.000 | .735 |
| el6 | 1.000 | .825 |
| el8 | 1.000 | .793 |
| iwb2 | 1.000 | .840 |
| iwb4 | 1.000 | .600 |
| iwb7 | 1.000 | .539 |
| iwb9 | 1.000 | .857 |
| jc1 | 1.000 | .825 |
| jc2 | 1.000 | .870 |
| jc3 | 1.000 | .824 |
| jc10 | 1.000 | .858 |
| jc21 | 1.000 | .858 |
| oc4 | 1.000 | .840 |
| oc10 | 1.000 | .907 |
| oc11 | 1.000 | .877 |
| oc1 | 1.000 | .717 |
| oc2 | 1.000 | .831 |

| | | |
|---|---|---|
| oc3 | 1.000 | .878 |
| oc6 | 1.000 | .858 |
| oc7 | 1.000 | .862 |

Extraction Method: Principal Component Analysis.

Appendix F

**Total Variance Explained**

| Component | Initial Eigenvalues | | | Extraction Sums of Squared Loadings | | | Rotation Sums of Squared Loadings | | |
|---|---|---|---|---|---|---|---|---|---|
| | Total | % of Variance | Cumulative % | Total | % of Variance | Cumulative % | Total | % of Variance | Cumulative % |
| 1 | 5.100 | 23.183 | 23.183 | 5.100 | 23.183 | 23.183 | 2.828 | 12.855 | 12.855 |
| 2 | 2.854 | 12.972 | 36.155 | 2.854 | 12.972 | 36.155 | 2.561 | 11.642 | 24.497 |
| 3 | 2.137 | 9.716 | 45.871 | 2.137 | 9.716 | 45.871 | 2.506 | 11.391 | 35.888 |
| 4 | 1.986 | 9.026 | 54.896 | 1.986 | 9.026 | 54.896 | 2.339 | 10.631 | 46.519 |
| 5 | 1.684 | 7.654 | 62.550 | 1.684 | 7.654 | 62.550 | 2.271 | 10.323 | 56.842 |
| 6 | 1.551 | 7.050 | 69.600 | 1.551 | 7.050 | 69.600 | 1.770 | 8.046 | 64.888 |
| 7 | 1.363 | 6.196 | 75.796 | 1.363 | 6.196 | 75.796 | 1.769 | 8.039 | 72.927 |
| 8 | 1.122 | 5.099 | 80.894 | 1.122 | 5.099 | 80.894 | 1.753 | 7.968 | 80.894 |
| 9 | .657 | 2.987 | 83.882 | | | | | | |
| 10 | .586 | 2.662 | 86.544 | | | | | | |
| 11 | .420 | 1.910 | 88.454 | | | | | | |
| 12 | .416 | 1.890 | 90.344 | | | | | | |
| 13 | .334 | 1.518 | 91.862 | | | | | | |
| 14 | .296 | 1.346 | 93.208 | | | | | | |
| 15 | .271 | 1.232 | 94.441 | | | | | | |
| 16 | .237 | 1.078 | 95.519 | | | | | | |
| 17 | .203 | .924 | 96.442 | | | | | | |
| 18 | .198 | .899 | 97.341 | | | | | | |
| 19 | .175 | .795 | 98.136 | | | | | | |
| 20 | .163 | .739 | 98.875 | | | | | | |
| 21 | .143 | .651 | 99.526 | | | | | | |
| 22 | .104 | .474 | 100.000 | | | | | | |

Extraction Method: Principal Component Analysis.

Appendix G

**Rotated Component Matrix[a]**

| | Component | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| el2 | .911 | | | | | | | |
| el1 | .836 | | | | | | | |
| el3 | .827 | | | | | | | |
| iwb7 | .685 | | | | | | | |
| jc2 | | .895 | | | | | | |
| jc3 | | .886 | | | | | | |
| jc1 | | .885 | | | | | | |
| oc3 | | | .909 | | | | | |
| oc2 | | | .866 | | | | | |
| oc4 | | | .801 | | | | | |
| el6 | | | | .892 | | | | |
| el8 | | | | .879 | | | | |
| oc1 | | | | .807 | | | | |
| iwb9 | | | | | .898 | | | |
| iwb2 | | | | | .880 | | | |
| iwb4 | | | | | .691 | | | |
| oc10 | | | | | | .929 | | |
| oc11 | | | | | | .896 | | |
| oc7 | | | | | | | .915 | |
| oc6 | | | | | | | .870 | |
| jc21 | | | | | | | | .920 |
| jc10 | | | | | | | | .909 |

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 6 iterations.

**Model Fit Summary(Amos v.26)**

CMIN

| ````` | NPAR | CMIN | DF | P | CMIN/DF |
|---|---|---|---|---|---|
| Default model | 79 | 926.514 | 662 | .000 | 1.400 |
| Saturated model | 741 | .000 | 0 | | |
| Independence model | 38 | 1382.555 | 703 | .000 | 1.967 |

Parsimony-Adjusted Measures

| Model | PRATIO | PNFI | PCFI |
|---|---|---|---|

| | | | |
|---|---|---|---|
| Default model | .942 | .511 | .575 |
| Saturated model | .000 | .000 | .000 |
| Independence model | 1.000 | .000 | .000 |

RMSEA

| Model | Default model | Independence model |
|---|---|---|
| RMSEA | .037 | .058 |
| LO 90 | .032 | .054 |
| HI 90 | .043 | .063 |
| PCLOSE | 1.000 | .002 |

**Regression output**

Regression Weights: (Group number 1 - Default model)

| | Estimate | S.E. | C.R. | P | Label |
|---|---|---|---|---|---|
| INNWORKBEHAV <--- ENTERLEADER | .199 | .061 | 3.243 | .001 | par_3 |

Standardized Total Effects (Group number 1 - Default model)

| | ENTREPRENEURIAL LEADERSHIP | JOBCRAFT | INNOVATIVE WORK BEHAVIOR |
|---|---|---|---|
| JOBCRAFT | .136 | .000 | .000 |
| INNOVATIVE WORK BEHAVIOR | .282 | .285 | .000 |

Standardized Direct Effects (Group number 1 - Default model)

| | ENTREPRENEURIAL LEADERSHIP | JOBCRAFT | INNOVATIVE WORK BEHAVIOR |
|---|---|---|---|
| JOBCRAFT | .136 | .000 | .000 |
| INNOVATIVE WORK BEHAVIOR | .243 | .285 | .000 |

Standardized Indirect Effects (Group number 1 - Default model)

| | ENTREPRENEURIAL LEADERSHIP | JOBCRAFT | INNOVATIVE WORK BEHAVIOR |
|---|---|---|---|
| JOBCRAFT | .000 | .000 | .000 |
| INNOVATIVE WORK BEHAVIOR | .039 | .000 | .000 |

**SURVEY INSTRUMENT QUESTIONNAIRE**

Dear participant,

You are invited to participate in a research project entitled "Entrepreneurial leadership effect on employee innovative behavior: the role of job crafting and organizational culture"

This project is being conducted by Kidist Getachew at Addis Ababa under the supervision of Dr. Habtamu Endris from the School of Business Administration.

The research project seeks to understand the relationship between Entrepreneurial leadership, employee innovative behavior, job crafting and organizational culture among employees of Ethiopian Telecommunication Corporation. For the purpose of this research project, a survey has been developed to help disclose the interactions among these important elements.

All specified information will be kept in the highest level of privacy and used only for this study. Only the summarized data, free of any identifying characteristics, will be reported in the thesis and any resulting publications. Your privacy will therefore be guaranteed.

I thank you in advance for your anticipated cooperation and participation in this study.

**Part A: Demographic Information**

**Gender:** ☐ Female ☐ Male

**Age:**

☐ 20 -30
☐ 31- 40
☐ 41-50
☐ 51 & above

**Educational Level:**

☐ Secondary/Technical School
☐ Bachelor Degree
☐ Master's Degree
☐ Doctorate Degree
☐ Diploma
☐ other (please Specify):_____

**Job Position:**

☐ Technical position
☐ Supervisor
☐ Manager
☐ other (please Specify

Part B: Questionnaire

NOTE: please mark ☑ in the alternatives you choose.

In the following set of questions, think of your immediate manager (or team leader). How well do the following statements describe him/her? (If you have many immediate managers, please pick one)

| No | Item for **Entrepreneurial leadership** | Strongly Disagree | Disagree | Neutral/I don't know | Agree | Strongly agree |
|---|---|---|---|---|---|---|
| 1. | My manager often comes up with radica improvement ideas for th products/services we are selling | | | | | |
| 2. | My manager often comes up with ideas o completely new products/services that w could sell | | | | | |
| 3. | My manager takes risks | | | | | |
| 4. | My manager has creative solutions t problems | | | | | |
| 5. | My manager demonstrates passion fo his/her work | | | | | |
| 6. | My manager has a vision of the future o our business | | | | | |
| 7. | My manager challenges and pushes me t act in a more innovative way | | | | | |
| 8. | My manager wants me to challenge th current ways we do business | | | | | |

In the following set of questions, think of employee under your supervision. How well do the following statements describe him/her?

| No | Item for **Innovative Work Behavior** | Strongly Disagree | Disagree | Neutral/I don't know | Agree | Strongly agree |
|---|---|---|---|---|---|---|
| 1. | Wonder how things can be improved? | | | | | |
| 2. | Search out new working methods techniques or instruments? | | | | | |
| 3. | Generate original solutions for problems? | | | | | |
| 4. | Find new approaches to execute tasks? | | | | | |
| 5. | Make important organizational member enthusiastic for innovative ideas? | | | | | |
| 6. | Attempt to convince people to support a innovative idea? | | | | | |
| 7. | Systematically introduce innovative idea into work practices? | | | | | |
| 8. | He/she contribute to the implementation o | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| | new ideas? | | | | | |
| 9. | Put effort in the development of new things? | | | | | |

The following statements are about your behavior at work. Please indicate how often you have shown these behaviors at work today. Choose for every statement the best suitable answer

| No | Item for **job crafting** | Strongly Disagree | Disagree | Neutral/I don't know | Agree | Strongly agree |
|---|---|---|---|---|---|---|
| 1. | I try to develop my capabilities | | | | | |
| 2. | I try to develop myself professionally | | | | | |
| 3. | I try to learn new things at work | | | | | |
| 4. | I make sure that I use my capacities to the fullest | | | | | |
| 5. | I decide on my own how I do things | | | | | |
| 6. | I make sure that my work is mentally less intense | | | | | |
| 7. | I try to ensure that my work is emotionally less intense | | | | | |
| 8. | I manage my work so that I try to minimize contact with people whose problems affec me emotionally | | | | | |
| 9. | I organize my work so as to minimize contact with people whose expectations are unrealistic | | | | | |
| 10. | I try to ensure that I do not have to make many difficult decisions at work | | | | | |
| 11. | I organize my work in such a way to make sure that I do not have to concentrate fo too long a period at once Increasing socia job resources | | | | | |
| 12. | I ask my supervisor to coach me | | | | | |
| 13. | I ask whether my supervisor is satisfied with my work | | | | | |
| 14 | I look to my supervisor for inspiration | | | | | |
| 15 | I ask others for feedback on my job performance | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| 16 | I ask colleagues for advice | | | | | |
| 17 | When an interesting project comes along, offer myself proactively as project co worker | | | | | |
| 18 | If there are new developments, I am one o the first to learn about them and try then out | | | | | |
| 19 | When there is not much to do at work, I se it as a chance to start new projects | | | | | |
| 20 | I regularly take on extra tasks even though do not receive extra salary for them | | | | | |
| 21 | I try to make my work more challenging by examining the underlying relationship between aspects of my job | | | | | |

The following statements are about the work culture the organization you are working. Please indicate how often you have seen the characters in the company. Choose for every statement the best suitable answer

| No | Item for **organizational culture** | Strongly Disa gree | Disagree | Neutral/I don't know | Agree | Strongly agree |
|---|---|---|---|---|---|---|
| 1. | New ideas are readily accepted here | | | | | |
| 2. | This company is quick to respond whe changes need to be made | | | | | |
| 3. | Management here are quick to spot the need to do things differently | | | | | |
| 4. | This organization is very flexible; it can quickly change procedures to meet new conditions and solve problems as they arise | | | | | |
| 5. | Assistance in developing new ideas is readily available | | | | | |
| 6. | People in this organization are always searching for new ways of looking at problems | | | | | |
| 7. | This organization is continually looking for new opportunities in the market place | | | | | |
| 8. | In this organization, the way people work together is readily changed in order to improve performance | | | | | |

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|---|---|---|---|---|---|---|
| 9. | The methods used by this organization to get the job done are often discussed | | | | | |
| 10 | There are regular discussions as to whethe people in the organization are working effectively together | | | | | |
| 11 | In this organization, objectives are modified in light of changing circumstances | | | | | |
| 12 | In this organization, time is taken to review organizational objectives | | | | | |