



SELINUS UNIVERSITY
OF SCIENCES AND LITERATURE

Examining the Role of Organisational Culture in Promoting Innovation and Creativity

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A DISSERTATION

Presented to the Department of
Business Administration
program at Selinus University

Faculty of Business & Media
in fulfillment of the requirements
for the degree of Doctor of Philosophy in
Business Administration

2026

Abstract

This study examines the role of organizational culture in fostering innovation and creativity by identifying key cultural elements that drive these outcomes. The research employed a cross-sectional design and a deductive approach to use quantitative methods to test hypotheses which are collected through structured questionnaires in different industries. It offers comprehensive insight through statistical analysis such as PLS-SEM, regression, ANOVA and Chi square tests. The results are confirmed and show that transformational and transactional leadership style matter greatly with the optimal mix improving creativity. Collectively, corporate beliefs, adaptive organisational routines, and psychological safety support creativity by strongly reinforcing psychological safety in risk-taking. It also depends on organisational structure because a flexible and decentralised organisational structure empowers knowledge sharing and the creation of creative problems. Organisational culture is also greatly influenced by external factors, including market competition, technological developments, regulatory environments, globalisation and interindustry transfer of knowledge. Additionally, measurement of involvement, consistency, adaptability, and mission directly contributes to the organisation's capability to maintain innovation and subsequent alignment with strategic goals should the cultural elements be aligned with strategic. In the end, organisations must continuously ask themselves whether their cultural frameworks match internal and external drivers of innovation. In order to achieve the most innovation outcomes, balance transformational and transactional leadership, adopt hybrid structural models, implement agile strategies through employee engagement surveys and innovation audits, invest in digital transformation, and create alignment between innovation strategies and a strong organisational mission. These findings are relevant for the businesses and policymakers aiming to develop and maintain the innovation capabilities to foster a long-term business competitiveness.

Acknowledgements

The completion of this thesis marks the end of a significant journey, one that would not have been possible without the unwavering support, guidance, and encouragement of numerous individuals. It is with profound gratitude that I acknowledge their contributions.

First and foremost, my deepest appreciation goes to my supervisor, Prof. Salvatore Fava. Your expertise, insightful feedback, patient guidance, and unwavering belief in this project were invaluable. Thank you for supporting my exploration and providing the intellectual rigor that shaped this work. I am deeply grateful to your mentorship.

I extend my sincere gratitude to Selinus University, Faculty of Business and Media for this great privilege and guidance.

My sincere thanks go to my colleagues and friends at University of Suffolk Partnership, Business Management team, especially my Colleague Omoyeni Labode and Emmanuel Alegbeleye, for their stimulating discussions, shared challenges, and moral support throughout this process. The collaborative and supportive environment made this journey far more enriching and manageable.

To my fellow students and peers, thank you for the shared experiences, late-night study sessions, and mutual encouragement. Your companionship was a constant source of motivation.

Words cannot adequately express my gratitude to my dear Husband ADEYEMI AJAYI and my daughter MORIREOLUWA for believing so much in me and giving me a good atmosphere, and all the support needed to achieve this Milestone. To my Mother Mrs. C. R Soneye, thank you for being the best Mother, to my Siblings Olanrewaju, Omolara, Oluwaseun, Oluwadurotimi thank you for your boundless love, unwavering patience, constant encouragement, and steadfast belief in me, especially during moments of doubt. Your sacrifices and emotional support provided the foundation that sustained me throughout this endeavour.

Finally, I acknowledge all those who participated in this research, whose contributions were essential to its execution. Thank you for sharing your time and insights.

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CHAPTER ONE

1.1 Background to the Study

Today's fast-moving business scenario is characterized by innovation and creativity that creates organizational success. The need to innovate is therefore increasingly critical for organizations facing evolving competition, changing technologies and changing consumer demands (Bishop, 2020). Organisations who wish to remain competitive and relevant need to be innovative in terms of innovation – that is the development and implementation of new ideas, processes, products and services (Sheehan et al., 2020). On the other hand, creativity is the basis of innovation which stimulates the creation of novel and valuable ideas that can be translated into material results (Kabangire and Korir, 2023). Things, however, never just seem to happen as outlined; rather they are significantly influenced by the organizational culture (OC) that encompasses values, attitudes and beliefs of employees' behavior and attitude (Gault, 2023).

Continuous learning, adaptation and knowledge sharing are crucial for innovation (Azeem et al., 2021; Ali et al., 2024); organizational culture is important in creating an environment for continuous learning and adaptation for innovative production system (Erni et al., 2014; Smith et al., 2016). The studies indicate (Achdiat et al., 2023)) that an OC is innovative if it is open to change, risk tolerant and starves on creative problem-solving. As opposed to which rigid and hierarchical cultures stifle creativity through discouraging experimentation and raising employee participation in decision making (Kang, 2024). Particularly, leadership holds a significant role in shaping OC because leaders influence organizational values and build the structural conditions for innovation to stay (Onwu et al., 2023). It has been proved that transformational leadership (based on vision, motivation and empowerment) has very strong positive relation with innovative work behaviours (Knezović and Drkić, 2021).

It was firmly believed that organizational culture (OC) - the collective capacity of an organization to learn through acquiring, distributing and applying knowledge for the purpose of performance improvement and competitive success - is an important aspect of OC which promotes the innovation of managers (Collins, 2023; Lasrado and Kassem, 2021). Organizational Change can be correlated to the growth of an innovative workforce, as it creates an atmosphere where the employees are being enticed to always learn and dish out their creativity (Achdiat et al., 2023). Jerab and Mabrouk (2023) identify the key components of OC as leaders, empowerment, a collaborative learning climate, and a shared vision which supports

alignment between individual and organizational goals. OLC is defined as a strong enabler of process innovation that pertains to the development of new and better business processes that promote efficiency and therefore better performance (Gomes et al., 2022). Furthermore, OLC promotes open mindedness, knowledge integration and adaptive approaches, which are essential to bring environments into this art (Zamiri, 2024).

Although the importance of OC and OLC as a promoter of innovation is recognized, there are discrepancies in the relationship between OC and OLC. According to some studies, a well-established learning culture directly contributes for the innovation, while others indicate that the relationship is subject to external factors such as market dynamics and industry trends (Khalil et al., 2022). For instance, organizations in rapidly changing industries need higher external knowledge integration to sustain innovation (Lam et al., 2021). Psychological safety, i.e., the extent to which individuals feel free to express ideas and engage in risk taking and creative problem solving without fear of negative consequences (Elsayed et al., 2023), is indeed known to strongly influence employees' willingness to engage in such activities. A culture without psychological safety represents a culture that suppresses innovating, employees are either prone to fear of criticism or failure.

A useful framework to understand the contribution of OC in the innovation process is the Systems Theory of Management. An organization is treated as an interactive system, in which the shifts at one place are spreading to other components (Teece, 2018). This approach to fostering an innovative culture has leadership and employee engagement, knowledge management, and external environment factors as the key (Azeem et al., 2021). However, OC and innovation are influenced by variables other than Systems Theory such as globalization and technological change and cross-sectoral collaboration (Omobhude and Chen, 2019). This gap is addressed by Human Resource Management (HRM) Theory, which focuses on the role of leadership, staffing and workplace policies in the OC construction (Adeniyi et al., 2024). Integration of the principles of both theories helps organizations to develop a holistic viewpoint for fostering innovation by introducing cultural change.

In recent research there is a growing attention to open innovation, defined as the use of external knowledge for improving internal innovation capabilities (Badir et al., 2020). Open innovation in this sense can be inbound innovation (sourcing and integrating external knowledge into the organization) as well as outbound innovation (commercializing original knowledge and spreading it out to external partners) (Helm et al., 2019). The contribution of a strong OC in

facilitating open innovation is through fostering collaboration, knowledge exchange, and external partnerships (Wiroomrath et al., 2024). Yet very few organizations are able to use open innovation and there are cultural barriers such as resistance to change and hierarchical decision-making structures.

Another critical area of study is the role of reward systems in encouraging an innovation driven culture. The research shows that organizations that are aware of and reward innovative behaviour tend to sustain long term creativity and knowledge sharing practice (Ye et al., 2022). Unfortunately, however, traditional performance appraisal systems have actually discouraged employees from trying out new ideas because they have tended to focus more on the short-term productivity rather than the long-term innovation (Liao et al., 2024). In order for the organizations to have a culture of innovation, they need incentive structures that are in line with the innovation goals: Encouraging recognition for creative problem solving and supporting a professional development.

Hence, organizational culture has a fundamental role in shaping the innovation and creativity, by impacting the employees' perspectives, attitudes, behaviours and decision-making process. Flexible working hours and continuous learning of new skills by employees can promote a culture of innovation as it fosters strong learning culture of knowledge sharing, risk taking and open mindedness (Whitacre and Leavitt, 2025). Nevertheless, research to date has indicated that the relationship between OC and innovation pose issues of complexity, that multiple factors, including leadership style, reward system, and external environmental pressures are also operationalized upon OC to produce innovation outcomes (Tadesse Bogale and Debela, 2024). These complexities require organizations to take an integrated approach between cultural transformation with strategic innovation objectives and make it happen (Imran et al., 2021). This way businesses can increase their competitive advantage and build sustainable innovation ecosystems to create sustainable successful business over the long run.

1.2 Statement of the Problem

Organizational culture (OC) has been widely recognized as a potent driver of innovation and creativity in an organization. It influences the values, norms, cultures and behaviours that affect the interactions, sharing of knowledge and development of novel ways to meet business challenges (Hong and Zainal, 2022). An effective innovation culture gives the organizations an opportunity to adapt to the changes of the competitive landscape, improve their market position, and generate long term growth (Zeb et al., 2021). Nevertheless, despite the strong

observed relationships documented between OC and innovation, organizations persist in their efforts to build organizations where creativity and knowledge of this nature are fostered (Abbas et al., 2023). But previous studies have tried to explain why OC contributes to innovations, however these researches did not provide a consistent finding especially on the mediating variable that helps or harm the relationship between OC and innovation (Osman et al., 2023). Some researches claim that transformational leadership is a key factor in facilitating innovation through OC while there are some that find culture alone is unable to generate important innovation results without supplementary interventions like engagement of leadership, empowerment of employees and structured learning mechanisms (Piccolo et al., 2023).

One major gap in existing research is that there is a wide gap in the comprehension of what cultural elements have had the biggest impact on innovation. Even though the studies widely demonstrate that a culture of openness, knowledge sharing and collaboration supports innovation, few have investigated which OC dimensions are essential in different organizational settings (Lam et al., 2021). For instance, some organizations perform optimally under employee autonomy and creativity in culture, while some perform due to structured learning and process innovation culture (Temitope, 2022). An organization that is trying to build an innovation-oriented work environment faces many challenges because of the lack of a clear framework for identifying and implementing the best cultural attributes (Yazdani and Saberi, 2024). Therefore, businesses may choose the generic strategies such as, which do not match in some way with the industry needs, the dynamic of their workforce or the leadership style so as to not fully implement the OC in maximizing their innovation performance (Iranmanesh et al., 2021).

Moreover, one issue that has been paid insufficient attention in the organizational culture research is the role of open innovation in organizing success (Naveed et al., 2022). Albats et al. (2023) define open innovation as integration of external knowledge, resources, and partnerships to internal organization processes for generation of new products, services, and business models. Yet many companies, especially hierarchical and rigid ones, tend to find it hard to adopt open innovation strategies successfully due to their resistance to integrating external knowledge (Weissenberger-Eibl and Hampel, 2021). The failure of organizations to undertake open innovation can lead to stagnation due to the fact that organizations might not have the relevant insights and various perspectives required to facilitate continuous improvement (Cricelli et al., 2023). Furthermore, the lack of an adaptive and flexible culture may also miss out on developing relationships with external stakeholders as universities and

research institutions are the source of innovative ideas among others (Mian et al., 2020). This calls for organisations to create cultural framework for promoting knowledge exchange, encouraging collaboration on its internal boundaries and allowing employees to think out of the box in problem-solving (Kerrissey 2021).

According to another factor, employee empowerment and psychological safety have been linked to organizational creativity, but have not been studied to enough in cultural research (Ahmad et al., 2022). Working in such an environment makes it more likely that employees will actually generate and then implement ideas that are novel and innovative (Edmondson, 2018). Despite this, many organizations cannot foster an environment where employees are not afraid to challenge the norm or suggest a new idea (Soto Setzke et al., 2023). It often leads to lack in psychological safety, which stifles innovation by inhibiting employees from taking risks or making attempts with new ideas that diverge from the traditional ones (Shirinzaad, 2024). Additionally, organisations with the main focus on strict control mechanisms and a hierarchical decisional structure often do not allow for employees' creativity contribution, and in consequence, damage the workforce's, and afterwards organisation's innovation potential (Lazarević and Ružičić, 2023).

Reward systems are also important in keeping an innovation driven culture and they are not just relational but also psychological. But many of them find it difficult to construct suitable incentive structures to promote and maintain creative thinking among employees (Mdhlalose, 2024). The lack of appropriate rewards can deprive employees of the motivation to take innovational activity, and as a result impede the process leading to stagnation and the loss of competitiveness (Weryński, 2022). The study suggests that the performance-based incentive, career advancement opportunity and public recognition will be the most effective strategies to foster innovation in the workplace (Thneibat and Sweis, 2023). However, most organizations fail to incorporate these elements in its corporate culture or utilize them without ensuring they integrate with employee expectations and motivational drivers (Ababneh, 2021). So, it is necessary for organizations to make their reward structure more and more refined in order to match the goals of innovation and unexpectedly inspire employee participation in the creation.

In addition, the lack of learning environments that are structured within the organization is an impediment to the effectiveness of OC in facilitating innovation (Awoyemi et al., 2023). On the one hand, many companies know they need to do more in continuous learning, yet they are few that have orchestrated such learning mechanisms in the path of their innovation goals

(Viterouli et al., 2024). A learning-oriented culture that creates an environment for creativity and knowledge sharing includes training programs, mentorship initiatives or cross functional collaboration programs (Ahsan, 2024; Yazdani and Saberi, 2024). Yet, without obvious strategic direction and leadership commitment, OC could promote innovation efforts in vain (Sutiyatno et al., 2022). Therefore, it is essential for organizations to give employees as much training on new trends, technical advancements and etc. as possible to improve their creative capacity and problem-solving ability.

Against this backdrop, this study will test particular aspects of organizational culture that are most strongly related to innovation and creativity. This will help organizations define targeting strategies to support a culture that supports continuous learning, risk taking and external knowledge integration. This research attempts to contribute to the expanding field of literature on organizational culture and innovation with answers to these challenges, providing useful practice insights for business leaders and policymakers as they attempt to improve competitiveness in an increasingly dynamic market environment.

1.3 Research Aim

This study will focus on the cultural aspect required to promote innovation and creativity, focusing on what are the great cultural elements which can promote these outcomes. Specifically, it aims at analysing the effect of leader styles on the creation and sustaining of an innovative and innovative work environment. Furthermore, the impact of organizational beliefs, practices and structures in the promotion of creativity as well as external factors that mold organizational culture and promote innovation will be studied. Additionally, this work will determine how well various methods of evaluation that organizational use to assess the impact of culture on innovation and creativity work. The aim of the study, therefore, is to address these critical elements and contribute with its insights towards organisations embarking on such an initiative of developing and a culture of continuous learning, risk taking and creative problem solving. Findings will provide practical suggestions for business leaders and politicians to come up with ways of improving their organizations competitiveness by using culturally driven innovation.

1.4 Research Questions

1. How does leadership style impact the development and maintenance of innovative and creative culture?

2. How do beliefs and practices influence innovation and creativity?
3. What is the impact of organizational structure on creativity and innovation?
4. What external factors influence organizational culture to foster innovation and creativity?
5. In what ways can organizations evaluate organizational culture in fostering innovation and creativity?

1.5 Significance of the Study

This is special study of how organizational culture affects this relationship of innovation and creativity. The research examines the interrelationship among leadership, beliefs, practice and structure to construct a complete understanding of how the cultural parts interrelate to create an innovative work environment. The role of leadership in shaping the organizational norms and influencing employees' behaviour is vital and therefore, this study tries to exemplify how different leadership styles defeat and promote a culture of creativity. Secondly, beliefs and practices in an organization influence employees' approach to solving problems, sharing knowledge, and taking risks, all of which are necessary for sustaining the innovation. This will tell us the way in which the organizations can establish a culture in which employees can contribute in a creative way with fear of failure.

In addition, this is pertinent to management structures that intend to enhance employee engagement, decrease attrition, and generally yield enhanced performance through innovation inspired methods. The lack of creativity is something that a well-structured and supportive culture does not address. An environment of innovation that empowers and values employees will result in a more engaged and valuable employee that will contribute to the success of an organization in a much better way. Based on the results of this research, business leaders, policymakers, and human resource practitioners will gain practical opportunities to develop a cultural framework that promotes creativity and on-going learning. The study's insights will also add to the current academic literature from the standpoint of bridging the culture-linked gaps in understanding the exact cultural ingredients that fuel innovation to provide a basis for further research into how organizational culture influences creativity and competitive advantage.

1.6 Scope of the Study

This is special study of how organizational culture affects this relationship of innovation and creativity. The research examines the interrelationship among leadership, beliefs, practice and structure to construct a complete understanding of how the cultural parts interrelate to create an innovative work environment. The role of leadership in shaping the organizational norms and influencing employees' behaviour is vital and therefore, this study tries to exemplify how different leadership styles defeat and promote a culture of creativity. Secondly, beliefs and practices in an organization influence employees' approach to solving problems, sharing knowledge, and taking risks, all of which are necessary for sustaining the innovation. This will tell us the way in which the organizations can establish a culture in which employees can contribute in a creative way with fear of failure.

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CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter explores the theoretical and conceptual foundations of organizational culture and its role in fostering innovation and creativity. The essay starts with the definition of organisational culture, listing its key characteristics, and then discussing how common values, norms and beliefs affect creative problem solving. In addition, the chapter examines leadership styles, particularly transformational and transactional leadership styles for the purposes of driving an innovative culture. In addition, it investigates how organisational creativity is fostered by corporate beliefs, adaptive routines and psychological safety. Additionally, the chapter examines structural influences, contrasting mechanistic and organic models, and analysing the impact of decision-making frameworks and communication channels on knowledge-sharing. The effects of the external factors like market competition, technological advancements, and globalisation, are assessed in determining the role of innovation driven culture. Other frameworks they discuss for assessing various cultural attributes that support creativity, including employee engagement surveys and innovation audits, are also discussed. Finally, the chapter presents the theoretical and conceptual frameworks, integrating key models that explain the interaction between leadership, structure, culture, and external dynamics in fostering innovation.

2.1 Conceptual Review

2.1.1 Organisational Culture and Its Role in Innovation and Creativity

2.1.1.1 Organisational culture

Organisational culture serves as the foundation upon which businesses establish their identity, guiding employee behaviour, decision-making, and strategic direction. It is a system of shared values, beliefs and norms that dictate how individuals interact in a professional setting (Williams, 2022). The significance of organisational culture extends beyond internal operations, influencing innovation, creativity, and long-term sustainability. Companies that put more muscle into creating a strong culture have a competitive advantage in the market as increased employee commitment, higher levels of engagement, and many other benefits (Ketprapakorn, N. and Kantabutra, 2022). This is all a reinforcement of the point that culture

has tremendous bearing on business success, as it influences how businesses respond to external as well as internal challenges (Bozkus, 2023).



Figure 2.1: The process of organizational Culture (Shyamala and Ezine, 2022)

Culture is often described as the collective programming of the mind that differentiates one group from another (Hofstede, 2019). This means that organisational culture is not merely a set of superficial rules or procedures but a deeply ingrained system that influences employee perspectives, behaviours, and workplace interactions (Ackroyd and Thompson, 2022). Bozkus, (2023) expands on this view by identifying culture as the set of assumptions that groups have developed over time to navigate external adaptation and internal integration challenges. With these assumptions, the way to interpret and respond to workplace realities becomes accepted as the way that new employees will learn to interpret and respond to workplace realities. As a result, culture functions as both a stabilising force and a catalyst for transformation, determining whether organisations embrace innovation or resist change (Padua, 2021).

Ng (2023) indicates that organisational culture gives employees a sense of identity and thus a shared commitment to company goals and values. This sense of belonging aids to promote the work of collaboration, sharing of knowledge and creativity in the workplace. Employees who get along with values of the organization are more prone to be more motivated and engaged in innovation efforts (Ajmal et al., 2025). In addition, an open culture that encourages open

communication and experimentation encourages employees to have the courage to put forth new ideas without fearing criticism or failure (Waseel et al., 2025). On the other hand, rigid and hierarchical cultures usually suffocate creativity since employees are reluctant to challenge the established norms or suggest unconventional solutions (Kang, 2024).

It has also been identified that organisational culture is a significant determinant of economic performance (Bhuiyan et al., 2020). According to literature, cultural traits such as adaptability, mission orientation, and employee involvement are positively related with long-term profitability and market competitiveness (Abdul-Halim et al., 2019). When organisations align their cultural values with strategic business objectives, they create an environment that nurtures both innovation and operational efficiency. Such alignment helps increase resilience of companies in responding proactively to industry disruptions and technological advancements (Tripathy and Lenka, 2024). On the other hand, cultures that do not change or prioritize rigid bureaucratic structure find it hard to compete in dynamic market environments (Holbeche, 2019).

Employee attitudes towards change is a fundamental part of organisational culture. The research demonstrates that the companies with flexible cultures are more successful in managing transformation initiatives because they promote openness to learning and adaptation (Adhikari and Budhathoki, 2024). Tadesse Bogale and Debela, (2024) identify four key functions of culture, which are providing identity, enhancing member commitment, reinforcing organisational values, and shaping behavior through established norms. These functions support a work environment that promotes experimentation and calculated risk taking because these are key factors to drive innovation as per (Giaccone and Magnusson, 2022). If these cultural elements are not integrated within an organisation, then they generally experience resistance to change, and are prone to stagnation and miss opportunities for growth.

This further represents the role of culture on an organisational success through the overhang of digital transformation (Bozkus, 2023). In this era where businesses are integrating advanced technologies in their respective operations, cultural adaptability becomes an important factor in determining whether employees will accept or resist such changes (Chychun et al., 2023). Organisational culture must evolve to support digital initiatives by fostering agility, knowledge-sharing, and cross-functional collaboration (Rahimi et al., 2024). The companies that focus on the digital literacy and continuous learning are more successful in the digital age than the companies that follow the traditional hierarchical structures (Tian et al., 2018).

Economic performance also has been seen to be determined by organisational culture (Bhuiyan et al., 2020). The research shows that to achieve long term profitability and market competitiveness, cultural traits such as adaptability, mission orientation and employee involvement are positively correlated. When cultural values in an organisation line up with strategic business goals, it allows for the development of both innovative and operational efficiency. This alignment also makes companies resilient to the industry disruptions and technology advancement (Tripathy and Lenka, 2024). On the contrary, cultures that are too resistant to change or prefer rigid bureaucratic structures find it difficult to stay competitive in fast changing market environment (Holbeche, 2019).

Employee attitudes towards change are a fundamental aspect of organisational culture. The research shows that the companies that have flexible culture are able to handle transformation initiatives better as they encourage an environment of learning and adaptation (Adhikari and Budhathoki, 2024). According to Tadesse Bogale and Debela (2024) there are four key functions of culture as providing identity, enabling member commitment, reinforcing organisational values and shaping behaviour through established norms. The functions enable a work environment conducive to experimentation and taking risks, which are crucial to innovation (Giaccone and Magnusson, 2022). If these cultural elements aren't integrated, most organisations do not facilitate change and therefore stagnate and fail to take advantage of growth opportunities.

With the growing influence of digital transformation, culture becomes more vital in the success of the organisation (Bozkus, 2023). In the context of integrating the advanced technologies into their operations, cultural adaptability has become a critical factor in determining if employees will embrace or resist the changes (Chychun et al., 2023). Organisational culture must evolve to support digital initiatives by fostering agility, knowledge-sharing, and cross-functional collaboration (Rahimi et al., 2024). In the world of digital, digital literate and learning oriented companies are more likely to survive than companies that follow the traditional hierarchy.

Modern organisational culture is categorised as to how the risk taking and decision making is approached. There are some frameworks that organise cultures based on their adaptability level, and other frameworks categorise cultures based on the degree of power centralization (Kanhaiya, 2023). For instance, task-oriented cultures such as teamwork, problem solving and goal driven strategies are good for fostering innovation (Rottmann et al., 2023). Power driven cultures on the other hand tend to transfer decision making authority to senior management

excluding creativity and employee autonomy (Schmidt, 2023). This suggests that for innovation to flourish, organisations must strike a balance between structure and flexibility, ensuring that employees have both clear directives and the freedom to explore new ideas.

In the context of today's business landscape, it is the role of culture that has come to support digital transformation. Organisations are forced by the digital technologies to have a culture of continuous learning and fast adaptation (Deep, 2023). Such cultures are more likely to perform better than those that refuse to embrace digital innovation (Azeem et al., 2021). In addition, organisations that use virtual collaboration tools and data driven decision making approach create an environment that encourages knowledge exchange as well as creative problem solving.

The research also shows that the best organisation is the one which combines the cultural elements that are for stability and agility (Ahmad et al., 2024). They focus on the long-term sustainability while retaining responsiveness to new trends in the market and technological innovations (Nikčević, 2023). For example, companies that use democratic leadership have more employees engaged and more creative participation than companies that use autocratic leadership (Alsuhaibany, 2024). It means that organisational culture has to change constantly to match new business realities and keep key values that promote growth and innovation.

Hence, organisational culture plays a critical role in the shaping of a company's ability to innovate and be creative (Lam et al., 2021). It functions as both an orientation and a shaping force for the condition of the employee, the quality of leadership, and the relevance of organizational fit. Strong cultures create a base of collaboration, take risks, and learn continuously, thereby enabling the nurturing of an innovation environment (Ahsan, 2024). Contrary to this, Weak or Rigid cultures do not allow creative expression, thus making an organisation unable to compete effectively in a fast-changing world (Naveed et al., 2022). In a digital transformation and a continuously evolving market needs, businesses will have to create a culture of innovation in order to survive in the long run. Working organizational integrations of power structurally with strategic vision makes it possible for organizations to use culture to drive innovation, improve performance, and sustain competitive relevance to their business.

2.1.1.2 Innovation and Creativity

Innovation and creativity serve as fundamental drivers of organisational growth, resilience, and long-term success (Mai and Nguyen, 2023). Organisations which put innovation first,

constantly give birth to new products, services and operational processes, which helps them to gain a competitive advantage. The positive correlation between innovation and organisational performance has been widely supported, with studies demonstrating that firms investing in creative problem-solving experience higher productivity, increased profitability, and enhanced market positioning (Ali et al., 2024). Yet, the process of innovation is very complex and difficult to manage, and as a result, there are many failures of implementation. An organisation's cultural environment influences the effectiveness of innovation efforts largely, because the presence of enablers (values, norms and beliefs) that encourage or discourage employees to embark on creative endeavours (Chaubey and Sahoo, 2022).

Certain industries, such as mining, exemplify the necessity of innovation in addressing evolving market conditions and technological advancements (Calzada Olvera, 2022). The industry is challenged by the necessity of bringing in sustainable energy sources, social licencing, and lack of easy access to the high-quality mineral deposits. Yet, many of the mining companies have started innovation projects but many of their efforts have not resulted in transformative results because of cultural barriers that prevent creative thinking and taking risks (Kashan et al., 2021; Gruenhagen & Parker, 2020). Traditional industries with hierarchical structures and risk-averse cultures struggle to embrace change, highlighting the crucial role of organisational culture in fostering an environment conducive to innovation.

Organisational culture shapes employees' perceptions of creativity and innovation by establishing norms regarding acceptable behaviours and risk-taking (Gorzeleny et al., 2021). Studies have indicated that a company's success is more dependent on its strong innovation culture rather than its strategy or structure (Illiasenko et al. 2018). The social forces embedded in organisational culture influence employee engagement, motivation, and willingness to experiment with new ideas (Norouzinik et al., 2022). Culture functions as a regulatory mechanism that extends beyond formal policies and procedures, guiding employees towards behaviours that contribute to long-term organisational success (Bertassini et al., 2021).

The process of innovation is multi-faceted and extends beyond the creation of new products to include improvements in organisational processes, service delivery, and business models (Nosike et al., 2024). Omol (2024) defined it as transformation of ideas into new or improved offerings that will distinguish an organisation from its competitors. Some scholars conceptualise innovation as a unidimensional process, focusing on tangible outcomes such as product development and technological advancements (Mendoza-Silva, 2021). However,

others claim that innovation is a continuous process of idea generation, experimentation and the realisation of the creative value (Garbuio and Lin, 2021). In both perspectives, a successful innovation for an organisation depends on having cultural enablers that make it possible for exploration and discovery.

Innovation and creativity are closely related and the latter provides the basis for innovation by generating new ideas that can be improved and put into practise (Harvey and Berry, 2023). Organisational environments that support learning, knowledge-sharing, and experimentation enhance the creative capabilities of employees (Zhao et al., 2021). Such a culture in the workplace encourages questioning of standard practise, rethinking of the traditional ways of doing thing, and it encourages collaboration across different departments to create innovative outcomes (Martins & Terblanche, 2003). The more empowered and supported by leadership employees are, the more likely they are to propose and develop creative solutions (Omachi and Ajewumi, 2024). Conversely, rigid organisational cultures that prioritise efficiency and predictability over adaptability often suppress creativity, limiting their ability to respond to market changes (Thomas, 2023).

The link between creativity and innovation has been extensively explored across disciplines, with theories such as Amabile's Componential Theory of Creativity providing insights into how organisations can cultivate innovation (Sharmin, 2021). It emphasises the interaction of domain relevant skills, creativity relevant processes, and intrinsic motivation in the process of individual and collective creativity (Xu et al., 2023). Technical expertise in the field (domain relevant skills) and creativity relevant processes, such as cognitive flexibility and openness to risk, allow employee to provide valuable insights and generate unique solutions (Ellerton & Kelly, 2022). Intrinsic motivation is in existence as well and this only adds to the employee's commitment to innovation, as people who are motivated by curiosity and personal satisfaction engage in more creative activities (Udin et al., 2023).

Another factor that is important for the success of innovation initiatives is collaboration. Ahmad et al. (2023) explains how relationships and interactions between individuals determine the group creativity through the Social Exchange Theory. More specifically, when they feel supported and valued by the team, employees tend to share their knowledge, challenge ideas constructively, and so contribute to the problem solving (Zirar et al., 2023). Tuckman's Stages of Group Development is one of the team dynamics theories suggesting that creative teams pass through phases of forming, storming, norming, and performing; which affects the ability

of the creative teams to produce and implement innovative ideas in an effective way (Zirar et al., 2023). Trust, mutual respect, and incorporating a common commitment to creative problem solving are grown through strong social experiences and well managed team dynamics (Ellerton & Kelly, 2022).

With further transformation of the landscape of innovation, the integration of digital technologies is increasing. The digital economy necessitates rapid adaptation and continuous learning, requiring leaders to cultivate a culture that embraces technological advancements (Temelkova, 2018). Digital leadership plays a key role in guiding organisations through technological disruptions, as leaders must develop new competencies to navigate complex and uncertain environments (de Araujo et al., 2021). The use of digital tools to enhance collaboration, automation of processes as well as facilitating remote work creates an ecosystem that is conducive for creativity (Wasono & Furinto, 2018). Digital platforms let employees work together virtually to brainstorm ideas, exchange ideas across geographical distances, and try out new solutions in real time (Elbaghdady, 2020).

In the digital age, work is evolving and leaders need to use transformational styles of leadership based on collaboration, continuous learning, and adaptability (Mihardjo et al., 2019). Traditional leadership methods of hierarchical control, and rigid structures are becoming obsolete as they do not support agility needed in digitization (Ononiwu et al., 2024). Innovation efforts are actively taken part in by the digital leaders by creating an environment that encourages experimentation and knowledge sharing (Hensellek, 2020). By fostering a culture of innovation, leaders can mitigate employee resistance to change and drive organisational success in an increasingly technology-driven world (Gouda and Tiwari, 2022).

Due to its application of digital technologies, employees in organisations now interact and collaborate differently (Temelkova, 2018). Artificial intelligence, cloud computing, data analytics, and other tools make it possible for employees to use new tools to solve problems, automate repetitive tasks and optimise workflows (Hensellek, 2020). When these technologies are integrated well, these technologies make employees more autonomous and creative, as digital solutions provide people an opportunity to try and test new ideas, in a low-risk environment (Macnab-Holding, 2023). The shift towards remote work and virtual teams has also reshaped collaboration dynamics, requiring organisations to develop digital cultures that support knowledge exchange and innovation (Gouda and Tiwari, 2022).

Therefore, innovation and creativity are integral to organisational success, with culture playing a decisive role in shaping how these processes unfold (Elsbach and Stigliani, 2018). An innovation friendly environment provides employees with a platform to propose and implement new ideas (Ajmal et al., 2025). Finally, theories of creativity and collaboration can offer valuable insights into the process of team structuring, the eliciting of ambition for workers, and the leveraging of digital technologies to increase innovation outcomes (Kohli and Melville, 2019). As the need for creativity and solutions to complex problems continues to be a demanding and essential aspect of the job in the digital world, people need to stay engaged in what they are doing and in creative problem solving. By embedding innovation within organisational culture, companies can sustain long-term growth and maintain a competitive edge in a rapidly evolving business landscape.

2.1.1.3 Impact of shared values, norms, and beliefs on creative thinking and problem-solving.

Shared values, norms, and beliefs serve as the foundation upon which organisational culture is built, shaping how employees engage with challenges and opportunities (Maleka, 2023). In an environment that is conducive to innovation, these cultural elements stimulate the mentality of open mind, the attitude of taking risks, and the capacity of creative problem solving, hence the ability of the organisation to adopt complex and dynamic market changes (Michna and Kmiecik, 2020). A strong culture of innovation is characterised by collective values that prioritise learning, collaboration, and flexibility, allowing employees to generate and implement novel ideas that drive business success (Rubin and Abramson, 2018). On the other hand, rigid organisational norms focusing on control, predictability and uniformity tend to restrict creative thinking and thereby restrict the capacity of the firm to innovate breakthrough (Wrigley and Simons, 2025).

Organisational climate with values that place importance on learning and knowledge sharing promotes a culture of its employees seeking ways to enhance products, services and internal processes (AlShamsi and Ajmal, 2018). Organisations based in participative decision making that allows the delivery of diverse perspectives from employees to be delivered, results in the generation of collective intelligence and a higher probability of innovative solutions (Naqshbandi et al., 2019). One of an encouraging collaboration as a core value, it promotes this interdisciplinary problem solving by enabling employees to transfer information from various domains, to come up with creative solutions to business problems (Tang, 2019). Additionally,

with trust and mutual respect as a part of corporate culture, employees are more likely to take a risk with innovative ideas without fear of failure (Edmondson, 2018).

Openness and flexibility in organisational norms increase employees' willingness to engage with new ideas and adopt innovative approaches to problem solving (Podmetina et al., 2018). Companies that allow this behaviour will develop diverse views and try to exploit the cross functional expertise to address complex problems (Ungureanu et al., 2021). What that means is, this adaptability has tremendous benefits in dynamic industries that place a premium on constant innovation in order to stay ahead of the curve. In contrast, organisations that uphold rigid norms often discourage employees from deviating from established procedures, thereby suppressing creativity and limiting opportunities for process improvement (Ogbeibu et al., 2024).

The belief system of an organisation determines how the employee thinks about innovation and creativity (Azeem et al., 2021). Therefore, employees are more likely to propose bold and unconventional ideas when they perceive experimentation and risk taking as valued (Harada, 2023). Firms that establish a culture where failure is seen as an essential part of learning tend to generate more innovative outcomes, as employees feel encouraged to test new concepts without fear of negative repercussions (Kucharska and Rebelo, 2022). Contrastingly, this approach is different from those environments that penalise mistakes, which may discourage employees from exploring creative solutions, fearing the consequences of failure.

The presence of an innovation-oriented culture is closely linked to the firm's ability to bridge the gap between market demands and organisational offerings (Junior et al., 2021). Businesses that foster outward-looking cultures, where employees are encouraged to seek external insights and customer feedback, tend to identify and capitalise on emerging trends more effectively (NKashan et al., 2021). Unlike the latter, such organisations focus on efficiency and stability over exploration and adaptation (Uyarra et al., 2018). By embedding innovation-supporting values into daily operations, companies create an environment where employees proactively identify opportunities for growth and differentiation.

The competing values framework developed by Cameron and Quinn (1999) serves to open a lens to understand how different cultural orientations make creativity (Zeb et al., 2021). Among the four culture types like adhocracy, clan, market, and hierarchy—the adhocracy culture is most conducive to innovation, as it emphasises flexibility, entrepreneurship, and risk-taking

(Tian et al., 2018). This cultural archetype imbues firms to encourage employees to be creative, experiment with new ideas and projects with confidence (Martins et al., 2018). On the other hand, cultures that prioritise control and stability, such as hierarchical cultures, often suppress creative problem-solving by enforcing rigid structures and discouraging deviations from established norms.

The translation of shared values into concrete behaviours and organisational practices is critical for fostering an innovation-driven culture (Kokt and Makumbe, 2020). Companies which promote innovation supporting beliefs by means of policies, reward systems and performance evaluations create an environment for creative thinking to get embedded into daily activities (Skinner et al., 2018). Therefore, in order to further encourage the ability of an organisation to strengthen its problem-solving capacity, encouraging autonomy, trust and cross functional collaboration encourages employees to feel free to propose and implement new solutions without bureaucracy (Omachi and Ajewumi, 2024). Creative thinking is not an isolated activity in such cultures, but is an integral part of how business challenges are addressed.

Conversely, organisations that reinforce cultural values associated with predictability and control often create environments that resist change and innovation (Naveed et al., 2022). In such settings, employees may be unable to deviate from the standardised processes and explore alternative solutions (Tuominen, Martinsuo, 2019). By promoting a culture that values experimentation, organisations can counteract this resistance, ensuring that employees have the freedom to explore, iterate, and refine new ideas.

An effective innovation culture not only supports idea generation but also facilitates the implementation of creative solutions (Li et al, 2018). With this in mind, organisations that do not support their structural values like cross functional teams and open communication platforms with their cultural values have lower capacity to translate innovative ideas into tangible results (Usman, 2024). However, to get them done, these values must be reinforced by leadership which provides employees with the necessary resources and mentorship to bring creative ideas to life.

Organisational values also affect the creative problem solving, not only from internal structures but also from external factors, including industry trends, competitive pressures and technological advancements (Alawamleh et al., 2022). A culture of continuous learning and adaptability helps businesses better catch on to external changes as employees are trained to

anticipate changes in the market and hence be proactive (Moşteanu, 2024). By institutionalising values that emphasise agility, knowledge-sharing, and customer-centric innovation, organisations create sustainable mechanisms for maintaining competitive advantage (Rizi et al., 2024).

Therefore, shared values, norms, and beliefs play a fundamental role in shaping how organisations approach creative thinking and problem-solving (Alabi, 2025). Employees will exhibit more innovative behavior if the cultural elements prioritise means of learning, collaboration, and flexibility and, consequently, business success (Abdul-Azeez et al., 2024). Organisations that reinforce these values through leadership support, structural mechanisms, and performance incentives create an environment where creativity flourishes (Mogaji and Dimingu, 2024). In contrast, wide cultural norms of control and predictability also prevent innovation that restricts an organization to adapt to change. By fostering an innovation-oriented culture, businesses can harness the full potential of their employees, driving continuous improvement and long-term competitive advantage.

2.1.2 Leadership Style and the Development of an Innovative Culture

2.1.2.1 Transformational vs. Transactional Leadership in Fostering Innovation

Leadership plays a crucial role in shaping organisational culture and influencing innovation outcomes. Transformational and transactional leadership styles impact employee engagement, motivation, and creativity in different ways, each fostering innovation through distinct mechanisms (Zhao and Sun, 2024). Transformational leadership encourages employees to go beyond ordinary work to find novel solutions, whereas transactional leadership focuses on ensuring that goals are set with a structured and performance-based incentives for small increments (Akpan, 2023). Understanding how these leadership styles interact with organisational culture provides valuable insights into fostering an environment that supports continuous innovation and competitive advantage.

The concern of transactional leadership is rather of task execution and performance monitoring with the use of rewards and punishments (Layek and Koodamara, 2024). Such leaders make the expectations clear, set goals, and design tools for accountability (Adebayo 2024). This leadership style has been found to contribute to incremental innovation, where employees refine existing processes and make standardised improvements (Nguyen et al., 2022).

Employees working under transactional leadership develop strong organisational commitments based on clear objectives, leading to efficiency-driven innovation that enhances operational performance (Nikijuluw et al., 2024).

Transactional leadership has one key characteristic that is its process is focused and structured, and it adheres to the rules (Nurlina, 2022). Reward based on the achievements of employees in terms of recognition, bonuses, etc. (Cotton et al., 2022) is contingent reward motivating. Although this leadership style fosters a stable work environment, it is often limited in driving breakthrough innovation since employees may be reluctant to deviate from predefined expectations (Zhao and Sun, 2024). Studies indicate that transactional leadership supports creativity only when it is combined with transformational leadership, suggesting that a balance between control and inspiration is necessary to drive meaningful innovation.

Transformational leadership, on the other hand, fosters innovation by encouraging employees to embrace change, explore new ideas, and challenge conventional thinking (Al-Husseini et al., 2021). The transformational leaders have a vision of the future that is compelling, they enable collective commitment and empower their employees to come up with innovative solutions (Stanescu et al., 2021). Transformational leaders are different from transactional leaders, they are more interested with intellectual curiosity and a culture of experimentation (Mott, 2023). This leadership style has been strongly associated with radical innovation, where organisations introduce groundbreaking products, services, or business models.

Psychological empowerment is a critical mechanism through which transformational leadership influences innovation (Ambad et al., 2021). Employees who are trusted to be creative are considered to be value and given opportunity to be creative and creative problem solving (Tan, 2024). Transformational leadership has been found in studies to improve employee's psychological capital and lead them to take calculated risks and seek unconventional solutions (Karimi et al., 2023). A further factor is that leaders of a culture which is integrated and inclusive also establish an environment for diverse perspective, which alone will substantially enhance creative output.

A meta-analysis of 129 studies highlights that transformational leadership significantly improves innovation performance, organisational commitment, and task efficiency (Peng et al., 2021). Transformational leadership is different from transactional leadership as this latter one is focused on enhancing short term performance only, whereas transformational leadership

helps long term, creativity and adaptability (Rashid and Al Qaseer, 2022). Employees under transformational leadership are more likely to demonstrate proactive behaviours, explore alternative solutions, and contribute to strategic innovation initiatives.

It has special pertinence to industries that require high degrees of adaptability, because the distinction between transactional and transformational leadership becomes significant. For instance, sectors such as technology, healthcare, and digital enterprises benefit from transformational leadership, as these industries require continuous innovation to remain competitive (Vărzaru and Bocean, 2024). On the other hand, industries with rigid structure, manufacturing and logistics, may have more to gain from transactional leadership as they focus on efficiency and standardisation (Ahmad, 2025). However, an excessive reliance on transactional leadership may slow down the process of change, while excessive focus on transformational leadership without clearly defined processes may cause inefficiency in the organisation (Zhao, 2024).

Synergistic relationship between transformational and transactional leadership has been increasingly being studied in leadership research. According to studies, both styles of leadership should be combined in order to receive the best results that structured goal-setting complements creative freedom (Fürstenberg et al., 2021). An environment that has open Windows for employees to experiment on, but also know what the expectations are set for them (Jiang et al. 2023) seems to work well for employees. Government and corporate research initiatives have also confirmed that organisations integrating transformational and transactional leadership approaches achieve superior innovation outcomes (AlNuaimi et al., 2021)

A critical aspect of fostering innovation is the role of leadership in shaping social exchange relationships within organisations. Transactional leaders reinforce reward structures and increase employees' commitment to higher levels, whereas transformational leaders create trust, collaboration, and shared purpose and increase their employees' engagement to a higher degree (Khairy et al., 2023). Research indicates that organisations with strong leadership support experience higher employee motivation, leading to increased knowledge-sharing and innovation capability (Le and Lei, 2019). As the quality of interactions with employees determines the level of the creativity, there is a need for leadership interactions with employees to be considered, and workers will tend to take risks and come up with innovative solutions when the quality of interactions is high. (Lee et al., 2020).

Transformational leadership has been widely identified as capable of promoting organisational commitment a critical variable in idea generation and execution (Al-edental, 2018). This helps in creating a vision that is articulated by leaders, who are also role models, following which employees are willing to be dedicated to innovation initiatives (Schuckert et al., 2018). Additionally, transformational leadership has been found to increase work engagement, intrinsic motivation, and staff's willingness to engage in new practises (Islam et al., 2021).

Education sector is an example of how the transformational leadership emerged in response to changes in demand. Historically, academic institutions have relied primarily on instructional leadership in which the leader was responsible for curriculum development and administrative efficiency (Bush, 2020). However, with a shifting landscape of higher education, transformational leadership became a model that needed to be implemented in order to create creativity and adaptability in a learning environment (Asbari et al., 2020). Transformational leaders, who are embraced by educational leaders, are able to inspire faculty members to adopt innovative methods of teaching consider, integrate technology, and support student driven learning (Bernarto et al., 2020).

Although transactional leadership brings stability, transformational leadership is said to be more beneficial for an innovative culture (Cahyono et al., 2020). This is due to the fact that perception of transformational leadership as superior model is because it creates environments where employees are empowered to challenge conventional thinking and drive organisational change (Putra et al., 2020). However, a balanced approach that incorporates elements of both leadership styles may be the most effective strategy for organisations seeking to achieve both operational efficiency and breakthrough innovation.

Therefore, both transformational and transactional leadership styles contribute to innovation in distinct ways. Transactional leadership sets up structured processes and performance incentives to promote efficiency and incremental improvements leading to its ability to maintain operational stability (Alrowwad et al., 2020). Transformational leadership, on the other hand, fosters creativity and strategic innovation by inspiring employees to embrace change and pursue ambitious goals (Manu, 2022). While transformational leadership is widely regarded as more conducive to innovation, research suggests that an optimal balance between both leadership styles produces the best outcomes (Elrehai et al., 2018). When structured along visionary inspiration and goal setting, organisations create an environment where employees are expected to be both motivated and empowered to do innovation. Thus, leadership will

continue to be a determinant factor that will determine how effectively organisations would adapt to change and sustain long term success in light of the change in industries due to technological advancement and other market disruptions.

2.1.2.2 The role of leadership in shaping organisational learning and creative problem-solving

Leadership serves as a foundational element in influencing organisational learning and fostering creative problem-solving. Effective leadership guides an organisation's strategic direction, cultivates a culture of continuous learning, and enhances the organisation's ability to navigate complex challenges (Jerab and Mabrouk, 2023). The relationship between leadership style and organisational learning has been well established, with research demonstrating that leaders play a significant role in shaping employee behaviour, motivation, and problem-solving capabilities (Jia et al., 2024; Singh and Jha, 2024). Leaders that promote a collaborative and a learning-oriented environment allow employees to come up with new ideas, try out new ways of working and come up with innovative solutions to deal with organisational challenges (Ahsan, 2024).

Leaders are one of the main ways in which they shape organisational learning through their way of thinking about task and relationship orientation (Shariq, 2019). Task oriented leaders will create structured process, have clear expectations and require their employees to meet up the specific objectives to improve the efficiency and performance (Cai, 2023). It leads to standardised learning mechanisms in which employees acquire knowledge in a formalised way and with well-defined roles. On the other hand, relationship-oriented leaders pay attention to building trust, improving communication, and important employees to think creatively (Ahmed et al., 2018). Those leaders that value relationship building, provide an environment for employees to feel empowered to take intellectual risks, challenge conventional wisdom and engage in creative problem solving (Ananyi and Ololube, 2023).

The growing shift towards cooperative leadership styles has further highlighted the role of leaders in promoting organisational learning and innovation. A participative approach adopted by leaders involves involving employees in the decision-making process thus allowing them to contribute their insight and expertise in solving problems (Akpoviroro et al., 2018). Cooperative leadership enhances knowledge-sharing, promotes cross-functional collaboration, and ensures that employees feel valued for their contributions (Ton et al., 2022). This style of

leadership not only enhances individual learning but also strengthens the collective intelligence of teams, leading to more effective and innovative solutions.

Leadership also plays a vital role in shaping organisational culture, which in turn influences learning and problem-solving capabilities. Organisational culture refers to how employees think, behave, and take decisions based on the shared values, norms and conventions (Schein, 2004). Leaders that create a culture of continuous learning facilitate employees to learn new things, change old processes and experiment with innovative solutions (Cameron & Quinn, 2006). To facilitate employees' skills improvement, decision making capabilities and their involvement in creative problem-solving efforts (Wallach, 1983), structured organisational learning frameworks are introduced.

The influence of leadership on learning and innovation is further reinforced by national cultural dynamics. According to Hofstede (2001), national culture is perceived to set the tones of norms and values that regulate individual and organisational behaviour (Mansaray & Jnr, 2020). Knowing the influence of the cultural will enable leaders to develop their approaches tailored to employees' expectations, and to bring engagement and sharing of knowledge during the process (Morin and Stokes, 2022). The research shows a positive correlation between strong organisational culture and employee satisfaction because employees with values aligned with their organisation's tend to be more engaged in creative problem solving and continuous learning (Hoxha et al., 2024).

The interplay between leadership, learning, and innovation is particularly evident in-service industries, where adaptability and creativity are key drivers of success (Afsar and Umrani, 2020). Organisations that foster such learning from customers, markets trends and industry changes are more responsive to changing demand (Schoemaker et al., 2018). A case of innovation is not just being able to generate new products, but also creating new ways of improving internal processes, enhancing service delivery and optimising operational efficiency (Obiki-Osafiele et al., 2024). Leaders who create innovation capabilities in the organisational structure in companies make it possible to maintain long term competitiveness by being able to adapt rapidly to the market changes (Rajapathirana and Hui, 2018).

In particular, transformational leadership has been identified as an important role player in developing organisations into learning and creative problem-solving organisations. Transformational leaders prompt employees to do more than the ordinary and ask what is

possible to address organisational problems (Zadok et al., 2024). By adopting this leadership style, it gives rise to enhanced collective efficacy, and enhances resilience and adaptability in teams (Zhaxylyk, 2023). Employees working under transformational leaders are willing to learn because they are given the opportunity to experience ideas, take calculated risks and embrace continuous improvement (Waidyaratne, 2022).

Transformational leadership does not just affect individual learning here they also achieve benefit in organisational resilience. Leaders of the organisation create an adaptive and knowledge driven culture which gives the organisation ability to withstand market disruptions and crises (Yulianti et al., 2022). More specifically, for the duration of the COVID-19 pandemic, transformational leadership was vital for keeping employees motivated, collaborating remotely, and coming up with innovative ways to overcome the unprecedented challenges (Zhaxylyk, 2023). Transformational leadership, too has been found to support employees' psychological well-being in helping them to learn and innovate under challenging conditions (Waidyaratne, 2022).

Leadership plays a key role in creating organisational learning and problem solving in the healthcare sector. In previous studies, it has been found that transformational leaders in the healthcare setting create resilient and knowledge sharing professionals that help in making better decision and good outcomes of patients (Mansoor et al. 2025). He also adds that healthcare leaders establish a culture of continuous learning for employees to learn and adapt to new medical advancements and patient care standards (Zhaxylyk, 2023). This also points at the significance of leadership for the organisational learning in other sectors and industries.

Therefore, leadership plays a pivotal role in shaping organisational learning and creative problem-solving by establishing a culture of continuous knowledge acquisition, fostering collaboration, and inspiring employees to engage in innovation (Hayat, 2024). Task-oriented and relationship-oriented leadership styles influence learning in distinct ways, with structured processes enhancing efficiency and participative leadership promoting adaptability (Cai, 2023). Transformational leadership has emerged as a particularly effective approach in fostering resilience, engagement, and long-term innovation (Abdul-Azeez et al., 2024). Leaders embed learning driven strategies in organisational culture so as to make sure employees stay agile, knowledgeable, and able to solve complex challenges with innovative solutions.

2.1.2.3 How leadership empowerment supports employee creativity and risk-taking

Leadership empowerment plays a fundamental role in shaping organisational environments that foster creativity and encourage risk-taking among employees. Klein (2020) suggests that leaders can turn these conditions on and empower their team to think by themselves, to challenge the norms, to come up with the new idea. Leaders provide autonomy, resources, and ownership so that employees can have intrinsic motivation and generate novel ideas and improve problem solving (Nurhaeda et al., 2024). Employees with empowerment are more likely to be involved in experimentation and to take creative solutions to the challenges because they are assured about the decision-making process (Kane et al., 2019).

One of the key ways leadership empowerment supports creativity is through fostering a culture of psychological safety. Finally, psychologically safe employees are more likely to be willing to share ideas that are unconventional and to invoke change from current methods and to take calculated chances with a minimal risk of harassment (Susanto et al., 2023). Leaders who encourage open communication and demonstrate trust in their teams create an environment where individuals feel comfortable taking initiative (Gozman & Willcocks, 2019). This empowerment leads to increased confidence in exploring innovative solutions, knowing that their contributions will be valued and respected (Avelino et al., 2019).

Leadership empowerment also enhances creativity by promoting a growth mindset among employees. Leaders who provide opportunities for continuous learning, skill development, and professional growth enable their teams to expand their knowledge and generate new ideas (Madanchian, 2025). Employees who perceive leadership as supportive of ongoing learning are more inclined to experiment with different strategies and take calculated risks in their work (Klein and Speckbacher, 2020). Digital leadership, in particular, plays a crucial role in fostering creative problem-solving by equipping employees with the necessary digital skills and encouraging them to embrace emerging technologies (Kane et al., 2019).

In addition to fostering creativity, leadership empowerment facilitates risk-taking by removing hierarchical barriers and encouraging decentralised decision-making. Traditional leadership models that rely on rigid authority structures often discourage employees from taking initiative due to fear of failure (Kao, 2018.). However, when leaders empower their teams to make decisions and take ownership of projects, employees develop a greater sense of responsibility

and confidence in their abilities (Gozman & Willcocks, 2019). This autonomy enables them to explore unconventional solutions and push boundaries in ways that drive innovation.

Job satisfaction is closely linked to leadership empowerment, as employees who feel valued and trusted exhibit higher levels of engagement and motivation (Arshad et al., 2022). Studies indicate that empowered employees are more likely to demonstrate commitment to organisational goals and contribute actively to creative initiatives (Modise, 2023). Leadership behaviours that promote job satisfaction. This includes recognising employees' contributions, giving constructive feedback and helping employees develop career (Abdul-Azeez et al., 2024). Leaders who make conditions for employees to be inspired in generation and implementation of the creative ideas will create supportive and empowering work environment.

Organisational culture plays a pivotal role in determining the extent to which leadership empowerment influences employee creativity and risk-taking (Zhang, 2024). By favoring collaboration, knowledge sharing and adaptability cultures, fruitful grounds for innovation is created (Awan.and Brown, 2023). A leader operating within the clan and adhocracy culture where teamwork, experimentation and flexibility are valued, will empower employees more effectively and generate more creative output (Wahyuwardhana.and Wisesa, 2024). On the other hand, hierarchical or market driven cultures impose rigid structures which restrict employees' ability to take initiative (Jabeen & Isakovic, 2018).

The role of leadership in fostering innovation is further reinforced by the connection between empowerment and resilience. Employees who are empowered tend to have adaptive problem-solving skills which help them solve problems in uncertain and challenging situations (Shahi, 2024). In industries experiencing rapid technological advancements, this resilience is very important because it helps organisations keep a competitive edge through continuous innovation (Miceli et al., 2021). According to research, there exists a strong and positive correlation between leadership behaviours emphasizing empowerment, autonomy and inclusivity towards building a resilient workforce that can succeed in a dynamic work environment (Dagar & Sisodia, 2023).

Leadership empowerment also includes decision making process where employees also actively participate in shaping the organisational strategies (Naqshbandi et al., 2019). Employee involvement in strategic discussions and the possibility to share ideas lead to a positive sense of ownership of the employees' work (Pirkkalainen et al., 2018). This kind of

approach also increases employee willingness to accept the new ideas (Waseel et al., 2025) and improves their creativity. The leaders that support the process of inclusive decision making creates an environment where employees are willing to risk and experiment new ideas.

Another factor that leadership empowerment affects is the wellbeing of employees. Empowering and supportive leaders are perceived to lessen stress and burnout among employees to a degree, which allows them to perform their creative problem solving better (Cheng et al., 2024). An alignment of an individual's personal and professional goals with the goals of the workplace creates a sense of fulfilment that is linked with higher levels of job satisfaction and higher levels of innovation (Jabeen & Isakovic, 2018). An essential aspect of enhancing overall job performance and innovation outcomes is the priority of leaders to foster a positive and inclusive organisational culture to promote employee wellbeing (Radu, 2023).

The impact of leadership empowerment on creativity and risk-taking is particularly evident in high-tech and knowledge-intensive industries. Employees who are able to think independently, adapt to change, and create breakthrough innovations are necessary for the companies operating in the fast-paced environments (Farahmand, 2019). This empowers leaders to permit their teams to have access to advanced tools, digital tools and cross functional opportunities for their ability to help the employees to move boundaries of conventional thinking (Attah et al., 2024). Organisations that prioritise empowerment as a core leadership strategy consistently outperform competitors in terms of innovation and market responsiveness (Muhammed and Mohammed, 2024).

Therefore, leadership empowerment is a crucial driver of employee creativity and risk-taking, as it creates an environment where individuals feel valued, trusted, and motivated to explore new ideas (Mehmood et al., 2021). Leaders create psychological safety, promote continuous learning and decentralise decision making to allow employees to engage in creative problem solving and take initiative in their work (Nuraini, 2024). Empowerment strategies are further shaped by organisational culture, particularly collaborative and flexible environments being the best conditions for innovation (Radu, 2023). As industries continue to evolve in response to technological advancements and market disruptions, leadership empowerment will remain a key factor in shaping resilient, adaptive, and high-performing organisations.

2.1.3 The Influence of Beliefs and Practices on Organisational Creativity

2.1.3.1 The relationship between corporate beliefs, openness to change, and innovation

Corporate beliefs form the ground on which an organisation's strategic direction and its view on innovation are shaped. These include shared value, norm and assumption beliefs and affect how an organisation perceives likelihood of opportunities, adaptations to change and creativity (Yang et al., 2021). As companies believe in innovation as a core belief, they encourage a culture of experimentation, risk taking and continuous improvement (Ali et al., 2024). Such a mindset is necessary for coping with the dynamic business environment, allowing the organisations to stay ahead of the competition through the constant presentation of new ideas and solutions (Moşteanu, 2024).

An important factor in how well an organisation can accept new ideas and incorporate them into its operations is openness to change. Such organisations set an environment for employees to feel encouraged to challenge conventional thinking and contribute to transformational initiatives (Hasyim and Bakri, 2023). The concept of open innovation that encourages collaboration between internal and external sources of knowledge mirrors the growing necessity of business to go beyond the traditional boundaries and harness multiple views (Bereznoy et al., 2021). In this approach, companies will enjoy increased knowledge exchange, faster product development cycles as well as better market positioning.

One of the primary ways' corporate beliefs influence openness to change is through leadership commitment to fostering a learning-oriented culture. Organisational climate that promotes continuous learning and intellectual curiosity helps to create climate where employees are motivated to accept new processes, experiment with the new methods, and improve their problem-solving abilities (Hamelink and Opdenakker, 2019). For instance, the business model innovation involves restructuring value proposition and operational framework, so that core beliefs will be used to support transformative change (Amit and Zott, 2020). Organisations that incorporate innovation into their corporate philosophy are more likely to undergo business model changes that reflect the changing needs of the consumers and technological advancement (Attah et al., 2023).

The interplay between corporate beliefs and openness to change significantly impacts an organisation's ability to sustain long-term innovation. Rigid companies and long embedded traditional values make it difficult for them to adapt to changing market trends and disruptive

technologies (Temitope, 2022). On the contrary, those that foster a culture of adaptability actively look for growth opportunities by evaluating new revenue models, reconfiguring process and using digital transformation (Kostovyat and Rogov, 2024). The alignment between an organisation's belief system and its willingness to embrace change determines the extent to which innovation becomes a driving force for sustainable development.

Research has consistently highlighted the role of organisational culture in shaping attitudes toward innovation. Creative problem solving and continuous improvement (Othman and ElKady, 2023), can be supported in an environment where collaboration, knowledge sharing and empowerment of staffs are valued. Employees who perceive their organisation as open to new ideas and supportive of experimentation are more likely to take initiative, challenge assumptions, and contribute to breakthrough innovations (Tan et al., 2024). Organisational structures that facilitate cross-functional teamwork and interdisciplinary collaboration further enhance innovation outcomes by promoting diverse perspectives and collective intelligence (Aslam, 2023).

Despite the recognised importance of openness to change, many organisations face challenges in embedding innovation into their culture. Previous research has indicated that traditional management approaches, rigid hierarchies, and lack of change readiness may limit an organisation's ability to change (Elkahlout et al, 2024). Similarly, businesses emphasizing business alone on utilization effectiveness and decrease on costs could possibly neglect investment in exploration and advancement, disregarding the chance to break through innovation (Dent, 2024). Therefore, companies must develop strategies that will align the corporate beliefs with adaptive business models and an organisational mindset that promotes agility and forward thinking.

An organisation's long-term success strongly depends on the capability to create and implement ideas. Such companies can optimise their innovation capabilities to meet the increasing unpredictability of the industry and capitalising on new opportunities for sustainable growth (Almashhadi and Almashhadi, 2023). Innovation is not limited to product development but extends to process improvements, customer engagement strategies, and organisational design (Aldoseri et al., 2024). By embedding innovation into corporate values, organisations create a resilient framework that supports continuous adaptation and reinvention.

Corporate beliefs and openness to change are reflected in top down and bottom-up innovation approach. In top-down innovation, leadership sets the strategic direction and communicates organisational priorities, ensuring alignment with long-term objectives (Zhou et al., 2021). This approach offers structure and clarity to employees on how to carry out the innovation driven initiatives (Huang et al., 2021). However, bottom-up innovation based on employees' insights and creativity enhances the feeling of ownership and participation in the innovation process (Cadeddu et al., 2023). Successful organisations balance both approaches, ensuring that innovation is not only a leadership-driven agenda but also an integral part of organisational culture (Andrews, 2023).

The benefits of fostering an innovation-oriented corporate culture extend beyond competitive advantage to include enhanced employee engagement and organisational resilience. Kullberg et al. (2022) states that employees in such working environments are satisfied with their jobs and have chances of professional growth. Additionally, organisations that prioritise innovation as a core belief are better equipped to navigate economic uncertainties and industry disruptions (Oladele, 2025). The companies did this by reinforcing adaptability and creativeness as firm values, thereby creating a bedrock for continued success and long run industry leadership.

Therefore, the relationship between corporate beliefs, openness to change, and innovation is essential for organisational growth and competitiveness. Compared to others, companies which develop innovation in their value system and based a culture of adaptability are more capable to produce intelligent solutions, apply new interventional methods, and control business fluctuations (Chandratreya, 2025). The alignment of leadership vision, employee engagement, and organisational culture determines how effectively an organisation capitalises on change as a catalyst for innovation (Osman et al., 2024). It is a proven fact that businesses keep changing due to the technological developments and changing trends of customer demands, so a business will have to stay open to innovation and an innovation driven mindset to be successful at the long run.

2.1.3.2 Organisational routines and how they impact creative thinking and problem-solving

Organisational routines, defined as repeated patterns of behaviour that guide employees in performing tasks, play a significant role in shaping creative thinking and problem-solving within firms (Lin et al., 2021). These routines create a structured framework for decision

making and operational efficiency and to some extent, influence employees' ability to explore novel ideas and innovative solutions (Mahrinasari et al., 2021). When well-designed, organisational routines can enhance creativity by providing a stable foundation that allows employees to focus on generating new ideas rather than navigating uncertainties in workflows (Suresh et al., 2025). In contrast, the routine and rigid routines might hamper the creative expression by discouraging the deviation from the existing routine procedures.

As per Mahrinasari et al., (2021), the environment that encourages employees to experiment in the set routine is the one that promotes creativity. Routines that are effective in organisation have clear goals for employees but flexibility in attaining those goals (Huang et al., 2022). The freedom to allow employees to solve the problem according to his own way helps him to improve his problem-solving ability because he is not restricted by the use of conventional methods (Abdul-Azeez et al., 2024). An example is to guide employees through iterative feedback loops in their routine such that they can refine their ideas over and over again so as to increase the likelihood of coming up with innovative solutions (Omachi and Ajewumi, 2024). Such an environment is created because of the balance between structure and flexibility, allowing for the creative problem solving.

Organisational routines directly influence technical creativity, that is generating novel and practical solutions using technical knowledge (Hassan et al., 2021). Companies are more able to develop groundbreaking products and services the more technical creativity they embed in their routines (Clegg et al., 2019). For example, structured but flexible routines are used by technology firms to conduct research and development, in order to ensure that research and development efforts are applied in an efficient way, while still allowing for creative breakthroughs (Taherdoost, 2024). Startups, in particular, leverage flexible routines that allow them to rapidly iterate on new ideas, enabling continuous innovation.

One of the key ways organisational routines impact problem-solving is by determining how employees approach challenges (Mwantu et al., 2021). In this sense, structured problem-solving routines like design thinking and agile methodologies offer systematic ways to solve complex problems to employees (Huang and Hands, 2022). These routines assist employees to decompose issues into pieces that are manageable, explore several possible solutions, and implement the most helpful strategies (Volberda et al., 2021). In fact, overly rigid routines focused on efficiency can inhibit employees' ability to investigate unrealized solutions (Woodhead et al., 2023).

To solve problems within organisations, effective routines must motivate knowledge sharing and collaboration (Khraishi et al., 2023). The diverseness of perspectives within teams that operate within cross functional structures allows them to come up with innovative solutions (Ungureanu et al., 2021). Problems arising during the construction anticipate unforeseen challenges like design change, material shortage, or regulation issues (Woods, 2022) could be overcome with the incorporation of collaborative problem-solving process (Woods, 2022). Integrating creativity into these routines gives organisations the ability to transform obstacles into opportunities for innovation.

Organisational routines that encourage learning and adaptability contribute to long-term creativity and innovation (Khraishi et al., 2023). For companies, institution of continuous improvement processes such as after-action reviews and knowledge sharing meetings ensures that employees review past experiences and apply to future challenges (Lebuda et al., 2021). Reflective routines define the culture of learning in an organisation and enable it to change as it continues to advance in the competitive market (Zhang et al., 2022). Besides, such routines that reward to experiment and take a calculated risk are also incentives for employees to break boundaries and challenge the rules.

A fundamental challenge in designing organisational routines that foster creativity lies in balancing efficiency with innovation (Lill et al., 2021). Companies that emphasise doing things exactly as they have been prescribed will stunt any creativity of employees. On the other hand, firms that allow flexibility in their routines have the ability to allow employees freedom to generate new approaches (Galeazzo et al., 2021). Without compromising on creating solutions to problems, safe operational efficiency is provided by keeping things in balance (Hassan et al., 2021).

In industries where innovation is a key competitive advantage, organisational routines that support experimentation are essential (Tu and Wu, 2021). For instance, in agile companies, the dynamic work environment allows employees to fast test new ideas and iterate on the basis of feedback (Kaban, 2024). The routine is desirable because they improve adaptability, and therefore enable organisations to respond to market changes and technological advances (Ghahramani et al., 2023). Organisations can maintain continuous improvement culture by the embedding of innovation into daily routines.

Therefore, organisational routines have a profound impact on creative thinking and problem-solving by shaping how employees approach tasks, collaborate, and experiment with new ideas (Omachi and Ajewumi, 2024). Structured routines have stability and efficiency but it can't be without flexibility and adaptability because flexibility and adaptability enable employees to stay innovative and respond to challenges (Jerab and Mabrouk, 2023). Organisations that manage to strike the right balance between routine creativity create an environment which serves to engender the problem-solving progress that leads to long term success as well as competitive advantage.

2.1.3.3 Psychological safety and its role in promoting a culture of experimentation

It is important for psychological safety to be used as an environment in which employees can feel safe to take risks, express ideas, and experiment without the fear of negative consequences (Edmondson and Bransby, 2023). Experimentation is necessary in an organisation where innovation is valued as it is needed to explore new possibilities, improve processes and develop novel solutions (Djakaria and Shlapai, 2022). However, when psychological safety is lacking employees might be more reluctant to experiment out of fear of blame, failure, or professional consequences (Clark, 2020). Giving employees to consider their failures as learning experiences rather than matter, results in organizations that are better equipped to innovate and adjust to varied surroundings (Bligh et al., 2018).

In a workplace with a lack of psychological safety, blame is more likely to be enforced among employees, where they are responsible for the failed outcome (Wawersik et al., 2023). This fear driven environment is driven by fear and fears create a culture of risk avoidance and fosters self-protective behaviour that leads to making safe but uninspired decisions that cater to individual interests as opposed to the growth of the organisation. However, when psychological safety is present, employees are comfortable proposing unconventional solutions which will be evaluated on the merit of the ideas, rather than penalised for potential failure (Coutifar and Grant, 2022). This openness creates a culture where individuals engage in problemistic search, actively seeking alternative solutions to challenges rather than resorting to defensive decision-making (Stanovich and Toplak, 2023).

Uncertainty is an inherent part of experimentation, yet many organizations struggle with uncertainty avoidance (Ge, 2024). Leaders play a pivotal role in shaping employees' perceptions of uncertainty by setting expectations and defining acceptable risk levels (Lapshun

and Fusch, 2023). When leaders encourage experimentation and emphasize learning over immediate success, employees become more willing to explore innovative solutions without fear of failure (Puttaraju, 2021). Furthermore, leaders who provide constructive feedback and openly discuss setbacks as growth opportunities reinforce a psychologically safe culture that values continuous learning (Tu et al., 2019).

The ongoing evaluation of employee performance can either support or undermine psychological safety (Verdorfer and Schmid, 2024). If employees perceive performance evaluations as mechanisms for judgment rather than development, they may engage in defensive decision-making and avoid taking creative risks (Hubbart, 2024). However, when evaluations focus on progress, learning, and contribution to long-term organizational goals, employees are more likely to embrace experimentation and innovation (Aguilera et al., 2024). The way in which incentives are structured within an organization also influences psychological safety—reward systems that emphasize creativity and learning encourage employees to engage in experimental problem-solving rather than conforming to risk-averse behaviors (Paulus, 2023).

Leadership authenticity strengthens psychological safety by reinforcing transparency, fairness, and trust (Kim et al., 2022). When leaders model open communication, acknowledge uncertainty, and demonstrate a willingness to learn from failures, they signal to employees that experimentation is valued (Coutifaris and Grant, 2022). This leadership approach fosters an environment where employees feel comfortable voicing concerns, challenging existing practices, and collaborating on innovative projects (Mathieu et al., 2019). Moreover, supportive leaders mitigate the negative effects of stressful work environments, ensuring that employees remain engaged and motivated to pursue creative solutions (Lin et al., 2020).

Psychological safety can sometimes be halted by organisational politics as well as hierarchical structure (Pattanatornchai et al., 2024). Employees in such workplaces may refrain from taking risks due to the belief that their work contributions will go unnoticed or misattributed (Dhiman et al., 2018). Yet, strong leadership can take these effects by motivating people to be fair, be recognized, and cherish shared decisions (Khattak et al. 2023). Leaders are more likely to create a transparent and inclusive environment when leaders create an environment that psychologically safe for employees to engage in knowledge sharing and collaborative experimentation (Jeong et al., 2023).

Effective leadership can also act as a protective factor to enable innovation even in psychologically unsafe environments (Hughes et al., 2018). The kind of leadership that helps someone counteract uncertainty and rigid organisational norms is equitable treatment and employee autonomy to explore new ideas (Schein and Schein, 2018). In fact, however, although structural factors such as over formalisation and centralised decision making can impede a culture of experimentation (Bendersky and Brockner, 2020), leaders are not well equipped to promote one. Rigid controls from organisations can even stifle the most effective leaders from creating an environment that allows creativity and innovation to flourish (Eva et al., 2021).

In addition, the effectiveness of psychological safety in encouraging experimentation is also guided by broader organisational characteristics (Higgins et al., 2022). For example, leadership focus on psychological safety might have a limited added impact if the organisation already values fairness and collaboration (Maximo et al., 2022). However, organisations with rigid cultures or based on financial incentive driven reward system may neutralise the benefits of psychological safety as employees are first and foremost focused on short term performance outcomes as opposed to creative exploration (Al-Nuaimi, 2020). Furthermore, framed within their efforts have been some leadership behaviors that have the potential to directly hinder psychological safety, by reinforcing fear driven decision making, including self-serving tendencies and authoritarian control (Mao et al., 2019).

Thus, psychological safety is an important enabler of a culture of experimentation, enabling employees to experiment with creative risks without fear of negative consequences (Edmondson, 2018). Organizations reduce uncertainty avoidance, support open communication and foster leader authenticity in order to create a workplace where employees feel free to explore their innovative ideas. Yet psychological safety is not standalone: As Weiner et al. (2021) outline, it is contingent upon how leadership behaves, on what organizational incentives are, and on what are structural features. In organizations looking to build (and sustain) a culture of experimentation, psychological safety has to be explicitly embedded in leadership practices, performance evaluation and reward systems (Imran et al., 2025).

2.1.4 Organisational Structure and Its Impact on Creativity and Innovation

2.1.4.1 Mechanistic vs. organic structures and their influence on innovation

Organisational structure affects how innovation is shaped by influencing decision making processes, communication flows and how well an organisation reacts to change (Jerab and Mabrouk, 2023). How organisations create and innovate is mediated by the two dominant structural forms, mechanistic and organic (Naveed et al. 2022). Formalized rules, centralized decision making and hierarchical authority, of which mechanistic structures are characterized, can block for rapid innovation (Moon et al., 2018). In contrast, the organic structures allow for flexibility, decentralized decisions making as well as collaboration, and thus the environment encourages creativity and exploration (Hartnell, Ellet, and Joo, 2019). It is imperative for organisations to understand the role of these structures on innovation to maintain competitiveness and long-term growth (Manoharan & Singal, 2019).

Mechanistic structures, usually linked with bureaucratic organisations, are focused on efficiency and stability by rigid chains of command and well-defined roles (Song, 2022). Here, these structures look good for ensuring consistency and reducing errors, but at the same time they don't encourage risk taking that stimulates creativity. Employees in mechanistic systems often face constraints that do not allow them to explore new ideas or question current procedures (Rampa and Agogué, 2021). Furthermore, decision making authority is concentrated at the highest levels of hierarchy and this impedes the process of implementation of innovative solutions (Lee, 2024). So, in the industry where precision and control are very important like manufacturing or finance, you may achieve operational efficiency at the price of adaptability by adopting the mechanistic structure (Bustinza et al., 2019).

On the other hand, organic structures allow innovation through open communication, adaptability, and empowerment of the employees (Jerab and Mabrouk, 2023). Decentralised decision making is pushed in these organisations as employees at all levels can contribute to solve the creative problems and knowledge sharing. One of the main advantages of the organic structures is their capacity to nurture a culture of experimentation, to be able to accept calculated risks and to find unconventional ways (Döner and Efeoğlu, 2024). Organic organisations are different from mechanistic structures that are very procedural and control employees to act in a strictly procedural way; they give employees autonomy to quickly respond to new challenges and opportunities (Namim, 2023). Due to the nature of the fast-

changing nature of many industries, such as technology and research, the ability to be flexible is important for innovation (Aktas et al., 2011), this structure is very suitable for these industries.

External environmental factors, e.g., technological advancements and market dynamics, as well as mechanistic and organic structures influence innovation further (Appio et al., 2019). Organisations operating in highly competitive and uncertain markets are benefited by adopting organic structures that facilitate quick experimentation and speedy decisions (Awasthi et al., 2019). However, mechanistic structures may be more useful in stable settings where the regular operation and organizing compliance are emphasized (Alnoor et al., 2022). Since technological change increases, companies should assess whether the structural design is in tune with the need to innovate and adapt (Hassani and Mosconi, 2022).

Mechanistic structures are one of the main limitations of mechanistic structures as they tend to resist change and can hinder an organisation's capacity to adopt new technologies and innovative practises (Naveed et al., 2022). Such are these environments, that employees find themselves unable to go through bureaucratic hurdles and end up delays in taking up creative solutions (Oreg et al., 2018). Finally, organic structures promote knowledge sharing and cross functional collaboration that is necessary for driving breakthrough innovations (Hartnell et al., 2019). Organic organisations remove hierarchical barriers and promote open dialogue so that employees can question the conventional thinking and suggest new ideas.

One of the key aspects of the structural influence on innovation is how organisations balance efficiency with creativity (Ruoslahti, 2020). Mechanistic structures assign great value to control and a degree visualiseability, while they tend to be inflexible to accommodate for continuous process of innovation (Mathew, 2019). On one hand, organic structures encourage creativity but their efficiency in keeping operational discipline and scalability (Keskar, 2024). Therefore, organisations should find the effective balance between imposing structured processes and offering an experimentation environment (Christofi et al., 2024). The types of collaboration and integration across industries to drive innovation is of special relevance to companies that want to create technological clusters.

The society of the problems that grand challenges such as international organizations present is regarded by Roehrich et al. (2019) as especially rigid, with mechanistic structures rendering them incapable of adaptation with respect to complex social and technological problems.

Structural flexibility and cultural change are required by these organisations in order to acquire responsible innovation capabilities (Brand & Blok, 2019). International organizations can gain the greatest potential to address the pressing global issues like climate change and humanitarian crises by adopting some characteristics of organic structures. However, such a transformation would require a shift of the governance systems and the frameworks for making decisions (Mair and Seelos, 2021).

Moreover, an organisational structure's effectiveness in encouraging innovation depends on how well the organised objectives of the company are aligned with the market environment in which the company operates (Shaikh, 2025). Disentangling diffusion, which is both mechanical and organic and is advantageous depending on the organizational focus on stability and risk minimization or dynamism and continuous adaptation is (Evans et al., 2021). However, the problem of choosing between these structures as a binary option should not be viewed as such; companies can also adopt hybrid models that blend the features of both to yield the best innovation outcomes (Gamble et al., 2020).

For this reason, mechanistic and organic structures have differential effects on innovation as organisations respond to change, encourage creativity, and implement new ideas (Shalley and Zhou, 2024). Mechanistic structures work best when control and efficiency are paramount, however they can be inflexible when we need to innovate. This differs from the organic structures which allow for adaptability and collaboration while coming up with a solution (Jerab and Mabrouk, 2023). Organisations need to carefully appraise the structural design and enquire whether it is prepared to provide support for its operational effectiveness (Lucianetti et al., 2019). Companies, however, would be able to pass through the technological advancement and market competition complexities if they can find the right balance, and this would ensure the sustainability and success of them in the unpredictable global market.

2.1.4.2 Hierarchical decision-making vs. decentralisation and flexibility in fostering creativity

The structures of decision making in organisations play a large role in creating a conducive environment for creativity and innovation. Two dominant approaches—hierarchical decision-making and decentralization—play contrasting roles in influencing employee engagement, adaptability, and problem-solving capabilities (Tavares et al., 2025). Rigid authority lines, formalized rules, centralized control are a few characteristics of hierarchical structure and this

have a tendency to reduce creative autonomy and take risks (Baporikar, 2025). On the other hand, decentralised, flexible structures of decision-making free employees to be autonomous, talk openly to each other, and be experimental (Omachi and Ajewumi 2024). Organisations that desire to foster innovation without diminishing the efficiency of operations must understand its effect on decision making frameworks.

Hierarchical decision-making approach is about centralising authority at higher levels of management, with control, predictability and standardisation (Jerab, 2023). This structure guarantees consistency and we can say that it is the preferred structure for industries that are rigid and require precision and minimise potential risks, such as the manufacturing and the financial industries (Efunyi et al., 2024). Most have rigid hierarchies that suppress creative thinking because it discourages employees from questioning set norms and suggesting alternatives (Thomas, 2023). Empirical evidence showed that employees seem to have less engagement in hierarchical environments when they do not have autonomy and also feel disconnected with decision-making (Omachi and Ajewumi, 2024). The emphasis on formal processes and strict adherence to norms creates barriers to continuous change, empowerment, and communication—factors essential for fostering creativity (Hubbart, 2024).

In contrast, decentralized decision-making structures distribute authority across different levels of the organization, allowing employees to participate in shaping strategic initiatives and problem-solving processes (Altamimi et al., 2023). Decentralisation is organisations that embrace, flexibility, risk taking and experimentation which are both a critical driver of creative thinking (Hidayah et al., 2023). For example, employees in adhocracy cultures, such as those that focus on external coordination, adaptability and change have an empowered environment in which they are able to take initiative and contribute to or invent the new and innovative work to be done (Mtana and Tsuma, 2024). Unlike hierarchical systems, which emphasize control and efficiency, decentralized structures promote dynamic interactions and rapid decision-making, fostering an atmosphere where novel ideas can emerge and be tested (Tadesse Bogale and Debela, 2024).

The role of decision-making structures in creativity can be further explained using attribution theory (Sinnaiah et al., 2023). The organisation's values and norms dictate whether or not employees will feel encouraged to take ownership of their ideas and therefore influence the attitudes, perceptions and engagement levels of employees. Psychological ownership over the contribution of employees can be greater in decentralised organisations and hence, enhances

motivation and commitment towards the innovative initiatives (Zhao and Ali, 2025). As individuals take ownership of a problem, problem solving capabilities improve because they will seek a solution beyond what is their immediate responsibility (Ruijuan et al., 2023). Conversely, hierarchical structures may create a risk-averse culture where employees fear negative consequences for failure, leading them to avoid proposing new ideas or challenging conventional practices (Edmondson and Bransby, 2023).

Empirical evidence suggests that decentralized organizations tend to outperform hierarchical ones in fostering creativity, particularly in dynamic and competitive industries (Jerab and Mabrouk, 2023). There are companies that have environment where employees are more likely to engage in creative behaviours (Tobari et al., 2024) because they promote cross functional collaboration, participative decision making and knowledge sharing. That fits with the idea that involvement and engagement promote better adaptability and openness to change, which are necessary to sustain innovation (Altinay et al., 2019). By contrast, organizations that rely heavily on hierarchical control may struggle with employee disengagement, resistance to change, and reduced creative output.

Sadly enough, decentralization is a risky venture. While flexibility enhances creativity, excessive autonomy can lead to inefficiencies, misalignment with organizational goals, and inconsistent decision-making (Chen, 2019). Striking a balance between structure and autonomy is crucial for organizations aiming to integrate creativity with operational effectiveness (Schein and Schein, 2018). A potential solution to this problem involves hybrid models that combine aspects of hierarchical control as well as decentralized empowerment (Cadden et al., 2020). It has strategic oversight models while giving employees the freedom to think out the creative box within the given boundaries to keep the innovation mix.

Another critical aspect of decision-making structures is how they influence knowledge flow and communication (Joseph and Gaba, 2020). Information dissemination at hierarchical organisations undergoes bottlenecks where authority in decision making is concentrated among a few top executives (Malenko, 2024). Thus, it restricts employees' access to vital knowledge required for innovation (Opland et al., 2022). In addition, decentralized organizations allow organizations to exchange knowledge through open communication channels, collaborative platforms, participative leadership styles (Göransson and Siddiqui, 2024). Employees in such environments feel more confident in expressing divergent ideas and engaging in constructive debates, which are essential for fostering creativity.

Furthermore, decision-making structures influence how organizations respond to external challenges and disruptions (Edmondson and Bransby, 2023). Standards are common qualities in hierarchical organizations and when conditions are stable, have effective standardized responses as the fallback, but cannot respond as flexibly as required in a dynamic environment (Prouska et al., 2022). In contrast, decentralized structures allow for a quick change by having access to employees' collective intelligence and different perspectives (Victoria et al., 2022). Specifically, this adaptability is highly valuable in industries where innovation largely drives business success, and rapid innovation form the determinant for long term success, as has proven to be the case for industries driven by technological advancement and changing demand for products (Miceli et al., 2021).

On this basis, hierarchical decision making and decentralization are two different ways to encourage creativity in organizations (Lee, 2024). Hierarchical structures have control and stability as a priority, but they restrict autonomy and risk-taking capacity of employees and because of them innovation chances disappear. In the other hand, decentralized structures are more flexible, engaging and open communication, resulting in an environment where creativity blossoms (Victoria et1, author, 2022). But creativity and operational efficiency must be integrated and this balance has to be struck by organizations. Organizations that adopt hybrid models combining hierarchical oversight with decentralized empowerment create a culture that nurtures experimentation, versatility, and sustained innovation. (Jerab and Mabrouk, 2023).

2.1.4.2 Communication channels and their role in knowledge sharing and collaboration

Effective communication channels play a crucial role in fostering knowledge sharing and collaboration within organizations, directly influencing innovation and creativity (Ye et al., 2022). As mentioned, the ability of employees to exchange insights, experiences, and expertise determines the organization's ability to develop new ideas and drive continuous improvement (Azeem et al., 2021). Communication channels provide the structural framework that facilitates this exchange, shaping how information flows and how collaboration unfolds (Fuchs and Reichel, 2023). The effectiveness of these channels, whether formal or informal, digital or face-to-face, determines how knowledge is created, transferred, and applied across different levels of an organization (Ceci et al., 2021).

Knowledge transfer is one of the basic aspects of communication in knowledge sharing as it happens through different media such as meetings, reports, emails and digital platforms (Zamiri

and Esmaeili, 2024). It allows tacit and explicit knowledge to move through these channels. Tacit knowledge is a product of personal experiences and hence can be communicated in such forms as mentorship programs, storytelling, informal discussions (Budrytė and Vainauskienė, 2023). However, explicit knowledge is documented and disseminated in manuals, databases, and structured training programmes (Maravilhas and Martins, 2019). How well does an organisation use both forms of knowledge, the extent to which it fosters innovation and problem solving depends on it.

Knowledge sharing is a core component of collaboration because it facilitates gathering of expertise from multiple individuals and subsequent generation of new insights (Ahmad and Karim, 2019). Geographical gaps are bridged and interaction is enhanced by modern organisations with the use of digital communication platforms like collaborative tools, virtual workspaces, online discussion forums (Kumar, 2024). Their understanding of these platforms allows them to exchange real time knowledge and enables employees to access such critical information wherever they are. In addition to the artificial intelligence, virtual reality and big data analytics integrated, organisations have further increased the collaborative potential through the creation of an interconnected knowledge sharing ecosystem (Asrifan et al., 2025).

Knowledge sharing within an organisation is affected by the cultural and social context (Liu, 2018). According to Kaur (2024), an organisation with an open and transparent culture allows employees to engage in discussions, provide insights and give constructive feedback. On the contrary, in hierarchical and rigid cultures, knowledge hoarding takes place, which reduces collaboration, and hinders innovation (Nelufule and Abrahams, 2024). Trust and psychological safety are very important in order to allow employees to share their ideas without being criticised or punished (Vaida and Ardelean, 2019). Leaders play a pivotal role in establishing an inclusive knowledge-sharing culture, where open communication and teamwork are prioritized.

However, with the rise of the digital platform, the traditional knowledge sharing mechanism has been changed to a real time collaborative platform and data driven decision making (Tiwari et al., 2022). Both cloud-based collaboration tools and enterprise social networks facilitate access and contribution of knowledge by employees in an efficient manner (Brouwer, Jansen, 2019). The digital tools offer the personalization of learning experiences by enabling employees to personalise their knowledge acquisition based on their specific needs (Karhukorpi & Cirhinlioglu, 2022). Despite the receiving of these platforms, the uptake of

these platforms is contingent on the overcoming of the digital illiteracy barriers and the equitable access to technological resources (Matsuo & Aihara, 2022).

Using social media and online forums in workplace communication results into an environment where employees can share their ideas informally to enhance collaborative relationships (Tiwari et al., 2022). By using these platforms, the organisations collect collective intelligence and ensure that the ideas and the insights of various perspectives contribute to the innovation process (Zamiri and Esmaeili, 2024). Digital networking allows employees to participate in communities of practise which are always in the process of sharing and refining expertise. Nevertheless, organizational policies focused on promoting participation that ensure privacy and intellectual property are maintained while assisting employees and collaborating businesses to communicate effectively using these channels (Silva de Garcia et al., 2022).

Problem solving and innovation are also supported by effective communication channels since they allow brainstorming sessions, design thinking workshops, and cross functional collaboration (Lages et al., 2020). Communication plays a role in an organisation where it fosters an environment for continuous improvement and can aid in understanding the challenges and finding a way forward with creative solutions. Documentation sustains knowledge sharing in that recorded insights and best practises help to ensure that information does not get lost over time (Brouwer & Jansen, 2019). Knowledge managements systems allow to organize and archive information. It can easily retrieve for any time requirements.

Knowledge sharing has to be addressed such as accessibility, inclusivity, and engagement (Zamiri and Esmaeili, 2024) to maximize the impact of knowledge sharing in organizations. Digital tools should be considered carefully and increased to the extent they supplement rather than overload employees with too much information (Parr et al., 2021). As such, it is important to develop employees' digital literacy and navigate and use knowledge sharing platforms (knowledge management system) (Tiwari et al., 2022). Additionally, organizations should create structured feedback mechanisms to assess the effectiveness of communication channels and refine them continuously.

Therefore, communication channels serve as the foundation for knowledge sharing and collaboration, directly impacting an organization's ability to innovate and adapt to change (Lages et al., 2020). The successful integration of formal and informal, digital and face-to-face communication methods ensures that knowledge is effectively disseminated and applied

(Zamiri and Esmaeili, 2024). Organizations that cultivate open, inclusive, and technology-driven communication environments position themselves as leaders in innovation and creativity (Alabi, 2025). By continuously refining communication strategies and leveraging emerging technologies, organizations can sustain a collaborative culture that fosters learning, problem-solving, and long-term success.

2.1.5 External Factors That Influence Organisational Culture and Innovation

2.1.5.1 Market competition and industry trends shaping innovation practices

Market competition and industry trends evolve rapidly, and these developments have a huge impact on the organization's innovation practice. As industries become increasingly dynamic, firms must continuously adapt to emerging technologies, evolving consumer expectations, and intensified global competition (Zaslavska and Zaslavska, 2024). As such, there has been an organizational imperative to find ways of integrating service innovation, digital transformation and personalized experiences as part of their strategic thinking towards sustainability (Ononiwu et al., 2024). If companies do not take cognizance of and meet these industry trends in products, they could easily lose market relevance, while those that embed innovation into its organizational culture establish itself as a company with its sustained competitive advantage.

Servitization is one of the most significant trends in recent years where businesses can integrate services to its traditional product offerings. Given growing emphasis placed on service innovation, firms must step beyond transactional relationships to establish long term involvement with customers and partners (Kandampully et al., 2023). Today, manufacturing, automotive and information technology companies adopt service-based strategies to increase customer satisfaction and loyalty by emphasising value added services (Wilson et al., 2020). This means that organizations are going back to the starting point with regards to business models; they are starting to accept services paid for with subscription, and maybe predictive maintenance or services that complete the product, all of which will improve the way customers are served.

Gamification is another emerging trend that is shaping up innovation and which has changed the way businesses engage employees, customers, and channel partners (Patricio et al., 2020). Game mechanics have been widely used for integration into non-gaming environments across different sectors to achieve improvement in motivation, learning, and engagement (Hao et al.,

2024). Such corporations as Amazon, Expedia, and Starbucks are using gamified applications in their marketing and operational strategies to intensify interaction and retaining customers. In B2B (business to business) settings, companies employ gamification to improve the training programs, optimise the sales process and increase the productivity of the workforce (Friess, 2024). For instance, Volvo's Dynafleet app ranks drivers based on fuel efficiency, creating a competitive yet educational platform that enhances performance and sustainability.

Increasing demand for personalized service experiences also has a great impact on the innovation strategies. Businesses are leveraging data-driven insights to offer customized interactions and targeted solutions that align with consumer preferences (Feng et al., 2019). This expectation for hyper-personalization extends beyond B2C (business to consumer) markets into industrial sectors, where channel partners seek tailored communications, service offerings, and sales strategies (Miftakhova and Lutovinova, 2019). Yet the demand is there, as firms struggle to meet the demands of personalisation due to complexity in analyzing huge amounts of customer data or khawi, the fear of overwhelming recipients with too much communication (Sandrin, 2021). A successful approach to personalization is a balanced one based on relevant, data driven and the needs of each customer segment.

Artificial Intelligence (AI) and automation have accelerated further innovation in organizations by helping them improve decision making, reduce the operational costs, and deliver better service (Yi and Ayangbah, 2024). While deep learning has benefitted predictive analytics, customer sentiment analysis and behavior driven marketing, conventional rule-based AI has been replaced by (Stone et al., 2020). These AI driven personalization like intelligent chatbot and real time content customization has been revolutionary for customer engagement strategies and also helped sales and service team to become more efficient (Syam & Sharma, 2018). However, some of the inherent benefits of AI must be accompanied by the concerns of data privacy, security and ethics in the AI driven decision cycle.

With the advent of digital transformation, industries find themselves asking these concerns concerning one thing—data privacy and cybersecurity (Díaz et al., 2021). Organizations face heightened scrutiny from both regulators and consumers regarding how personal and business data is collected, stored, and used (Norval et al., 2021). Majority of companies have been forced to enforce stricter data protection measures, and greater transparency in their data practices due to the enforcement of such privacy regulations like the General Data Protection Regulation (GDPR) in Europe (Bharti and Aryal, 2023). Data driven innovation is in turn its profiting itself

from personalization and market intelligence but it's necessary to find the balance between the previous mentioned benefits and stringent frameworks about sensitive information and trust.

In addition, innovation also takes place in industrial markets through the Internet of Things (IoT) and interconnected ecosystems. The use of smart device and real time data analytics can help businesses optimize the supply chains, improve operational efficiency and develop predictive maintenance models (Pawar, 2024). IoT has expanded the scope of service innovation, and companies can provide real time monitoring, automated diagnostics, seamless integration between services and products (Chand and Tarei, 2024). Even though the proliferation of connected devices brings new issues for data security, interoperability and compliance requirements, organizations have to solve to achieve full potential of IoT (Uzoka et al., 2024).

Like in the market competition, firms are facing the same in innovation strategy, as they are prioritizing agility and adaptability (Syam & Sharma, 2018). Responsible organizations implement lean methodologies, design thinking, or agile development and deploy quickly new ideas, test solutions, and iterate based on market feedback (Kumar et al., 2019). In fast changing industries like the technology, healthcare and financial services, it is particularly critical to quickly enable the ability to pivot in response to market changes (Mialki et al., 2019). In integrated cross functional collaboration and open innovation companies, employees, customers and external partners contribute to the innovation process in ecosystems.

Organizations need to develop an innovation driven culture fostering experimentation, continuous learning and taking risks to gain a competitive edge in competitive industries (Ali et al. 2024). But this cultural transformation needs strong leadership, growth in developing talent and getting rid of bureaucratic barriers that limit creativity. Companies that enable employees to think beyond the normal constraints and proposed new and unique solutions are more likely to sustain innovation momentum (Russo et al., 2020).

This is why market competition and what is evolving in the industry are the main drivers of the innovation practices within the organization (Farahmand, 2019). Going digital and integrating IoT has become a necessity for companies; companies must still deal with such complexities in servitization, gamification, personalization, adoption of AI and data privacy. Organizations can successfully anticipate the industry trends, utilize the emerging technologies and bring real

value for the customers and the stakeholders by creating a culture of agility, openness and continuous improvement.

2.1.5.2 The role of technology in supporting or hindering a culture of creativity

Technology has become a fundamental driver of creativity in modern organizations, shaping how individuals and teams generate, develop, and implement ideas. The creative process has been completely changed by digital transformation, artificial intelligence (AI), and by industry 4.0, which provide new tools for ideation and way also bring challenges that (practically) can't allow us to promote a true innovation (Kraus et al., 2021; Orero-Blat et al., 2022). The way businesses harness the digital tools available to them for creativity and avoid being limited by them (Pedersen, 2022)

With such adoption of digital tools, there are unprecedented levels of creativity which have allowed platforms for collaboration, platforms for automation, and data driven decision making (Balakrishnan et al., 2024). In fact, companies such as Apple, Google and Renault have adopted a digital culture based on risk taking and experimenting with AI, Big data analytics, and Internet of Things (IoT) (Ghosh et al., 2021). These technologies make it easier for employees to generate ideas, then test hypotheses quickly and iterate on designs with as little friction as possible (Rajaram and Tinguely, 2024). Let's take AI powered design software as an example which will assist the creatives in developing new prototypes or collaborative digital platforms which assists the distributed teams in working in innovative projects from across geographical boundaries.

Moreover, digitalization has enabled democratization of creativity, in that interesting tools have become wieldier by anyone with a computer. With AI powered applications, non-experts can produce high quality artwork, music, written content without the need of any formal training in artistic disciplines (Ghonge et al, 2024). In cultural sectors, organizations like Arts Council England now embrace a broader definition of creativity, recognizing diverse creative expressions and supporting community-driven artistic endeavors (Mackney and Young, 2022). This shift towards cultural democracy highlights how technology empowers individuals by removing traditional barriers to participation in creative industries.

However, while technology provides new opportunities for creativity, it also introduces constraints that may hinder innovation. First, using algorithmic creative decision making

becomes a basic problem of a homogeneous rather than varied creative outputs (Benhamida et al., 2021). Generative AI content generation usually reinforces already popular trends and inhibits the advent of truly new and disruptive ones (Eger et al., 2025). Moreover, AI-generated works lack the emotional depth and cultural nuances that come from human experience, raising questions about the authenticity and originality of AI-assisted creativity (Sharma and Bozkurt, 2024).

Moreover, digital transformation initiatives tend to fail because there is a misalignment either with the organizational culture (Bozkus, 2023). While many companies pour heaps of resources into new technologies, many fail to integrate these new technologies into their creative processes due to lack of ability to change or due to lack of digital skills (Andriole, 2023). This cultural misalignment can result in technological stagnation, where tools are underutilized or even ignored, preventing their full creative potential from being realized (Papendieck and Hughes, 2022). Organizations must therefore prioritize cultural adaptation, ensuring that employees feel empowered rather than constrained by technology.

However, there is another challenge in the changing nature of creative labor, because creative labor is automated. Digital tools make the work process more efficient, but they can also replace human roles so that fewer hands-on creative problem-solving (Hernandez-de-Menendez et al., 2020) opportunities are offered. Increased usage of machine generated content creates the ethical and philosophical questions as to what a role should be played by the human agency for creative work. And as creativity becomes increasingly automated, the intrinsic motivation and autonomy that drive the innovation really happen will diminish for the organizations (Leal-Rodríguez et al., 2023).

Moreover, the push for data-driven personalization in marketing and product development may create a paradox of choice, where excessive reliance on consumer insights stifles bold experimentation (Rockett et al., 2025). Despite the evolution of management practices equipped with exploratory and creative value creation methods, companies often suffer from a lack of attention towards short or long-term market trends, while unexplainably placing short-term, marginal improvements over fully transforming technologies or innovative products or service offerings (Yamnitsky, 2021; Jankowicz, 2021). For an organization, the challenge is to use data as a basis for decision-making but at the same time allow intuition and artistic vision into the decision to avoid technology efficiency over originality.

The organizational structure and leadership approach also play a crucial role in determining whether technology supports or hinders creativity (Le and Lei, 2019). Rigid hierarchical models, along with their corresponding digital workflows, are among the causes that some companies operate with, limiting creative autonomy, making employees conform to predefined processes that may hinder out of the box thinking (Steyn, 2018). On the other hand, businesses that adopt decentralized decision making and flexible workplace are willing to allow employees to try out digital tools more freely, therefore creating the culture of continuous innovation (Vaia et al., 2022).

Therefore, technology is a double-edged sword in fostering a culture of creativity. First of all, it offers a set of very power tools, democratising creative expression and facilitating collaboration and efficiency as much as possible. However, it can also introduce constraints by reinforcing existing trends, diminishing human agency, and creating cultural resistance within organizations (Bozkurt et al., 2024). To fully harness technology's creative potential, companies must align digital transformation efforts with their organizational culture, ensure that technology complements rather than replaces human ingenuity, and strike a balance between data-driven optimization and artistic experimentation (Taherdoost, 2024). The organizations that overcome this complexity in a flexible way will be most suitable for maintaining long term successful creative practice and for driving innovation.

2.1.5.3 Regulatory and socio-cultural influences on organisational innovation

Organisational innovation is shaped by a complex interplay of regulatory frameworks and socio-cultural factors, both of which create opportunities and constraints for companies striving to innovate in an evolving marketplace (Das, 2024). Regulations influence how firms structure their innovation strategies, while socio-cultural norms dictate the level of openness, risk-taking, and adaptability within organisations (Dewangan et al., 2024). These external forces not only set the boundaries for innovation but also serve as catalysts for organisational change, compelling companies to reconfigure their structures, processes, and value systems.

There's nothing like regulation of whatever are the politics of the day to redirect and make otherwise feasible innovation. Policies of governments and international institutions set in place the conditions for or against technological innovations which ensure that innovation is driven by economic, environmental and social goals (Edler et al., 2023). E.g., the European Green Deal launched in 2019 sets out a petition for a transformation towards a more sustainable

and circular economy, which in turn entails those businesses have to incorporate ecofriendly procedures in their innovation strategies (Eckert & Kovalevskaia 2021). It is a requirement that companies create new business models built around resource efficiency, waste minimization and adoption of renewable energy.

The financial sector exemplifies how regulatory frameworks drive innovation. Regulatory bodies have an important role to play in what is now commonly known as fintech and digital payment systems: ‘the rise of fintech and digital payment systems, ... in places such as Mauritius (Ramgolam and Fuqiang, 2024).’ While digital payment technologies offer opportunities for financial inclusion and economic growth, concerns about cybersecurity, fraud prevention, and data privacy necessitate stringent regulatory measures (Alexander and Karametaxas, 2021). Countries that establish clear legal frameworks for fintech innovation such as open banking regulations tend to witness higher adoption rates of digital financial solutions, fostering a culture of technological experimentation and entrepreneurship (De Pascalis and Brener, 2024).

However, overly restrictive regulations can also hinder organisational innovation. In the industries of healthcare and pharmaceuticals, research and development (R&D) process may be slowed down due to stringent compliance requirements to introduce breakthrough medical treatments (Girasa, 2020). Like any other industries which have excessive bureaucratic oversight (examples of construction, transportation industries), they may find it hard to acknowledge the way of the technologies, for instance, autonomous vehicles or AI-enabled project management, because of lengthy approval processes and compliance constraints (Coccia, 2023). Regulations, however, are necessary for being able to offer some safeguards, but they must find a balance between risk reduction and encouraging innovation.

In addition to regulatory influences, socio-cultural factors play a crucial role in determining how organisations perceive and adopt innovation. Hofstede (2011) highlights the role of trust and institutional confidence in technological adoption (Hallikainen and Laukkanen, 2018). If societies are more trusting societies of institutions, they will be more willing of digital innovations such as cashless payment systems and AI driven decision making (Vittala et al., 2024). On the flip side, cultures that have always been averse to technological change may experience resistance which may necessitate organisations to engage in the consumer education and trust building activity (Stouten et al., 2018).

Cultural attitudes toward risk-taking and entrepreneurship also shape an organisation's willingness to innovate. For socially embedded IT teams in innovation driven economies, such as the United States and South Korea, failure is common through learning experience (Li, 2022). For instance, societies focusing on stability, hierarchy and predictability (Japan, Germany) may rather look for incremental improvements compared to disruptive innovation (Leyva de la Hiz et al., 2022). This distinction affects corporate structures, with hierarchical organisations likely suffering from difficulties in creating an agile and adaptable culture, while the same is more difficult for teams in the same organisation that are closer to the market.

The adoption of green technologies and green business practices can also be accelerated in a society's environmental consciousness. Taking make use return model instead of the linear take make dispose model, a growing consumer pressure is being put on the fashion industry, for example (Huynh, 2022). In response, the European Union's Circle Economy Action Plan has obliged brands to reconsider the structure of supply chains, materials and waste management strategies (Camilleri, 2021). However, cultural resistance to sustainable consumption—such as the fast fashion industry's emphasis on constant stylistic renewal—poses significant challenges to achieving long-term environmental goals (Macchion et al., 2018).

The societal attitude about AI and digital transformation drives same towards adoption of AI as well as digital transformation. However, AI solutions powered by AI can do so much for productivity and innovation without causing public backlgame because people are worried about job displacement with those algorithms, algorithmic bias, or data surveillance (Chen et al, 2024). Organisations must therefore operate in the ethical realms of the technological innovation, where AI deployment is in line with the values and principles of the society and the human being (Sargiotis, 2024).

Regulatory and socio-cultural factors are also deeply intertwined with economic resilience. The supply chain agility, digital infrastructure and adaptive policymaking are becoming pivotal during the time of COVID 19 pandemic and Russia Ukraine conflict (Ullah, 2023). The European Commission's 'Triple Transition' framework bases digital transformation, sustainability, and resilience in the connection and corresponding development of innovation and economy (Laranja et al., 2022). This shift is in line with organisations being required to not only accept technological and environmental changes but also have solid contingency plans to cope with market disruptions.

Therefore, the relationship between regulatory frameworks, socio-cultural values, and organisational innovation is dynamic and multifaceted. While regulations set the boundaries of the technological frontier, they can either allow or restrict an organization's ability to explore new technological frontiers (Acar et al., 2019). Simultaneously, it is cultural norms and social society attitudes that influence how innovations are viewed, accepted and integrated into organisational process (Ogunmola, 2024). With these external influences for businesses that wish to prosper in the economy of innovation (Sagar, 2024) a strategy is required. Companies must take into account regulatory requirements, adopt cultural diversity of consumer expectations, and come up with resilience to uncertainty (Lescrauwaet et al., 2022) in their innovation strategies. This permits organisations to create environment whereby they are able to meet the legal requirement and at the same time promote creative attitude, flexibility and sustainability in the long run.

2.1.5.4 Globalisation and cross-industry knowledge transfer

In an age of accelerated technological change and connected the world, the knowledge transfer across industries, as well as across national borders has become a basic driver of innovation and growth of organizational (Anand et al., 2021). Firms can expand out of domestic markets to access these perspectives, advanced technologies and innovative business models from other sectors and geography that can be integrated in their best practises. The global knowledge networks enable organisations to compete in the competition, respond to the changing market dynamics and speed up the creation of new solution (Irfan et al., 2021).

With globalisation, ideas, technologies and expertise have flowed across borders in ways that enable businesses to learn from one another, adopt cross industry innovations (Vetrivel et al., 2024). Firms are now able to draw from the global knowledge reservoirs, which has given them the capacity to produce cutting edge products and services (Chandratreya, 2025). In fact, in the fields of technology, healthcare and financial services, multinational corporations find it quite visible that they borrow best practise of multiple markets to refine their own strategies.

For example, the technology sector assisted the automotive industry by automating modern vehicles using AI and IoT technologies (Ebeh et al., 2024). Both financial services and other sectors have taken to use of fintech solutions, based on emerging blockchain and digital payment technologies to allow for more efficient and safer transactions across the global markets (Wu and Pambudi, 2024). The adoption of these cross-industry practises is both

contributions to the economics of knowledge transfer between sectors that allows operational efficiency and market responsiveness.

Knowledge exchange within and across industries make possible innovation and creative problem solving (Attah et al., 2024). Also, companies that interact with organisations from other sectors are more likely to introduce disruptive solutions that change the company's way of doing business (Attah et al., 2023). For instance, as a general example, cross functional teams are teams that consist of professionals with different expertise, thereby ensuring the coordination of the ideas from various disciplines for solving the complex problems in a unique way (Ikwuanusi et al., 2024).

The healthcare industry's adoption of AI and machine learning is another prime example of employment of technology inspired by the sector that has been leading the data analytics. AI driven diagnostic tools for medical imaging and predictive analytical use case have made early detection of typical diseases so that patients get favorable outcomes (Boero, 2024). Likewise, retail industry has also utilised the customer data analytics from the e-commerce platforms to develop better personalised marketing and improve supply chain management (Johnson et al., 2024). They have shown how breaking through these barriers in cross industries could be done with knowledge exchange.

Further, cross industry partnerships between conventional corporations and startups are now becoming a favourite method of accelerating innovation (Guerrero, 2019). Agility and risk-taking mindsets of startups along with large firms' abundant resources and market reach aid in the development of business models and advanced technologies that are disruptive (Alabi, 2025).

However, globalisation and cross industry knowledge sharing have their own advantages, but organisations still experienced multiple barriers in knowledge transfer and how to implement it. One such major barrier is cultural and organisational resistance (Bakare et al., 2024). It can be hard for people in highly regulated or hierarchical industries to accept innovative practises from other sectors because these industries have rigid corporate structures and risk averse mindsets (O'Reilly and Tushman, 2020).

Also, there are intellectual property issues that prevent the free exchange of ideas (Sharma, 2019). Since there is fear of intellectual property theft or competitive disadvantage, firms in

industries, like pharmaceuticals and consumer electronics, operating in highly competitive environments may be reticent to share proprietary knowledge (Yadav et al., 2023). These concerns can be mitigated through the establishment of robust legal frameworks and negotiating proper deals concerning knowledge sharing agreements (Ahlfänger et al., 2022).

A technological compatibility and integration is also another challenge (Attah et al., 2024). Going from one industry to another, new technology has to be sorted out on systems interoperability, data security and regulatory compliance. The integration of the blockchain technology of the tech sector by the financial institutions has to comply with financial regulations and cybersecurity standards (Khan and Malaika, 2021).

Calabrese et al. (2018) indicated that an organisational culture that is proactive towards the firm's absorption and utilisation of knowledge from global and cross industry sources is significant in determining how efficiently firms absorb and exploit knowledge from global and cross industry sources. The companies that have a culture of continuous learning, openness and experimentation are better able to integrate the external knowledge, to innovate and profit from it.

For illustration, strategic partnerships and open innovation platforms have been turned into institutionalised knowledge around cross industry by multinational companies such as Google and Amazon (Della Bruna, 2024). These organisations have achieved this translation by fostering an entrepreneurial mindset and fostering collaboration.

It is also vital to create a psychological safe environment where employees are allowed to experiment with new ideas without fear of failure for knowledge transfer and application. However, initiatives to share knowledge can further get the boost of leadership support for interdisciplinary collaboration, mentorship programs, and innovation incubators (Stana et al., 2024).

With industries more and more interdependent, globalisation and cross industry knowledge transfer will grow in role. Thus, collaborative knowledge sharing models (Ajirotutu et al., 2024) will even be more required and will be further accelerated by emerging trends such as Industry 4.0, AI-driven automation, and sustainable innovation.

The contribution of AI and big data analytics to knowledge management system integration will help organizations to discern patterns, predict the market trends, and minimize knowledge transfer process time (Sharma and Kumar, 2024), while the use of blockchain technology will open the doors for data security and the trust in cross-industry collaborations; reducing concerns on intellectual property protection and information integrity.

Furthermore, the firms will be encouraged to lead towards the sustainability and the circular economy mechanisms by denouncing trade across sectors, which means the eco-friendlier innovation approaches (Brown et al., 2019). For instance, the fashion industry's introduction to circular production models has been at the soil of the manufacturing and energy sectors that have already made progress towards sustainability, signifying the capability of cross industry specters on sustainable practices.

Consequently, globalisation, cross industry knowledge transfer are powerful enablers of organisational innovation and creativity (Klein and Spsychalska-Wojtkiewicz, 2020). By leveraging it, insights from the diverse industries as well as global markets will further help in developing the disruptive solutions, increase its operational efficiency and stay ahead in the market trend. However, overcoming cultural resistance, intellectual property concerns, and technological integration challenges is essential to maximising the benefits of knowledge exchange (Yilmaz, 2025). As industries continue to evolve and interconnect, organisations must cultivate a culture of openness, continuous learning, and strategic collaboration to effectively absorb and apply external knowledge. Through cross-functional teamwork, digital innovation, and strategic partnerships, businesses can unlock new frontiers of creativity, efficiency, and sustainable growth in the global knowledge economy (Smolinski, 2024).

2.1.6 Evaluating Organisational Culture for Innovation and Creativity

2.1.6.1 Frameworks for assessing cultural attributes that support innovation (Denison Organizational Culture Survey)

A well-defined culture fosters engagement, collaboration, and adaptability, all of which are essential for sustaining innovation. Among the various models designed to assess cultural attributes, the Denison Organizational Culture Survey (DOCS) provides a robust framework for evaluating the alignment of culture with innovation potential (Abu-Shawish, 2021). Key

attributes of an organization's ability to innovate are identified as involvement, consistency, adaptability, and mission (involvement, consistency, adaptability and mission). These attributes respectively are unique to the overall cultural environment and thus affect employee commitment, decision-making process, and long-term performance outcomes (Tadesse Bogale and Debela, 2024). A culture of involvement ensures that employees are actively engaged in the organization's mission and strategy, fostering a sense of ownership and responsibility (Oladimeji et al., 2023). This is because employee involvement in decision making and problem solving would make the commitment to innovation since people will feel more valued and empowered to contribute their new ideas (Ejere and Jarbandhan, 2019). For the creation of breakthrough innovations, leadership in highly innovative firms creates an environment in which employees are provided autonomy to experiment, fail, and learn (Pisano, 2019).

Studies suggest that companies with high involvement cultures demonstrate higher levels of collaboration and cross-functional teamwork, leading to an enhanced capacity for creative problem-solving (Hadjielias et al., 2021). An example of this is where research has shown a strong correlation between employee involvement and performance management techniques in Pakistani universities, for example, in which inclusivity in strategic planning was associated with higher levels of innovation outcomes (Rehman and Iqbal, 2020). Like in Kenya's educational sector, Ng'ang'a and Wesonga (2012) pointed out that involvement in the enhancement of the institutional's performance as employees were more creative and motivated when they were involved in shaping the strategies (Mati, 2022). In the private sector, multinational technology firms like Google and Amazon have institutionalized high-involvement cultures by implementing open-innovation platforms and cross-functional collaborations that enable employees at all levels to contribute to innovation (Read and Smith, 2023). This approach aligns with Denison's assertion that empowering employees through participatory decision-making strengthens an organization's innovative capabilities.

While innovation thrives on adaptability, a stable and well-integrated culture serves as a critical foundation for sustaining innovation over time (Schiuma and Santarsiero, 2024). Consistency refers to the degree to which core values, policies, and operational procedures are well-coordinated and aligned with an organization's strategic objectives (Omesa et al., 2019). This attribute helps maintain organizational coherence, ensuring that innovation efforts are structured rather than chaotic. Research indicates that firms with strong cultural consistency tend to have clear processes for knowledge management and idea implementation, allowing

innovations to scale effectively (O'Reilly and Tushman, 2021). In Romania's IT sector, companies that integrated consistency into their performance management approaches reported higher efficiency in translating creative ideas into market-ready products (Osarenkhoe et al., 2024).

Similarly, Ahmed and Lasrado and Kassem, (2021) study on Pakistan's telecommunications industry found that firms with well-established cultural consistency demonstrated higher levels of product innovation and service excellence. The fact that organizational values and innovation strategies need to match to ensure long term sustainability of the organization is brought out. Nevertheless, although rigidity is important, too much of a good thing can stunt experimentation and risk taking (Lange et al., 2023). Microfoundations of inconsistent innovation indicate that sustainably innovative firms have to be both consistent and adaptable (Miceli et al., 2021).

An organization's ability to adapt to changes, take risks, and incorporate new ideas is referred to as adaptability (Karman, 2020). High-performing firms often exhibit a willingness to experiment and learn from failures, which is essential for fostering an innovative culture. A study by Alake et al., (2024) in Nigeria demonstrated that firms with adaptive cultures were more efficient in responding to technological advancements, enabling them to outperform competitors. Relevant research on Ghanaian firms shown that adaptability significantly improved corporate performance as firms with continuous learning and experimentation were more likely to innovate disruptively (Asare-Kyire et al., 2023).

In the tech industry, adaptability has become a hallmark of digital transformation. Such companies as Tesla and Apple have been successful by undergoing constant change of business models, incorporation of the most advanced technologies and timely response to customer needs (Kumar, 2025). These organizations exemplify Denison's argument that an adaptive culture fosters continuous innovation and long-term growth. Yet, change has to be managed strategically as firms taking change for the sake of change may lose the cultural coherence (Ghaleb, 2024). The balance between innovation and stability is maintained by companies in the sense that new ideas must be aligned with core business values.

The mission pillar of the Denison framework is also a critical piece that should guide innovation efforts. Having a clear mission statement will help employees to know what direction to work (Wahyuningsih et al., 2019). Compelling vision is articulated by the

successful companies that inspire employees to be creative and yet focused on the strategic perspectives (Qasim, 2024). In research into Ghanaian firms, Oppong and Korang (2024) find that a distinct corporate mission was a major contributing factor to employee productivity and innovation. Esho and Verhoef, (2020) similarly stressed that companies that were more certain about their mission invested more in technological innovations and in developing skills therefore producing more innovation. Studies in higher education institutions have shown that those faculty members who have an understanding of their institution's mission are more involved in research and innovative teaching practise (Pudjiarti et al., 2024). Indeed, just as Microsoft and IBM have used their mission to direct investments in R&D toward steering technological breakthroughs toward organizational strategic priorities over the long term (Binns et al., 2022).

Consequently, the Denison Organisational Culture Survey serves as a holistic method to assess the cultural attributes that enable innovation and creativity (Illiashenko et al., 2018). In the end, the core attributes, namely involvement, consistency, adaptability, and mission are assessed and organisations can identify their strengths and gaps in their innovation ecosystems. High involvement cultures empower the employees and create an environment of co-operation and creativity. Adaptability will help an organisation to respond to the changing market dynamics and consistency will help in structured and scalability of innovation efforts (Chandratreya, 2025). Therefore, innovative activities should be directed to the strategic goals in a strategic mission to maintain a basic competitive advantage. Firms want to improve their innovation potential and this requires building a culture that balances stability and flexibility, inclusivity and direction, and risk taking with structured execution (Somasundaram et al., 2025). With the increasing proliferation of cultural facets in the global industries, organizations that integrate cultural attributes well will be better placed to lead in innovation, grow sustainably and long term.

2.1.6.2 Employee engagement surveys and innovation audits

In fact, organizational culture has a large effect on fostering innovation, creativity and business performance as a whole. Employee engagement surveys and innovation audits (Obeng et al., 2024) are two essential tools to use in assessing and enhancing culture in the area. Employee engagement surveys and innovation audits are ways to measure the level of employee

commitment, motivation and involvement and level of innovation support in the organisation (Ahmetoglu et al., 2018). However, these tools provide insights on how the cultural and structural forces of an organisation are adjusted to attain innovation objectives. Aldabbas et al. (2021) argue that employee engagement is an important factor of organisational success and thus creativity, productivity and commitment. In addition, continuously linked to higher levels of engagement has been more innovation and problem solving (Schöbel et al., 2023). By supporting and valuing employees, they are more likely to contribute creative ideas, take initiative and the mindset of embracing change.

This relationship is one of the most central frameworks that helps explain this relationship, which suggests, based on Organisational Support Theory, that employees will provide back to the organisation with higher levels of engagement and innovation (Eisenberger et al. 2020). Perceived organizational support (POS) has been shown to positively impact work engagement, and from there, work engagement is more positively associated with the creativity and problem solving (Eisenberger et al. 2020). For example, Khodakarami and Dirani (2020) show that employees who felt that their organisation provided high levels of support, were much more engaged and could show high levels of innovation in the work. Secondly, the intrinsic motivation has a major role in the connexion between engagement and creativity (Aldabbas et al., 2023). When work is meaningful and fun to employees, they also tend to be a proactive employee, to generate novelty and to experiment, and to persist in the face of challenges (Ahmadi et al., 2022). This is especially relevant in organisations which fosters autonomy and an environment open to innovation.

By measuring and tracking the engagement levels of an organisation, employee engagement surveys are a systematic way of doing so. There are numerous factors involved in these surveys, such as job satisfaction, the alignment with the values, having someone in leadership behind you, and increasing opportunities for growth (Eisenberger et al., 2020). Surveys are something that organisations that do it routinely can find out where there are barriers to innovation such as it does not psychological safe, does not communicate enough or doesn't have autonomy in taking decisions. For example, Alami et al., (2021) notes that organisations do not explicitly think about the organisation care and engagement connexion. Engagement survey results can be used to identify workplace factors that support or hinder creative thinking and consequently used to identify and target these factors by management. The studies have revealed that output of employee creativity and innovation is substantially increased when these organizations take

action based on engagement survey findings—amending the workplace policies, enhancing the leadership support and creating the culture of trust (Batmomolin et al, 2022).

In addition, the research indicates that engagement is also reciprocal; organisations offering employees with resources, recognition and work that makes sense tend to create a culture of engagement that reinforces continuous innovation (Aldabbas et al., 2023). The findings of longitudinal studies which show that organisations that frequently assess and strengthen the employee engagement tend to outperform competitors in the field of innovation driven industries (Kusumawijaya et al., 2024) support this.

Employee engagement surveys are based on workplace culture and employee motivation, whereas innovation audits are the objective assessment of an organisation's innovation processes, capabilities, and challenges. The main purpose of an innovation audit is to find gaps and opportunities to fill in order for companies to create and keep competitive advantage (Frishammar et al. 2019). Typically, innovation audits look at elements like: leadership for innovation; how organizationally the innovation process unfolds; the investment in research and development; collaboration and information sharing practices; the use of the new technology; a revisit on market responsiveness and flexibility (Ramesh, 2023). Therefore, with the acceleration of digitalization, it is possible to count on the innovation audits to integrate artificial intelligence (AI), automation, and digital transformation in the business processes (Leocádio et al, 2024). Organizations which agreed to digital innovation like data analytics, AI driven decision making, Machine learning etc. mostly developed scalable, sustainable, disruptive innovations.

The organizations are now performed by AI driven auditing tools that are enhancing the way the organizations can appraise the innovation potential. AI enables fast analytics over data, determination of emerging risks, and prediction of future innovation trend (Ebirim et al., 2024). A good example of this is machine learning (ML) which helps in detecting patterns in the audit reports, and deep learning (DL) technologies which are like simulating human cognitive processes to analyse huge volumes of complex data (Rane et al., 2024). Natural language processing (NLP) also makes it possible to interpret the enormous volume of textual data, for example, employee feedback, engagement surveys, customer insights (Chowdhary & Chowdhary, 2020). By using these AI driven approaches, innovations audits become more accurate and efficient as organizations uses them to gain actionable insights that guides their strategy.

Innovative strategies are effective only to the extent that they match employee engagement. Eisenberger et al. (2020) found that employees who are engaged more likely to contribute innovative idea, and accept the organisational change. Thus, innovation audits and employee engagement surveys need to be integrated into a comprehensive strategy to create a culture of creativity and continuous improvement in organisations (Ispiryan et al., 2024). To achieve this, organizations should: align engagement survey findings with innovation audit insights – Identify workplace factors that encourage or hinder innovation and take corrective actions; encourage leadership involvement – Leaders should actively support engagement initiatives and foster an innovation-friendly culture (Frishammar et al., 2019); invest in AI-driven audit technologies – Use data analytics and AI tools to enhance real-time monitoring of innovation metrics (Oko-Odion and Udoh, 2024); foster cross-functional collaboration – Encourage interdisciplinary teams to integrate insights from both engagement surveys and innovation audits to develop effective strategies (Ilori et al., 2021); create an adaptive innovation framework – Organizations should establish flexible innovation frameworks that continuously evolve based on employee input, market changes, and technological advancements (Frishammar et al., 2019).

As a result, employee engagement surveys and innovation audits are complementary approaches that an organisation can utilise to cultivate a culture of innovation (Richards, 2019). Regarding innovation, feedback surveys are the human and cultural part to cheque whether employees are encouraged, supported and empowered to contribute creative ideas (Chandel et al., 2025). Innovation audits, on the other hand, offer a structure framework of evaluating and strengthening an organisation's technological, strategic and operational capabilities (Abd-Mutalib, Muhammad & Walsham, 2020). Organizations can fill the gaps, develop a better innovation strategy, and create a culture where creativity flourishes if the insights from both tools are used. Furthermore, AI and digital transformation in auditing and engagement assessment make organisations capable of responding to the fast-changing market needs (Alonge et al., 2024). Ultimately, companies that successfully align employee engagement with innovation objectives will be better positioned to drive long-term growth, adaptability, and competitive advantage.

2.1.6.3 Metrics and performance indicators for measuring cultural effectiveness in fostering creativity

Cultural environment of an organisation is associated to its ability to foster creativity. Li et al. (2018) suggests that long term success for micro and nanotechnology concerns requires a strong culture of research, innovation and creativity. However, if measuring cultural effectiveness in promoting creativity is to be used, well defined metrics and performance indicators of an organisation's capacity to create new ideas, facilitate knowledge sharing, and sustain innovation (Awan and Brown, 2023) must be employed. The indicators help on understanding how well an organisation's culture supports its innovation goals and where it can improve.

The main indicator of cultural effectiveness in developing creativity is the investment in R&D. Evidence from the literature suggests that positive relationship between R&D expenditure and innovation output, economic growth and knowledge creation exists (D'Urso & Vitale, 2024). Specifically, Switzerland, the United States, and Sweden are typically ranked among the top of the Global Innovation Index (Braunerhjelm and Henrekson, 2024), countries that allocate high resources to R&D. Finally, Italy's lower R&D investment (1.51% of GDP vs. EU average of 2.31%) has been linked to a lower progress in innovation (Rossi et al, 2024). Organizations also measure the R&D intensity which is the ratio of R&D costs to total revenue (Sertkaya et al., 2024) and go outside the national investment in research and development. High performing companies keep the R&D sustained and have to come up with a pipeline of innovative products and services. In addition, it should be noted that creative outputs are strongly correlated with the number of patents filed and granted.

It is an indication of an innovation friendly culture as reflected in the employee engagement and participation in creative initiatives. The use of engagement surveys to determine if employees are enabled to bring new ideas or if they have resources to innovate (Ajmal et al., 2025). Quantitative insights into cultural effectiveness can be provided by metrics like percentage of employees in the innovation project, frequency of cross functional collaboration and volume of ideas submitted in the internal innovation programs (Nappi and Kelly, 2022).

Finally, the availability of formal knowledge sharing mechanisms, such as digital platforms, mentorship programs, and interdisciplinary workshops are important determinants for an organisation to sustain a culture of creativity (Ayestarán et al., 2022). Organizations that invest

in conversations that move freely and knowledge that moves freely tend to have higher creative problem solving and higher adaptability. An organization's responsiveness to external disruptions, such as economic crises or technological shifts, serves as an indicator of cultural resilience and innovation capacity (Heredia et al., 2022). For instance, the COVID 19 pandemic has led to a decrease in innovation activities in most of the industries as many firms have pointed out that financial constraints are a barrier (Jaka et al., 2022). Nevertheless, companies with an adaptive culture were able to realign their strategies, speed up their digitalization and initiate new business models.

Measurable insight into how well an organization is able to support continuous creativity and change can be gained through metrics such as time taken to implement new technologies, percentage of processes digitalized, etc. (Rasool et al., 2022). Furthermore, organizations that engage in open innovation ecosystems such as collaborating with start-ups, research institutions and industry partners also exhibit values of knowledge integration from the external environment. (Bereznoy et al., 2021).

As a result, cultural effectiveness in creating a creative work environment is measured on a multidimensional basis, namely the R&D investment, employee engagement, adaptability, and innovation outputs (Malek et al., 2024). Organizations that maintain a strong focus on knowledge-sharing, cross-functional collaboration, and adaptability are more likely to sustain a culture that supports continuous innovation and long-term growth (Tobari et al., 2024). By using these performance indicators, businesses and countries alike can gauge their preparedness for an innovation economy and specify facets of cultural transformation to boost creativity.

2.2 Theoretical Framework

2.2.1 Schein's Organisational Culture Theory

Schein's Organizational Culture Theory defines culture as a deep and multi-layered construct that shapes how organizations function. The model consists of three mutually related domains: artefacts, espoused values and basic underlying assumptions (Akpa et al., 2021). Artifacts are the visible manifestations of an organization's culture, including physical structures, language, rituals, and technological tools (Barton and Clark, 2021) These elements, while observable, do not always reflect the deeper values of the organization. Values espoused are the proclaimed

beliefs, goals and strategies for leadership, which act as a basis for guiding decision making and behaviour. However, discrepancies may arise between espoused values and actual practices if they are not deeply internalized (Akpa et al., 2021). The deepest level consists of basic underlying assumptions, which are unconscious beliefs that shape organizational behavior over time. These assumptions to a large extent determine employees' perception of reality and their response to challenges. If the artifacts, values, and assumptions of two organization are misaligned, they create an inefficient and an organization in conflict (Barton and Clark, 2021). The model it has stresses that it should not be just the changing of surface behavior that was essential, but rather the cultural change itself, and it deals with deep rooted assumptions. Therefore, optimal leadership must coordinate these layers to achieve a collectively and flexible organizational culture.

Organizational behaviour as well as innovation deeply depend on the cultural assumptions as they play a huge role in determining risk perception, decision making and adaptability. It is a belief that is unconscious and that employees take for granted and it either enables employees to explore new ideas and expand their horizon or keep them in a box and allow only rigid norms (Akpa et al., 2021). For example, organizations with hierarchically structured can believe that the authority needs to be centralized and are reluctant to challenge senior management or to suggest disruptive innovations (Reineke et al. 2025). Firms that consider failure to be an opportunity to learn, create an environment of experimentation that drives creativity, and technological pioneering (Horvat et al., 2025). Additionally, cultural expectations for collaborating and sharing knowledge shape employees' interactions and impact the collaboration and the open innovation processes (Al-Barghouthi, 2022). Companies with rigid cultural norms are usually resistant to change while companies with an adaptable culture are able to absorb emerging market trends (Akpa et al., 2021). Assumptions concerning competition and market dynamics, such as whether to favour incremental improvements or radical innovation, determine strategic choices of a company (Mendes et al., 2023). Finally, cultural assumptions are the basis for how an organization builds its innovation capability, how employees define challenges, how they deal with uncertainty and how they solve problems creatively (Boikanyo, 2024).

Quantitative and qualitative methods which assess the organizational behaviors, the employee perceptions and the innovation outcomes are used to measure the impact of cultural assumptions on innovation. The attributes of cultural such as adaptability, risk tolerance and

collaboration are directly related to innovation and are analyzed in surveys such as the Denison Organizational Culture Survey and Competing Values Framework (Zeb et al., 2021). Employee engagement surveys or innovation audits are used to determine if employees are psychologically safe enough to propose new ideas or innovation audits tracks R&D investments, patent filings and product development cycles (Mchayk & Kappara Wattage, 2024). Methods such as ethnographic studies and leadership interviews help gain understanding of how implicit assumptions lead to making decisions and are resistant to change (Akpa et al., 2021). Network analysis also studies how knowledge of various teams is shared through rigid hierarchies or silos that block creativity (Mendes et al., 2023). Performance metric such as time to market for new products, employee participation in innovation program and a rate of adoption of emerging technologies are tangible indicators of a culture that is friendly to innovation (Peykani et al., 2022). Integration of these methods will enable organizations to identify cultural barriers, align leadership strategies with innovation goals, develop environment to nurture continuous creativity and technological advancement.

2.2.2 Denison's Organisational Culture Model

Denison's Organizational Culture Model (1990) identifies four key cultural traits— involvement, consistency, adaptability, and mission—that shape organizational effectiveness. Communication is emphasised through involvement, participation, and leadership that facilitates engagement (Xuan et al., 2019). It increases ownership, trust and responsibility and this results in better motivation and better performance. However, an excessive involvement may make role specialisation and accountability appear blurred (Adisa et al., 2022). Consistency represents the extent of stability and predictability in the process of making decisions based on shared values, systems, and processes. While a strong culture fosters alignment and coordination, rigid consistency may limit adaptability. Adaptability highlights an organization's responsiveness to external changes and competitive pressures (Anning-Dorson, 2021). This trait allows businesses to redefine internal processes, update products, and become transformed. However, a decrease of adaptation may cause an internal vague and weaken of core values. Lastly, mission provides purpose and direction, linking strategic vision to organizational goals (Aguilera et al., 2023). A strong mission fosters long term sustainability as well as alignment of stakeholders; unless it is constantly relooked into several times as it also raises rigidity. The interplay of these four dimensions determines an organization's cultural

resilience, balancing stability and flexibility to foster innovation, productivity, and long-term competitiveness.

Denison's model provides a structured approach to evaluating innovation-friendly cultures by assessing how an organization balances stability with adaptability (Nguyen et al., 2024). High-involvement cultures empower employees to contribute ideas and take initiative, creating a participatory environment conducive to creativity. This is because engaged employees feel ownership over their work, and therefore are more motivated to innovate (Ernst et al., 2022). Nevertheless, involvement must be structured so that inefficiencies in decision making are avoided. Consistency ensures that innovative efforts align with organizational goals, preventing fragmentation (Zhao et al., 2021). Clear values and coordinated efforts help scale innovations efficiently while maintaining coherence (Cortes and Herrmann, 2021). However, overly rigid consistency may stifle experimentation. Adaptability is crucial for fostering an innovation-driven culture, as it enables organizations to anticipate industry trends, experiment with new technologies, and refine internal processes (Akpa et al., 2021). Organizations with strong adaptability develop dynamic capabilities, making them resilient to disruption (Vakilzadeh and Haase, 2021). But adaptability has to be disciplined by a strategic framework to avoid overly changing and unstable (Ouyang et al., 2023). Finally, mission gives direction and ensures that innovation can be directed towards the long-term goals (Zhao et al., 2021). A well-expressed mission creates a common mission sense giving rise to innovating towards sustainable value creation. By integrating these four dimensions, Denison's model helps organizations develop a structured yet flexible culture that supports continuous learning, creativity, and competitive advantage in an evolving market landscape.

Google exemplifies how Denison's Organizational Culture Model fosters an innovation-driven environment (Prabandari et al., 2024). The company's involvement culture empowers employees through initiatives like the "20% time policy," allowing them to dedicate a portion of their work hours to passion projects, leading to innovations like Gmail and Google Maps (Somasundaram et al., 2025). Google's strong core value of 'Focus on the user and all else will follow' reflects the alignment of innovation with user centric design (Cortes and Herrmann, 2021), which guarantees that creativity remains structured, scalable and market applicable. Adaptability is central to Google's strategy, as seen in its rapid integration of AI and cloud technologies to stay ahead of industry trends (Akpa et al., 2021). However, Google's ability to be willing to pivot, such as turning away from Google Glass to AR applications (Strategy,

2025), shows that they are open to change. Second, Google's long-term vision of being 'able to organise the world's information and make it universally accessible and useful' guides its innovation efforts by leaving room for execution (Zhao et al., 2021). Google has managed to integrate these cultural traits so that it could sustain its position as a global leader in technology and innovation and have the real-world applicability of Denison's model.

2.2.3 Burns and Stalker's Contingency Theory

Burns and Stalker's Contingency Theory (1961) challenged traditional organizational models by arguing that no single structure is universally effective; rather, an organization's effectiveness depends on its environment (Liu, 2020). They found two different structures, termed mechanistic and organic, appropriate at different levels of environmental stability. The best use of mechanistic structures occurs in stable predictable environments with rigid hierarchies under which centralized decision making and defined roles are established (Heisel, 2023). This means it is efficient but lends itself to little change. On the contrary, organic structures operate in dynamic environment which meant decentralized authority, open communication and flexible roles for the continuous adaptation (Jerab and Mabrouk, 2023). The theory underscores the importance of environmental uncertainty in shaping organizational design, aligning with Duncan's (1972) classification of unpredictable environments requiring adaptive strategies (Adegbite et al., 2018). Unlike traditional theories that assumed hierarchical control as inherently effective, Contingency Theory emphasizes that successful organizations must match their structure to their environment. However, the framework is criticized by critics as the structural choices in modern business landscapes are oversimplified, as hybrid models, which include both the mechanistic and organic elements, have come into existence (Seibel et al., 2023). However, the theory remains foundational in understanding how adaptability impacts innovation, particularly in industries facing rapid technological and market shifts.

Innovation thrives in environments that support flexibility, collaboration, and knowledge-sharing, making organic structures more conducive to fostering creativity. Organic organizations emphasize decentralization, open communication, and cross-functional collaboration, enabling rapid adaptation to change (Pacheco-Cubillos et al., 2024). It supports experimentation, risk, taking and continuous learning, which are the necessary conditions for breakthrough innovations. Companies like Google and Tesla adopt organic elements, such as flat hierarchies and project-based teams, to maintain agility in fast-evolving industries (Fang

and Qin, 2025). On the other hand, mechanistic structures, characterized by rigid hierarchies and systematic procedures, typically defeat creativity by reducing autonomy and risk taking (Haynes, 2024). However, mechanistic organizations can drive incremental innovation in industries requiring highly controlled environments, such as pharmaceuticals and aerospace, where structured R&D processes ensure compliance and precision (Haynes, 2024). In a global context, balancing the stability and flexibility corresponds to the optimal structure, which consists in the hybrid models of model that combines the organic adaptability with the mechanistic efficiency. For example, in Apple's structure there is centralized leadership for strategic direction and decentralized innovation teams' probing for creativity and control (Yoo et al, 2024). Ultimately, organizations fostering an innovation-friendly culture must align structure with industry dynamics, allowing creativity to flourish without compromising operational stability.

Several leading organizations successfully combine mechanistic and organic structures to foster innovation while maintaining operational efficiency. Apple's Inc. by providing integration to decentralized strategic control along with decentralized innovation teams is an example of this hybrid approach. However, they leave major product decisions up to top leadership but individual teams are given high levels of autonomy when it comes to problem solving (Rayets et al., 2023) and Amazon combines structural efficiency with organic flexibility (Turner, 2024). AWS and Alexa are R&D divisions in which the mechanistic structure is not in use and in which the structure is very adaptive and experimental (Hopp et al., 2018). Toyota's lean production system is another example—while its manufacturing processes rely on structured mechanistic principles for quality control, its Kaizen culture fosters continuous improvement through decentralized employee-driven innovations (Lakshmi and Ajay, 2024). Netflix, operating in the fast-changing entertainment industry, blends structured decision-making with a culture of freedom and responsibility, allowing teams to experiment while aligning with the company's broader strategic vision (Karjanmaa Willsteen et al., 2023). These case studies illustrate that hybrid structures maximize both efficiency and adaptability, enabling firms to drive continuous innovation without sacrificing stability, which is crucial in dynamic, competitive industries.

2.3 Conceptual Framework

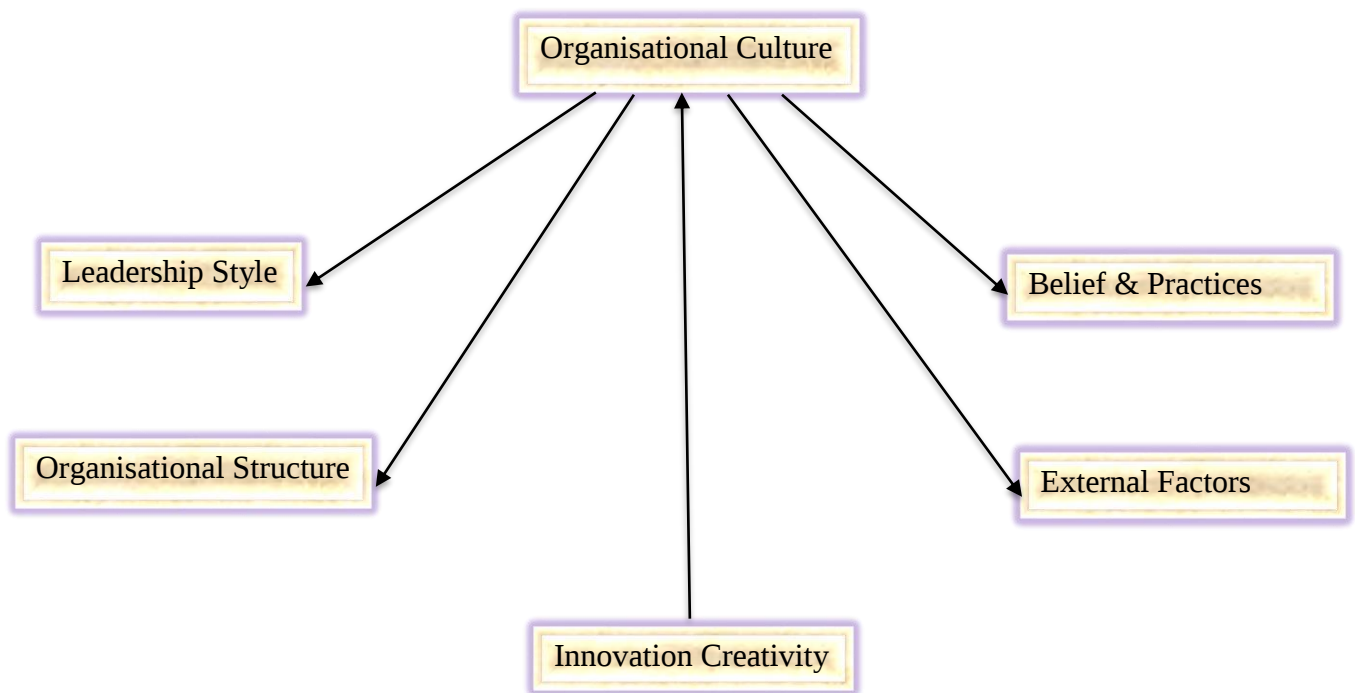


Figure 2.2: Organizational Culture and Innovation (Researcher, 2025)

The diagram shows the conceptual framework of the relationship between organisational culture and its key influencing factors to encourage innovation and creativity. It highlights the dynamic interactions between internal and external organisational components and their collective impact on shaping a culture that encourages innovation.

First, at the center of this framework is organisational culture, which serves as the foundation for innovation and creativity. A strong culture establishes shared values, norms, and practices that either enhance or hinder employees' willingness to think creatively, take risks, and introduce new ideas. Without a supportive culture, innovation efforts may be fragmented and unsustainable.

Second, leadership plays a pivotal role in shaping and maintaining an innovation-friendly culture. Transformational leaders inspire employees by fostering openness, experimentation, and empowerment, while authoritarian leadership may suppress creativity (Bass & Avolio, 1994). Leaders who prioritize learning, collaboration, and adaptability directly contribute to

the development of a culture that embraces continuous improvement and innovation (Denison & Mishra, 1995).

Thirdly, organisational beliefs and practices refer to deep-seated values and behavioral norms that guide decision-making and daily operations. When an organisation promotes risk-taking, flexibility, and open communication, employees feel encouraged to contribute innovative ideas. Conversely, rigid bureaucratic practices can stifle creativity and hinder knowledge-sharing. Psychological safety, trust, and shared vision are crucial for fostering a creative work environment.

Fourth, the structure of an organisation significantly affects information flow, decision-making, and autonomy, all of which are critical for creativity. Organic structures, characterized by decentralization, cross-functional teams, and open communication, promote innovation (Burns & Stalker, 1961). In contrast, highly hierarchical structures may create barriers to idea generation and experimentation. Companies that prioritize structural flexibility tend to be more adaptive to change and innovation.

Fifth, external elements such as market competition, industry trends, technology, regulations, and globalization also shape organisational culture. For instance, industries undergoing rapid digital transformation require a culture that supports continuous learning and adaptation. Similarly, companies operating in highly regulated sectors must navigate compliance requirements while balancing creative freedom. An organisation that effectively integrates external knowledge and adapts to external pressures fosters a culture conducive to innovation.

Finally, when all these elements—leadership, structure, beliefs, and external influences—are aligned to support a culture of innovation, organisations experience higher levels of creative output, improved problem-solving, and long-term competitiveness. A learning-oriented, risk-tolerant, and collaborative culture drives sustainable innovation, enabling firms to respond proactively to change.

Therefore, this conceptual framework emphasizes that innovation is not an isolated process but a product of cultural, structural, and environmental interactions. To cultivate and sustain an innovative workforce, organisations must intentionally shape their culture by empowering leadership, encouraging open communication, adopting flexible structures, and leveraging external knowledge. By understanding these interdependencies, companies can design targeted

strategies to enhance innovation and creativity, ensuring long-term growth and competitive advantage.

2.4 Hypothesis Development

From the above Research Gaps, the following are the hypothesis developed to facilitate effective answers to the research questions. Therefore, making the study more relevant to organizations, government, public and researchers.

H1: Transformational and transactional leadership styles significantly predict the level of creativity and innovation within an organization.

H2: Corporate beliefs, adaptive organizational routines, and psychological safety have a significant and positive impact on fostering innovation and creativity within organizations.

H3: Different organizational structures have a significant effect on creativity and innovation levels within organizations.

H4: Market competition, technological advancements, regulatory frameworks, globalization, and cross-industry knowledge transfer have a significant positive impact on shaping organizational culture to foster innovation and creativity.

H5: Organizational culture, as measured by involvement, consistency, adaptability, and mission, significantly influences an organization's ability to foster innovation and creativity.

2.5 Summary of Literature Review

Organizational culture plays a pivotal role in shaping a company's ability to innovate by influencing employee behavior, leadership effectiveness, and adaptability. Strong culture foster collaboration, risk taking, learning; rigid culture inhibit collaboration, risk taking, learning. Incorporating innovation into cultural values makes it possible for businesses to experiment and share knowledge and it will most certainly be successful in the long run. Leaders who advise adaptability and learning facilitate sustainable growth in the organizations; allowing them to endure digital transformation and avoid being left behind by the changing business scenario.

Leadership styles add more feathers to an organization's innovation capacity. Transactional leadership guarantees efficiency and continuity, whereas transformational leadership helps innovation and strategical change. It is good to have structure with inspiration, to innovate. Besides, Leadership helps in organizational learning, creative problem solving, and empowering employees by promoting psychological safety, collaboration and adaptability. As industries change, resilient high performing organizations continue to be dependent on leadership to sustain innovation and great change.

The important factors to have an innovation driven mindset, corporate belief, openness to change and psychological safety. Companies that can be adapted with the culture that integrates innovation and adaptability will be the companies that facilitate creative solutions and long-term success. Psychological safety enables experimentation because of open communication and less fear. Structured routines provided balance with increasing flexibility that enhances problem solving and human engagement in the provision of an organization's vision in leadership combined with its ability to respond to technological changes and changing market demands.

Structural and decision-making approaches also determine the innovation capacity. Mechanistic and hierarchical models concentrate on spending rubbing and productivity and usually weaken flexibility and inventiveness of answers. Adaptable, collaborative and knowledge sharing is encouraged by then, whereas organic structures, decentralised decision making, and open communication. Organizations that will balance structure with autonomy, and will use various methods of communication, can create the culture of creativity, experimentation, and continuous innovation.

Market competition, industry trends, technology, regulatory frameworks and globalisation are among other factors that affect the innovation practise. Technology is good at creating a constraint, but it is also good at creating creativity. Innovation is subject to regulations and socio-cultural values and strategic alignment is needed. But both the creativity and the integration challenge in knowledge transfer is enhanced in cross-industry knowledge transfer. Agile, collaborative, and learning organizations have the backbone to leverage emerging trends, strike a balance in the adoption of technology and regulation, and run competitive long-term innovation processes.

To assess and enhance innovation, organizations can use structured frameworks such as the Denison Organizational Culture Survey, which evaluates involvement, consistency, adaptability, and mission. This is complemented by an employee engagement surveys and innovation audits that assess the readiness of culture and operations for creativity. To measure innovation effectiveness, R&D investment, adaptability and collaboration need to be tracked. Putting these cultural attributes and performance metrics together will help organisations to increase creativity, facilitate long term growth and keep them on top.

Several organizational culture theories highlight how cultural alignment, adaptability, and structural flexibility influence innovation. Schein's Organizational Culture Theory emphasizes deep cultural assumptions, while Denison's model links innovation to involvement, consistency, adaptability, and mission. Compared to mechanistic and organic structures, Burns and Stalker's Contingency Theory proposes hybrid models which will effectively balance the stability and creativity. Leading firms integrate these principles in order to sustain innovation and competitiveness in a changing global landscape, and case studies of Google, Apple and Amazon illustrate these incorporations.

CHAPTER THREE

METHODOLOGY

3.0 Introduction

This study adopts a cross-sectional research design to examine the role of organizational culture in fostering innovation and creativity across various industries in Nigeria. Quantitative methods are used to test the established theories using deductive research approach. The target population consists of 600 individuals from the banking, fashion, beverage (Coca-Cola), and media industries, with a systematic sampling method yielding a sample size of 240. The primary instrument is a structured questionnaire and data are collected by means of Google Forms and paper-based surveys. The study applies regression, PLS-SEM, one-way ANOVA, and Chi-square test for analysis while ensuring ethical considerations such as confidentiality and informed consent.

3.1 Research Design

A cross-sectional research design is appropriate for this study as it allows for the simultaneous examination of multiple variables related to leadership style, organizational structure, cultural beliefs, and external influences on innovation and creativity (Spector, 2019). The innovation and creativity in organizations is a complex and multidimensional process and hence measuring them in one point of time gives you a broad view of the current state of the situation and pattern as well as relationships. This approach allows researchers to find relationships between leadership styles and the development of an innovative culture without having to wait long periods of time.

Given that organizational culture and innovation are shaped by leadership, beliefs, and structural factors, a cross-sectional study helps capture the perceptions and experiences of employees and managers across various industries. It is essential to have such an understanding

of how such regimes of creativity work and how different leadership styles promote or decrease it. It also assists in analysing various views in a certain period of time to differentiate trends and differences in companies.

This design is particularly appropriate to assess the contribution of external factors in determining the ability of an organization to innovate. A cross sectional approach provides a full picture of these dynamics (Hunziker and Blankenagel, 2024) as they will depend on economic conditions, technological advancement and market competition. Additionally, this method helps to evaluate the organizational culture through using structured surveys or interviews to obtain employees' insights across different levels. Findings from the study can be used as a starting point for further longitudinal research and provide immediate practical recommendations to organizations that aim to improve innovation and creativity.

3.2 Research Approach

A deductive research approach is well-suited for this study as it allows for hypothesis testing based on established theories of leadership, organizational behaviour, and innovation (Casula, Rangarajan and Shields, 2021). By applying this top-down method, the research begins with theoretical frameworks that explain how leadership styles, organizational structures, and cultural beliefs influence creativity and innovation. This approach makes possible an organized way of connecting these factors to one another, and therefore of validating or correcting the existing knowledge.

Since leadership theories such as transformational and transactional leadership have been widely studied in relation to innovation, deductive reasoning enables the examination of whether these theoretical assumptions hold true in various organizational contexts. This approach enables an objective test of specific hypotheses regarding how leadership style promotes or suppresses the innovative culture. Similarly, established theories on organizational structure and external environmental factors provide a foundation for assessing their impact on creativity, ensuring that findings contribute to broader academic discussions.

In addition, this approach facilitates the use of commonly used standardized measurement tools in data collection and analysis. Researchers can apply existing theoretical constructs to determine the degree of congruence between beliefs and practices and recognized innovation models. Moreover, evaluating organizational culture through hypothesis-driven methods

allows for the identification of measurable indicators that organizations can use to assess their innovation potential. The deductive approach ultimately enhances the study's reliability and applicability by ensuring conclusions are drawn from empirical evidence rather than subjective interpretations (Haque, 2022), making it a valuable method for understanding and improving organizational innovation

3.3 Population/Sampling

The study focuses on examining the role of organizational culture in fostering innovation and creativity in Nigeria, with industries such as banking, fashion, beverages (Coca-Cola), and media selected based on their demonstrated commitment to innovation. Individuals employed in these sectors, however, use technological leaps and their own particular business models to continue development in an economy experiencing difficulties. Considering the characteristics of these industries, a systematic sampling technique is desirable, which should involve balance and reduce the selection bias in the collection of data while preserving the efficiency of data gathering.

It is because the banking sector has been chosen due to its quick adoption of digital transformation and the introduction of fintech innovations like ePayments and card less transactions initiated by companies like Interswitch. Digitalization in banking has reshaped service delivery, making it essential to assess how organizational culture has contributed to this shift. The fashion industry is another critical sector as it has embraced local production, sustainability, and technology-driven marketing, fostering creativity in design and branding. Coca-Cola inclusion is based on its pioneering sustainability efforts in Nigeria through the recycling initiatives which show innovation in environmental responsibility. Lastly, the media sector, represented by companies like Iroko TV, has utilized technology to create digital streaming platforms that expand Nollywood's reach, showing how organizational culture enables technological adaptation.

A systematic sampling is used with a target population of 600 individuals, so that each industry is proportionally represented and the sample size is manageable (Wang, 2024). Yamane's formula is used to determine the overall sample size for an estimated population proportion (Uakarn, Chaokromthong and Sintao, 2021).

3.4 Sample Size Calculation

Yamane's formula for sample size estimation is:

$$n = \frac{N}{1 + N \cdot e^2}$$

where:

N= 600 (target population)

e = 0.05 (margin of error, 5%)

$$n = \frac{600}{1 + 600 \cdot 0.05^2}$$

$$n = \frac{600}{2.5}$$

$$n = 240$$

The calculated sample size is 240 respondents from a total population of 600. To ensure proportionate representation across industries, the sample is distributed systematically among the selected sectors.

Table 3.1: Systematic Sampling Distribution

Table 3.1: Systematic Sampling Distribution

Industry	Population Size	Sampling Interval	Sample Size
Banking	175	$175/600 \times 240$	70
Fashion	125	$125/600 \times 240$	50
Beverages (Coca-Cola)	150	$150/600 \times 240$	60
Media	150	$150/600 \times 240$	60
Total	600	-	240

This systematic approach ensures that every industry is proportionally represented based on its contribution to innovation and creativity in Nigeria.

3.5 Instrumentation

A structured questionnaire will be the major instrument of data collection used in the study. The questionnaire will be designed to capture responses related to leadership styles, organizational culture, innovation, and external influences using both closed-ended and scaled questions. Because the study is so complicated, the instrument is expected to have various

sections that match with different hypotheses, allowing it to be analyzed in a targeted manner. The first section will collect demographic information, including industry, job role, years of experience, and organizational size. It makes the responses contextual in all different industries.

The second section will measure leadership styles, specifically transformational and transactional leadership, using a Likert scale (ranging from 1 = Strongly Disagree to 5 = Strongly Agree). This section aligns with H1 and will assess leadership styles that influence organizational creativity and innovation, providing data for regression analysis. In the third section, corporate beliefs, adaptive routines, and psychological safety will be evaluated to see how they promote innovation through Likert scale items. This section supports H2 and will be analyzed using PLS-SEM to assess relationships between these constructs.

The fourth section will measure organizational structures as hierarchical, flat, and matrix. Respondents will state the structure of their organization, and how it impacts creativity and innovation in one way ANOVA (H3). The fifth section will evaluate the influence of external factors such as competition within the market, the regulatory framework, and globalization on innovation culture through Likert scale (H4). The final section will measure organizational culture attributes (involvement, consistency, adaptability, and mission) that influences an organization's ability to foster innovation and creativity, facilitating the Chi-square test analysis (H5). This is because the structured questionnaire ensures that all hypotheses are statistically validated, and therefore, all the data collected is complete.

3.6 Data Collection

The study will employ a hybrid data collection approach, utilizing both online and paper-based surveys to ensure broad participation across industries (Verd, 2023). This method makes the questionnaire approachable, as respondents can take the questionnaire from any of their preferred mediums and still ensure that all the data is collected from different organizational settings. For industries with a strong digital presence, such as banking, media, and fashion, the survey will be administered online using Google Forms. We distributed the link to the questionnaire through official industry group chats and email lists, so all employees could access it without any difficulty, at different organizational level. The convenience of digital platforms facilitates real-time responses, improves response rates, and allows respondents to complete the survey at their own pace. The technological advances in these industries make

online distribution an appropriate choice, as it reflects the use of digital tools in research dissemination.

Conversely, for industries where direct engagement enhances response accuracy, such as Coca-Cola's production and recycling units, a paper-based approach was adopted. The questionnaires were given in the form of printed questionnaires that were distributed in person at the designated company offices or operational sites. It ensures employees who don't have extensive digital access or perhaps would rather have a paper copy for immediate access. A set time frame was given for data consistency across formats as the completed questionnaires were collected. The study integrates both online and paper-based data collection to maximize reach and inclusivity (Hardre, Crowson & Xie, 2012). With its dual approach, this ensures high response rates, minimal barriers to participation, and technical innovation to improve efficiency, proving that research methodology is still moving forward in a number of industries.

3.7 Reliability and Validity

To ensure the reliability of the questionnaire, the study employed Cronbach's Alpha to assess internal consistency across Likert-scale items (Bonett and Wright, 2015). A threshold of 0.70 or higher confirmed that the instrument produces stable and consistent results. A pilot study was also done with a small sample from each industry to make ambiguous questions more refined and clearer. Further reliability will be achieved by the hybrid data collection approach, which involves the use of online and paper-based surveys to reduce response bias that may be involved in the use of only one mode of administration.

Table 1: 3.2: Reliability Statistics of Items used for Regression ANOVA and Chi-Square

Reliability Statistics		
Variables	Cronbach's Alpha	N of Items
Transformational Leadership	0.858	5
Transactional Leadership	0.950	5
Creativity and Innovation	0.798	5
Employee Creativity and Risk-taking	0.964	9
Involvement	0.748	3
Consistency	0.885	3
Adaptability	0.892	3
Mission	0.740	3

Both the content and construct validity were ensured for validity. Content validity was established through expert review, where specialists in leadership, organizational culture, and innovation assessed the questionnaire for relevance and comprehensiveness (Almanasreh, Moles and Chen, 2019). Construct validity was tested using confirmatory factor analysis (CFA) within PLS-SEM, ensuring that each variable accurately represents the theoretical constructs under investigation. Systematic sampling technique was used to enhance external validity to ensure distribution representative across industries and thus prevent sampling bias. The use of both online and paper-based methods will further strengthen validity by reaching diverse respondents, ensuring that the findings can be generalized to similar organizational contexts beyond the study sample.

Table 3.3: Reliability Statistics of Items used for PLS-SEM 1

Variables for Hypothesis 2	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
Adaptive Organizational Routines	0.956	0.958	0.966	0.850
Corporate Beliefs	0.858	0.890	0.895	0.634
Psychological Safety	0.805	0.817	0.864	0.564

Table 3.4: Reliability Statistics of Items used for PLS-SEM 2

Variables for Hypothesis 4	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
Cross-Industry Knowledge Transfer	0.956	0.961	0.966	0.850
Globalisation	0.858	0.895	0.894	0.632
Market Competition	0.858	0.895	0.894	0.632
Organisational Culture for Innovation	0.805	0.821	0.869	0.579
Regulatory Framework	0.805	0.845	0.872	0.592
Technology Advancement	0.956	0.961	0.966	0.850

3.8 Data Analysis

The study employed a multi-method statistical analysis approach, integrating regression analysis, PLS-SEM, one-way ANOVA, and the Chi-square test to evaluate the research hypotheses effectively (Nanthagopan, 2021). Given the diverse nature of the collected data, both descriptive and inferential statistics were used to provide a comprehensive understanding of the relationships between organizational culture, leadership styles, innovation, and external factors. First, descriptive statistics such as frequency distributions was performed first to summarize demographic variables and key variables. This provided a general overview of the trends of each industry and also to find potential outliers.

H1 hypothesis of predicative validity of transformational and transactional styles of leadership on innovation was tested using multiple regression analysis. PLS-SEM (Partial Least Squares Structural Equation Modeling) were employed for H2 and H4, as these hypotheses involve complex relationships between multiple latent variables, including corporate beliefs, adaptive routines, psychological safety, and external influences.

To examine the effect of organizational structures on innovation (H3), a one-way ANOVA was conducted to compare innovation levels across different organizational structures. Lastly, the Chi-square test was used for H5, determining the association that exist in organizational culture attributes among firms towards influencing an organization's ability to foster innovation and creativity. All analyses were statistical interpreted with SPSS version 27 and SmartPLS 4. This will provide a deeper data driven insight into how the factors that drive innovation and creativity in Nigerian industries.

3.9 Ethical Consideration

In line with ethical research principles, this study abided by the rights, privacy, and well being of the participants (Bender et al., 2017). Before data collection, informed consent was obtained from all respondents, and they were clearly informed about the purpose of the study, their voluntary participation and right to withdraw at any time without any consequences. The responses were told they will be used for academic purposes only. The issue of confidentiality and anonymity was addressed without any personally identifiable information being collected (Artal and Rubinfeld 2017). Paper copies were kept in a locked environment, the paper surveys were kept in a safe place and then securely stored in the online (Google Forms) and paper-based surveys. No privacy was endangered as the researcher had access to the raw data only.

Participation was also voluntary and coercion or undue influence was avoided in the study. The appropriate institutional review board was asked for ethical approval to validate compliance with research ethics. Furthermore, Barrow, Brannan and Khandhar (2017) prevented findings from being manipulated or misrepresented, data integrity and accuracy were maintained. Proper followings of academic integrity, attribution and citation of existing literature will be done. These ethical safeguards will increase credibility and trustworthiness of the research.

3.10 Summary

This research utilizes a systematic and structured methodology to investigate the impact of organizational culture on innovation. In testing hypothesis in a cross-sectional design and deductive approach, quantitative methods are adopted. They collect the data through structured questionnaires distributed both online and offline and the study ensures representative sampling across industries. Statistical analysis methods, including PLS-SEM, regression, ANOVA, and the Chi-square test, provide in-depth insights. The research integrity is ensured by the ethical safeguards, namely confidentiality, voluntary participation, and data security. This methodology assures reliable and valid findings that can be generalized and are of value to businesses and to encourage innovation.

CHAPTER FOUR

RESULT AND ANALYSIS

4.1 Introduction

This chapter presents the demographic characteristics of the respondents, followed by the statistical analysis and results obtained from multiple methods, including regression analysis, Partial Least Squares Structural Equation Modelling (PLS-SEM), ANOVA, and Chi-square tests. The analysis examines the impact of leadership styles, organizational culture, market competition, regulatory frameworks, technological advancements, and globalization on fostering innovation and creativity. The results provide empirical validation of the hypothesized relationships, demonstrating how external and internal factors contribute to shaping organizational environments. These findings offer insights into the critical drivers of innovation and creativity within organizations across various industries and structural settings.

4.2 Demographic data

Table 4.1: Demographic Characteristics of Respondents

Industry Type	N	%
Banking	11	4.6%
Fashion	65	27.1%
Beverages (Coca-Cola)	62	25.8%
Media	102	42.5%
Total	240	100%
Job Role	N	%
Executive/Top Management	30	12.5%
Middle Management	21	8.8%
Supervisor/Team Lead	40	16.7%
General Employee	149	62.1%
Total	240	100%
Years of Experience	N	%
Less than 1 year	14	5.8%
1 – 3 years	73	30.4%

4 – 6 years	62	25.8%
7 – 10 years	71	29.6%
More than 10 years	20	8.3%
Total	240	100%
Organization Size	N	%
Small (1–50 employees)	41	17.1%
Medium (51–250 employees)	95	39.6%
Large (Above 250 employees)	104	43.3%
Total	240	100%

Source: Field Work, 2025

The dataset from table 4.1 above, provides insights into the diverse organizational landscape influencing innovation and creativity. The majority of respondents (42.5%) work in the media industry, followed by fashion (27.1%) and beverages (25.8%), highlighting sectors where creativity is essential. Most employees (62.1%) hold general roles, emphasizing the broader workforce's role in fostering innovation. Experience levels vary, with 30.4% having 1–3 years and 29.6% having 7–10 years, suggesting a mix of emerging and seasoned professionals. Organizational size skews towards medium (39.6%) and large firms (43.3%), where structured cultures can either enhance or hinder creative processes, depending on leadership and adaptability.

4.3 Analysis and Results

Hypothesis 1: Transformational and transactional leadership styles significantly predict the level of creativity and innovation within an organization.

Table 4.2: Relationship between leadership and creativity/innovation

Correlations	CI1	TFL1	TFL2	TFL3	TFL4	TFL5	TSL1	TSL2	TSL3.	TSL4	TSL5
CI1	-	-	-	-	-	-	-	-	-	-	-
TFL1	0.337***	-	-	-	-	-	-	-	-	-	-
TFL2	0.192***	0.716***	-	-	-	-	-	-	-	-	-
TFL3	0.382***	0.227***	0.587***	-	-	-	-	-	-	-	-
TFL4	0.736***	0.563***	0.574***	0.528***	-	-	-	-	-	-	-
TFL5	0.794***	0.392***	0.410***	0.629***	0.842***	-	-	-	-	-	-

SL1	0.683***	0.400***	0.559***	0.745***	0.844***	0.846***	-	-	-	-	-
SL2	0.606***	0.322***	0.438***	0.631***	0.771***	0.752***	0.820***	-	-	-	-
SL3	0.516***	0.274***	0.506***	0.706***	0.679***	0.673***	0.860***	0.850***	-	-	-
SL4	0.735***	0.324***	0.440***	0.638***	0.759***	0.807***	0.819***	0.854***	0.839***	-	-
SL5	0.799***	0.359***	0.402***	0.529***	0.747***	0.787***	0.749***	0.764***	0.656***	0.850***	-

**** < .001**

Source: Field Work, 2025

Table 4.3: Leadership Predict the level of Innovation/Creativity

Descriptive Statistics			Unstandardized Coefficients				Correlations			ANOVAa		
Variables	Mean	Std. Deviation	B	Std. Error	T	Sig.	Partial	Partial	R Square	df	F	Sig.
CI1 (Constant)	4.08	1.150	1.882	0.197	9.538	0.000			0.814	10(228)	100.026	.000 ^b
TFL1	3.65	1.217	0.199	0.046	4.307	0.000	0.274	0.123				
TFL2	3.19	1.248	-0.417	0.054	-7.782	0.000	-0.458	-0.222				
TFL3	3.07	1.395	0.024	0.046	0.526	0.599	0.035	0.015				
TFL4	3.59	1.486	0.243	0.059	4.095	0.000	0.262	0.117				

TFL5	3.76	1.240	0.17 4	0.068	2.54 2	0.0 12	0.16 6	0.07 3
TSL1	3.19	1.694	0.12 4	0.065	1.92 1	0.0 56	0.12 6	0.05 5
TSL2	3.54	1.218	- 0.29 0	0.065	- 4.44 9	0.0 00	- 0.28 3	- 0.12 7
TSL3	3.38	1.284	- 0.07 3	0.075	- 0.97 2	0.3 32	- 0.06 4	- 0.02 8
TSL4	3.29	1.574	0.20 8	0.061	3.42 5	0.0 01	0.22 1	0.09 8
TSL5	3.84	1.325	0.36 2	0.053	6.80 2	0.0 00	0.41 1	0.19 4

a. Dependent Variable: CI1-Employees in my organization are encouraged to propose and implement new ideas.

b. Predictors: (Constant), TSL5-Employees are motivated by the incentives and penalties system set by leadership., TFL1-My organization's leadership inspires employees with a clear and compelling vision., TFL3-My organization's leadership motivates employees beyond their self-interest for the benefit of the company, TSL3-My organization's leadership monitors employee performance closely and takes corrective actions when needed., TFL5-My organization's leadership acts as a role model, setting high ethical and professional standards., TFL2-Leaders in my organization encourage creativity and innovation among employees., TSL2-Leaders in my organization emphasize clear structures and defined responsibilities., TFL4-Leaders provide intellectual stimulation by encouraging new perspectives on problem-solving., TSL4-Leaders primarily focus on short-term goals rather than long-term innovation., TSL1-My organization's leadership rewards employees for meeting performance targets.

Source: Field Work, 2025

Normal P-P Plot of Regression Standardized Residual
Dependent Variable: CI1-Employees in my organization are encouraged to propose and implement new ideas.

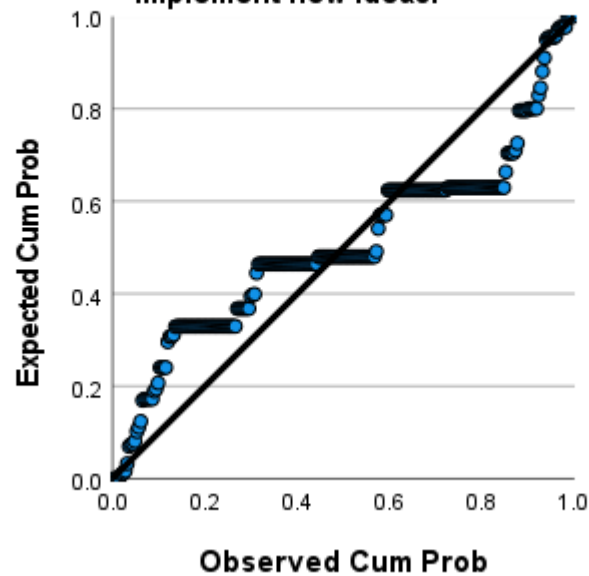


Figure 4.1: Normal P-P Plot of Creativity/Innovation

Scatterplot
Dependent Variable: CI1-Employees in my organization are encouraged to propose and implement new ideas.

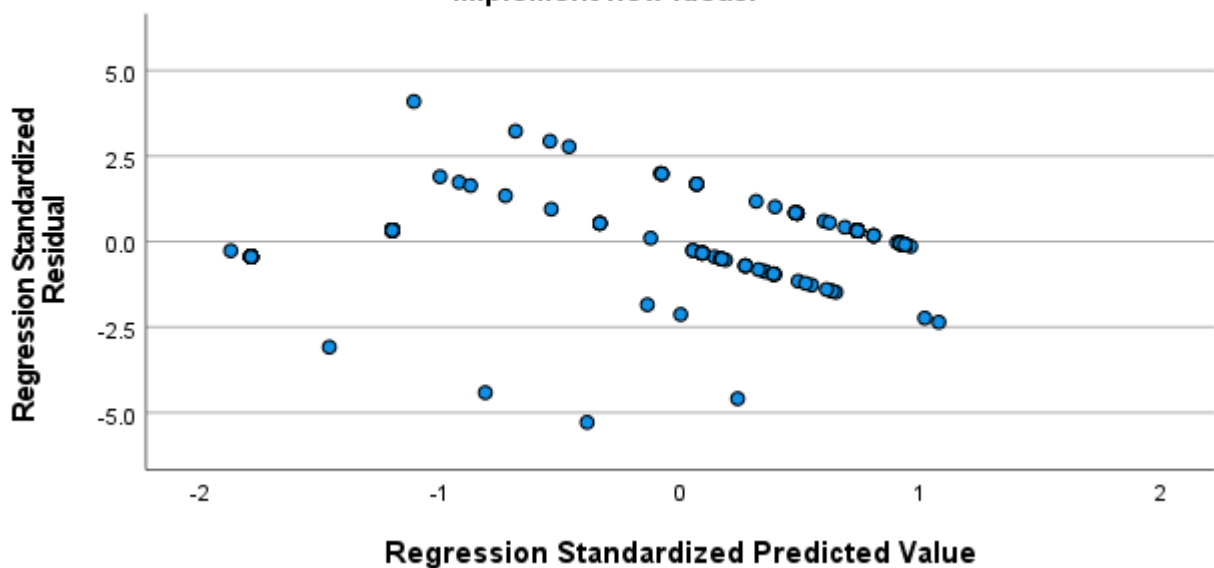


Figure 4.2: Scatterplot Plot of Creativity/Innovation

The above analysis examines the extent to which transformational and transactional leadership styles predict creativity and innovation within an organization. The correlation matrix reveals strong and significant relationships between creativity and innovation (CI1) and various

transformational leadership (TFL) and transactional leadership (TSL) indicators. The highest correlations are observed between CI1 and TFL5 ($r = 0.794$, $p < .001$), TFL4 ($r = 0.736$, $p < .001$), and TSL5 ($r = 0.799$, $p < .001$), suggesting that leadership qualities such as acting as a role model, providing intellectual stimulation, and motivating employees through incentives strongly align with innovation.

The regression analysis further supports these findings. The overall model is statistically significant ($F(10, 228) = 100.026$, $p < .001$) with an R^2 value of 0.814, indicating that 81.4% of the variance in creativity and innovation is explained by the predictors. Among the transformational leadership factors, TFL1 ($B = 0.199$, $p < .001$), TFL4 ($B = 0.243$, $p < .001$), and TFL5 ($B = 0.174$, $p = .012$) have significant positive effects, confirming that inspiring a vision, intellectual stimulation, and ethical leadership contribute to innovation. Conversely, TFL2 ($B = -0.417$, $p < .001$) negatively predicts innovation, indicating that encouraging creativity alone without structural support may not be effective.

For transactional leadership, TSL5 ($B = 0.362$, $p < .001$) and TSL4 ($B = 0.208$, $p = .001$) show significant positive effects, implying that structured incentives and short-term goal orientation contribute to fostering innovation. However, TSL2 ($B = -0.290$, $p < .001$) negatively predicts innovation, suggesting that rigid structures can hinder creativity.

Since the regression model is significant, with key predictors demonstrating strong effects, the hypothesis that transformational and transactional leadership styles significantly predict creativity and innovation within an organization is supported. Organizations should balance transformational leadership's visionary approach with transactional leadership's structured incentives to maximize innovation potential.

Hypothesis 2: Corporate beliefs, adaptive organizational routines, and psychological safety have a significant and positive impact on fostering innovation and creativity within organizations.

Table 4.4: The Path Coefficients for Corporate beliefs

Path coefficients	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values	2.50 %	97.50%
Corporate Beliefs -> Adaptive Organizational Routines	0.461	0.462	0.045	10.200	0.000	0.371	0.552
Corporate Beliefs -> Psychological Safety	0.807	0.809	0.013	59.800	0.000	0.781	0.835
Psychological Safety -> Adaptive Organizational Routines	0.499	0.499	0.047	10.627	0.000	0.406	0.592

Source: Field Work, 2025

Table 4.5: The Relationship between Adaptive organizational routines, corporate beliefs and psychological safety

Correlations	Adaptive Organizational Routines	Corporate Beliefs	Psychological Safety	R-square	R-square adjusted
Adaptive Organizational Routines	1	-	-	0.833	0.832
Corporate Beliefs	0.864	1	-	-	-
Psychological Safety	0.871	0.807	1	0.651	0.649

Source: Field Work, 2025

Table 4.6: The Total Effects between corporate beliefs, adaptive organizational routines and psychological safety

Total effects	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values	2.50%	97.50%	F-Square
Corporate Beliefs -> Adaptive Organizational Routines	0.864	0.865	0.012	69.672	0.000	0.839	0.888	0.446
Corporate Beliefs -> Psychological Safety	0.807	0.809	0.013	59.8	0.000	0.781	0.835	1.863
Psychological Safety -> Adaptive Organizational Routines	0.499	0.499	0.047	10.627	0.000	0.406	0.592	0.522

Source: Field Work, 2025

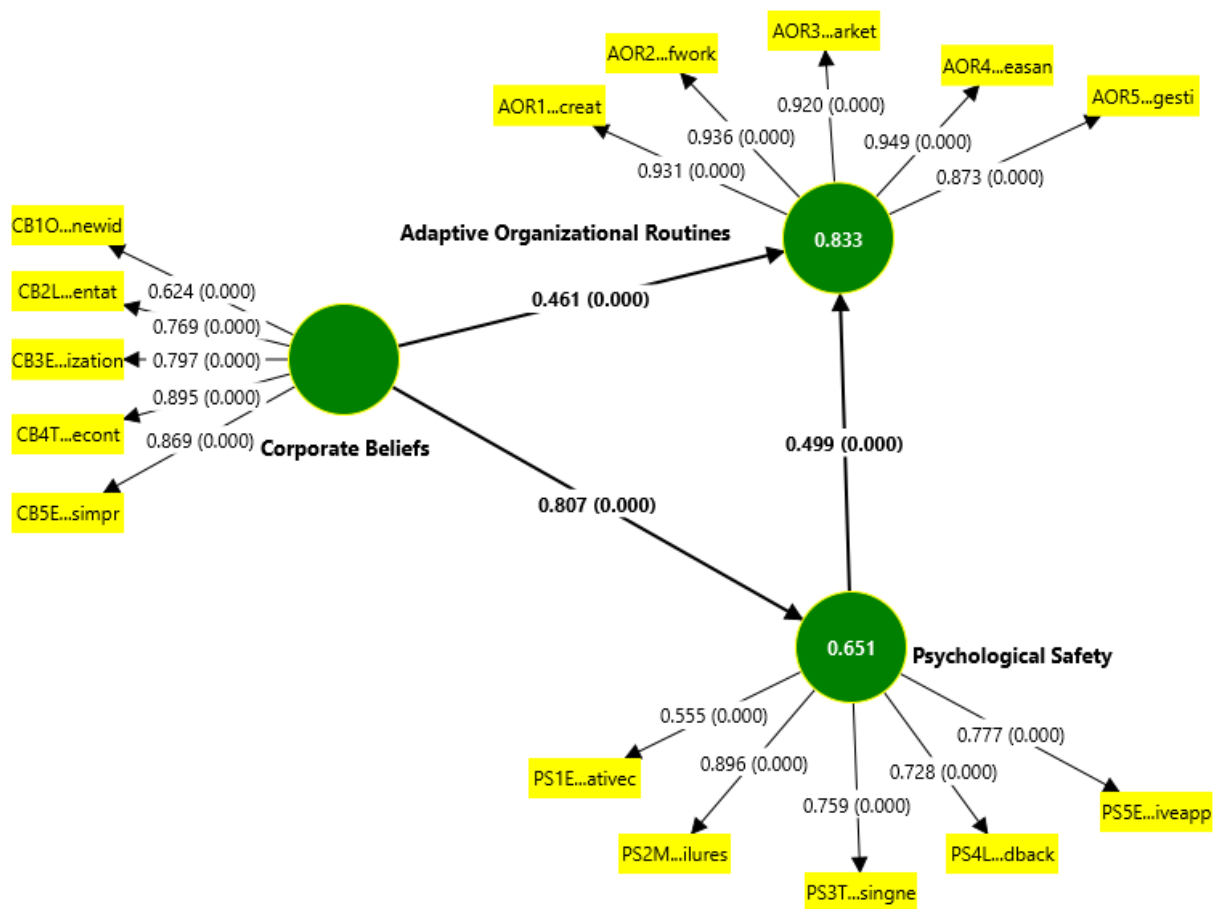


Figure 4.3: Structural Equation Modelling 1

The path coefficients and total effects confirm that corporate beliefs, adaptive organizational routines, and psychological safety significantly influence innovation and creativity within organizations. The relationship between corporate beliefs and adaptive organizational routines is strong ($\beta = 0.461$, $t = 10.200$, $p < 0.001$), with a confidence interval of [0.371, 0.552], indicating a robust positive association. Similarly, corporate beliefs strongly predict psychological safety ($\beta = 0.807$, $t = 59.800$, $p < 0.001$), with a narrow confidence interval of [0.781, 0.835], suggesting high reliability.

Psychological safety also has a significant positive effect on adaptive organizational routines ($\beta = 0.499$, $t = 10.627$, $p < 0.001$), with a confidence interval of [0.406, 0.592]. This implies that fostering a psychologically safe environment enhances the organization's ability to develop flexible and adaptive routines, which are essential for innovation.

The correlation matrix shows strong relationships between the constructs, particularly between psychological safety and adaptive organizational routines ($r = 0.871$), and corporate beliefs and psychological safety ($r = 0.807$), further reinforcing their interconnected role in fostering innovation. The high R^2 values (adaptive organizational routines: $R^2 = 0.833$, psychological safety: $R^2 = 0.651$) indicate that these variables explain a significant proportion of the variance in fostering innovation.

The F-square effect sizes also support the hypothesis, with corporate beliefs having a large effect on psychological safety ($f^2 = 1.863$) and a moderate effect on adaptive routines ($f^2 = 0.446$). Given these findings, the hypothesis is supported, confirming that corporate beliefs, adaptive organizational routines, and psychological safety collectively foster innovation and creativity within organizations.

Hypothesis 3: Different organizational structures have a significant effect on creativity and innovation levels within organizations.

Table 4.7: Employee creativity and risk taking according to organisational structures

Descriptive				Test of Homogeneity of Variance			ANOVA		Effect Size
		Mean	Std. Deviation	Levene Statistics	Df	sig.	F	Sig	η^2
ECR1- Employees in my organization are encouraged to take initiative without excessive	Highly	3.76	1.422	1.436	2, 237	0.240	0.892	0.411	0.007
	Centralized								
	Moderately	3.54	1.530						
	Centralized								
	Decentralized	3.46	1.522						
Total		3.58	1.493						

approval processes.									
ECR2-My organization values new and unconventional ideas from employees at all levels.	Highly	3.93	1.215	2.949	2,237	0.054	1.434	0.24	0.012
	Centralized								
	Moderately	3.72	1.293						
	Centralized								
	Decentralized	3.61	1.240						
	Total	3.75	1.250						
ECR3-Leaders actively support risk-taking when pursuing innovative solutions	Highly	3.55	1.509	11.72	2,237	<.001	2.658	0.072	0.022
	Centralized								
	Moderately	3.06	1.830						
	Centralized								
	Decentralized	2.99	1.698						
	Total	3.19	1.692						
ECR4-Employees are given decision-making autonomy in their work processes.	Highly	3.79	1.258	0.8	2,237	0.451	2.963	0.054	0.024
	Centralized								
	Moderately	3.30	1.129						
	Centralized								
	Decentralized	3.51	1.228						
	Total	3.54	1.220						
ECR5-My organization experiments with new strategies to improve performance.	Highly	3.70	1.200	6.658	2,237	0.002	3.939	0.021	0.032
	Centralized								
	Moderately	3.13	1.305						
	Centralized								
	Decentralized	3.28	1.310						
	Total	3.37	1.290						
ECR6-Failure from	Highly	3.68	1.349	6.833	2,237	0.001	3.669	0.027	0.030
	Centralized								

innovative efforts viewed as a learning opportunity rather than a penalty.	Moderately	3.06	1.599						
	Centralized								
	Decentralized	3.14	1.673						
	Total	3.29	1.573						
ECR7-Teams in my organization can implement creative solutions without needing multiple layers of approval.	Highly	4.08	1.230	4.179	2,237	0.016	2.126	0.122	0.018
	Centralized								
	Moderately	3.80	1.335						
	Centralized								
	Decentralized	3.66	1.381						
	Total	3.83	1.328						
ECR8-There is open communication between leadership and employees, allowing for idea-sharing.	Highly	4.21	0.998	5.858	2,237	0.003	1.08	0.341	0.009
	Centralized								
	Moderately	4.06	1.235						
	Centralized								
	Decentralized	3.95	1.232						
	Total	4.06	1.164						
ECR9-Employees feel empowered to contribute to organizational changes and innovations.	Highly	3.79	1.379	4.665	2,237	0.010	1.95	0.145	0.016
	Centralized								
	Moderately	3.32	1.622						
	Centralized								
	Decentralized	3.45	1.493						
	Total	3.52	1.503						

Source: Field Work, 2025

Table 4.8: Difference in organisational structure according to Post Hoc test

Post Hoc Test								
Dependent Variable				Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
							Lower Bound	Upper Bound
ECR4- Employees are given decision- making autonomy in their work processes.	Dunnett T3	Highly Centralized	Moderately Centralized	.485*	0.198	0.046	0.01	0.96
			Decentralized	0.284	0.192	0.362	-0.18	0.75
		Moderately Centralized	Highly Centralized	-.485*	0.198	0.046	-0.96	-0.01
			Decentralized	-0.201	0.185	0.625	-0.65	0.25
		Decentralized	Highly Centralized	-0.284	0.192	0.362	-0.75	0.18
			Moderately Centralized	0.201	0.185	0.625	-0.25	0.65
ECR5-My organization experiments with new strategies to improve performance.	Dunnett T3	Highly Centralized	Moderately Centralized	.567*	0.209	0.022	0.06	1.07
			Decentralized	0.413	0.192	0.096	-0.05	0.88
		Moderately Centralized	Highly Centralized	-.567*	0.209	0.022	-1.07	-0.06
			Decentralized	-0.154	0.207	0.840	-0.65	0.35
		Decentralized	Highly Centralized	-0.413	0.192	0.096	-0.88	0.05
			Moderately Centralized	0.154	0.207	0.840	-0.35	0.65

ECR6- Failure from innovative efforts is viewed as a learning opportunity rather than a penalty.	Dunnett T3	Highly Centralized	Moderately Centralized	.626*	0.247	0.037	0.03	1.22
			Decentralized	0.547	0.231	0.056	-0.01	1.10
		Moderately Centralized	Highly Centralized	-.626*	0.247	0.037	-1.22	-0.03
			Decentralized	-0.079	0.258	0.986	-0.70	0.54
		Decentralized	Highly Centralized	-0.547	0.231	0.056	-1.10	0.01
			Moderately Centralized	0.079	0.258	0.986	-0.54	0.70

***. The mean difference is significant at the 0.05 level.**

Source: Field Work, 2025

The analysis above examines the impact of different organizational structures such as highly centralized, moderately centralized, and decentralized on creativity and innovation levels within organizations. The ANOVA results indicate that there are significant differences among the groups for specific creativity and innovation measures.

For ECR3 (leaders actively support risk-taking when pursuing innovative solutions), the test of homogeneity of variance is significant (Levene's statistic = 11.72, $p < .001$), indicating unequal variances across groups. The ANOVA result ($F = 2.658$, $p = .072$) does not meet the conventional significance threshold, suggesting that risk-taking support does not significantly differ across structures. However, for ECR5 (organizations experimenting with new strategies to improve performance), there is a statistically significant effect ($F = 3.939$, $p = .021$, $\eta^2 = 0.032$), implying that structural differences influence experimentation efforts. The post hoc analysis (Dunnett T3) reveals that highly centralized organizations report significantly higher experimentation levels compared to moderately centralized ones (mean difference = 0.567, $p = .022$), but no significant difference exists between highly centralized and decentralized structures.

Similarly, ECR6 (failure from innovative efforts being viewed as a learning opportunity) shows a significant structural effect ($F = 3.669$, $p = .027$, $\eta^2 = 0.030$), with highly centralized organizations scoring higher than moderately centralized ones (mean difference = 0.626, $p =$

.037). This suggests that centralized structures may better normalize failure in innovation. Additionally, ECR4 (employees given decision-making autonomy) presents significant differences ($F = 2.963$, $p = .054$, $\eta^2 = 0.024$), with post hoc analysis indicating that highly centralized organizations offer more autonomy than moderately centralized ones (mean difference = 0.485, $p = .046$).

Since multiple innovation-related variables exhibit significant structural effects, the hypothesis that organizational structure significantly influences creativity and innovation levels is supported. Organizations must consider structural adaptations to optimize innovation outcomes.

Hypothesis 4: Market competition, technological advancements, regulatory frameworks, globalization, and cross-industry knowledge transfer have a significant positive impact on shaping organizational culture to foster innovation and creativity.

Table 4.9: The path coefficients on the impact of shaping organisational culture

Path Coefficients	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values	2.50%	97.50%
Organisational Culture for Innovation -> Cross-Industry Knowledge Transfer	0.843	0.844	0.016	54.21	0.000	0.813	0.874
Organisational Culture for Innovation -> Globalisation	0.8	0.802	0.013	60.356	0.000	0.775	0.828
Organisational Culture for Innovation -> Market Competition	0.8	0.802	0.013	60.356	0.000	0.775	0.828
Organisational Culture for Innovation -> Regulatory Framework	0.993	0.993	0.002	628.123	0.000	0.989	0.995

Organisational Culture for Innovation -> Technology Advancement	0.843	0.844	0.016	54.21	0.000	0.813	0.874
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Source: Field Work, 2025

Table 4.10: Relationship between Market competition, technological advancements, regulatory frameworks, globalization, and cross-industry knowledge transfer

Relations	Cross-Industry Knowledge Transfer	Globalisation	Market Competition	Organisational Culture for Innovation	Regulatory Framework	Technology Advancement	R-square	sq adju
ss-industry knowledge transfer	1	-	-	-	-	1	0.711	0
Globalisation	0.854	1	-	-	-	-	0.640	0
Market Competition	0.854	1.000	1	-	-	-	0.640	0
Organisational Culture for Innovation	0.843	0.800	0.800	1	-	-	-	
Regulatory Framework	0.792	0.762	0.762	0.993	1	-	0.985	0
Technology Advancement	1.000	0.854	0.854	0.843	0.792	1	0.711	0

Source: Field Work, 2025

Table 4.11: Total Effects between Market competition, technological advancements, regulatory frameworks, globalization, and cross-industry knowledge transfer

Total effects	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values	2.50%	97.50%	F-Square
Organisational Culture for Innovation -> Cross-Industry Knowledge Transfer	0.843	0.844	0.016	54.21	0.000	0.813	0.874	2.460
Organisational Culture for	0.8	0.802	0.013	60.356	0.000	0.775	0.828	1.780

Innovation -> Globalisation								
Organisational Culture for Innovation -> Market Competition	0.8	0.802	0.013	60.356	0.000	0.775	0.828	1.780
Organisational Culture for Innovation -> Regulatory Framework	0.993	0.993	0.002	628.123	0.000	0.989	0.995	66.972
Organisational Culture for Innovation -> Technology Advancement	0.843	0.844	0.016	54.21	0.000	0.813	0.874	2.460

Source: Field Work, 2025

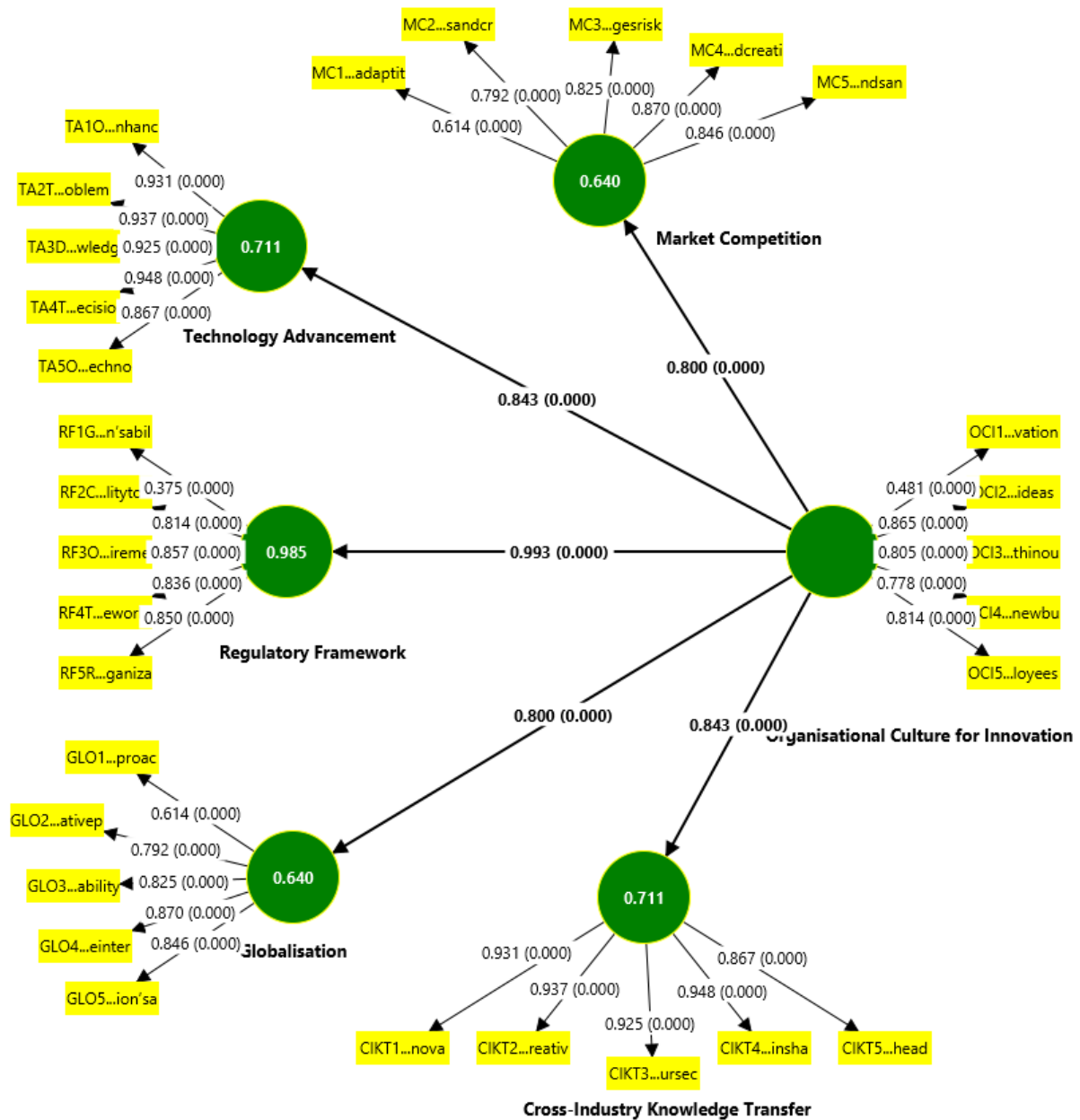


Figure 4.4: Structural Equation Modelling 2

The path coefficients indicate that market competition ($\beta = 0.800$, $t = 60.356$, $p < 0.001$), technological advancements ($\beta = 0.843$, $t = 54.21$, $p < 0.001$), regulatory frameworks ($\beta = 0.993$, $t = 628.123$, $p < 0.001$), globalization ($\beta = 0.800$, $t = 60.356$, $p < 0.001$), and cross-industry knowledge transfer ($\beta = 0.843$, $t = 54.21$, $p < 0.001$) significantly influence organizational culture for innovation. These relationships are further confirmed by the 95% confidence intervals, which do not include zero, demonstrating statistical reliability. The

highest impact is seen in regulatory frameworks, with a coefficient close to one, indicating an almost perfect relationship.

The correlation matrix highlights strong associations between organizational culture for innovation and all independent variables. Regulatory frameworks exhibit the highest correlation ($r = 0.993$), reinforcing their pivotal role in shaping innovation culture. Additionally, cross-industry knowledge transfer ($r = 0.843$) and technological advancements ($r = 0.843$) show substantial influence, suggesting that knowledge exchange and technological progress drive organizational adaptability. Market competition and globalization (both $r = 0.800$) also play a significant role, reflecting how external pressures and global connectivity contribute to innovation efforts.

The R^2 values indicate that a substantial proportion of the variance in each dependent variable is explained by organizational culture for innovation. Regulatory frameworks ($R^2 = 0.985$) and technological advancements ($R^2 = 0.711$) have the highest explanatory power, followed by cross-industry knowledge transfer ($R^2 = 0.711$), globalization ($R^2 = 0.640$), and market competition ($R^2 = 0.640$). These findings suggest that organizational culture is significantly shaped by external industry forces, regulatory policies, and technological developments.

The F-square effect sizes reinforce the strength of these relationships. Regulatory frameworks have the largest effect ($f^2 = 66.972$), followed by cross-industry knowledge transfer ($f^2 = 2.460$) and technological advancements ($f^2 = 2.460$). Market competition ($f^2 = 1.780$) and globalization ($f^2 = 1.780$) also have strong effects, indicating that these factors collectively shape organizational culture.

Based on these findings, the hypothesis that market competition, technological advancements, regulatory frameworks, globalization, and cross-industry knowledge transfer significantly shape organizational culture for fostering innovation and creativity is supported. The significant path coefficients, strong correlations, and high R^2 values confirm that these external factors drive organizational adaptability and innovative practices. Organizations that align their strategies with these factors are better positioned to cultivate an innovation-driven culture, ensuring long-term competitiveness and growth.

Hypothesis 5: Organizational culture, as measured by involvement, consistency, adaptability, and mission, significantly influences an organization's ability to foster innovation and creativity.

Table 4.12: Measures of organisational culture towards fostering innovation and creativity

Descriptive Statistics				Chi-square Test		
Variables	N	Mean	Std. Deviation	X ²	df	Sig.
I1	240	3.65	1.218	180.042 ^a	4	<.001
I2	240	3.19	1.245	206.333 ^a	4	<.001
I3	240	3.06	1.393	59.792 ^a	4	<.001
C1	240	3.83	1.328	99.600 ^b	3	<.001
C2	240	4.06	1.164	173.958 ^a	4	<.001
C3	240	3.52	1.503	61.042 ^a	4	<.001
A1	240	3.74	1.011	146.208 ^a	4	<.001
A2	240	3.68	0.956	209.750 ^a	4	<.001
A3	240	3.52	1.363	138.208 ^a	4	<.001
M1	240	3.59	1.089	92.083 ^a	4	<.001
M2	240	3.66	1.496	110.833 ^a	4	<.001
M3	240	3.67	0.946	206.750 ^a	4	<.001

a. 0 cells (0.0%) have expected frequencies less than 5. The minimum expected cell frequency is 48.0.

b. 0 cells (0.0%) have expected frequencies less than 5. The minimum expected cell frequency is 60.0.

I1-Employees at all levels actively participate in decision-making and innovation initiatives.

I2-My organization encourages team collaboration to drive creative solutions.

I3-Leadership actively seeks employee input in shaping the company's strategic direction.

C1-My organization has well-established values and principles that guide innovation efforts.

C2-Policies and procedures remain stable and predictable, ensuring structured support for innovation.

C3-There is a strong alignment between organizational values and employee behaviour in innovation-related activities.

A1-My organization quickly adapts to changes in the market and industry trends.

A2-Employees are encouraged to experiment with new approaches to problem-solving.

A3-Leadership supports continuous learning and flexibility to drive innovation.

M1-My organization has a clear long-term vision that promotes innovation and creativity.

M2-The company's mission prioritizes developing new and competitive solutions in the industry.

M3-Leadership ensures that innovation aligns with the organization's strategic goals.

Source: Field Work, 2025

The chi-square test results indicate significant associations between organizational culture dimensions like involvement, consistency, adaptability, and mission, and an organization's ability to foster innovation and creativity. All tested variables show highly significant results ($p < .001$), supporting the hypothesis that these cultural attributes influence innovation.

Involvement, as measured by employees' participation in decision-making (I1, $X^2(4) = 180.042$, $p < .001$), collaboration in creative solutions (I2, $X^2(4) = 206.333$, $p < .001$), and leadership seeking employee input (I3, $X^2(4) = 59.792$, $p < .001$), demonstrates a significant role in fostering innovation. The alignment of these factors suggests that higher levels of employee involvement contribute to a more innovative organizational environment.

Consistency, represented by well-established values guiding innovation (C1, $X^2(3) = 99.600$, $p < .001$), stable policies ensuring structured support (C2, $X^2(4) = 173.958$, $p < .001$), and alignment between values and employee behaviour (C3, $X^2(4) = 61.042$, $p < .001$), also shows a strong influence on innovation. Stability in policies and values ensures that innovation efforts remain structured and scalable, creating an environment where employees can confidently engage in creative initiatives.

Adaptability is confirmed as a key driver of innovation, with organizations quickly responding to market changes (A1, $X^2(4) = 146.208$, $p < .001$), encouraging experimentation (A2, $X^2(4) = 209.750$, $p < .001$), and promoting continuous learning (A3, $X^2(4) = 138.208$, $p < .001$). These results suggest that adaptive organizations are better positioned to embrace new ideas and industry shifts.

Mission-related factors, including a clear vision for innovation (M1, $X^2(4) = 92.083$, $p < .001$), prioritization of competitive solutions (M2, $X^2(4) = 110.833$, $p < .001$), and alignment of innovation with strategic goals (M3, $X^2(4) = 206.750$, $p < .001$), significantly impact

innovation. A strong mission provides direction, ensuring that creative efforts align with long-term objectives.

Given these significant findings, the hypothesis that organizational culture, measured by involvement, consistency, adaptability, and mission, influences an organization's ability to foster innovation and creativity is supported. Organizations should focus on these cultural dimensions to enhance innovation outcomes.

Summary

The findings indicate that organizational structure, leadership styles, and external factors such as market competition and regulatory frameworks significantly impact innovation and creativity. This is further supported by regression analysis that transformational and transactional leadership styles are important factors in creating an innovation environment. PLS-SEM results confirm strong relationships between corporate beliefs, psychological safety, and adaptive organizational routines. ANOVA findings highlight structural differences in creativity levels, while Chi-square tests validate associations between organizational culture and innovation capacity. Ultimately, the results indicate that organizations have to maintain some sort of internal leadership dynamics, cultural attributes and external environmental factors in order to deliver an environment in which innovation is sustainable for the long run.

CHAPTER FIVE

DISCUSSION

5.1 Discussion of Findings

Research Question 1: How does leadership style impact the development and maintenance of innovative and creative culture?

The results show that organisational leadership style significantly affects an organisation's innovative and creative culture. Analysis of regression confirms that leadership styles have impact on creativity and innovation and suggests that a balanced approach promotes possibility of innovation. A transformational leadership promotes a progressive environment, where employees are encouraged to think forward, challenge the norms, and seek new ways to solve the problem (Al-Husseini et al., 2021; Stanescu et al., 2021). The work culture created by the leaders who inspire a shared vision, provide intellectual stimulation and encourage psychological empowerment is a thriving one of continuous learning and creative problem solving (Karimi et al., 2023; Tan et al., 2024). Transformational leadership is more likely to foster innovative solutions and leading towards strategic innovation initiatives (Peng et al. 2021; Rashid and Al Qaseer, 2022).

Thus, findings exhibit that transactional leadership complements structured processes and offers a clear performance incentive (Layek and Koodamara, 2024; Adebayo et al, 2024). It helps in incremental innovation by improving existing practise and improving operational efficiency (Nguyen et al., 2022; Nikijuluw et al., 2024). Transactional leadership helps employees with well-defined goals and reward mechanism to be committed to structured innovation efforts (Cotton et al., 2022; Zhao and Sun, 2024). Nevertheless, the findings show that transactional leadership alone cannot bring radical innovation, since rigid structures may impede risk taking and experimenting (Mott, 2023). Transactional leadership is effective for facilitating creativity when it is integrated with transformational leadership, because organisations that combine the two styles have the capability to create an environment that combines stability and visionary inspiration (Zhao and Sun, 2024; Khairy et al., 2023).

Further, the findings underscore that leadership affects innovation by means of social exchange mechanisms that leaders engage employee motivation, engagement, and knowledge sharing (Le and Lei, 2019; Lee et al., 2020). Participative and cooperative leadership styles conform to more organizational innovation is the leadership style that participates more in their direct employees in decision making process as they promote a culture of shared responsibility and collaboration (Akpoviroro et al. 2018; Ton et al. 2022). This leadership impact goes beyond individual but also organizational resilience, especially in market disruptive industries and technology progress (Yulianti et al., 2022; Zhaxylyk, 2023). Psychological empowerment is supported by leaders who allow employees to take calculated risks, explore solutions, and contribute to long term innovation strategies (Susanto et al., 2023; Gozman and Willcocks, 2019).

These finding are based on the theoretical bases of Schein's organisational culture theory which explains that cultural assumptions determine how innovation practises are carried out (Akpa et al., 2021; Reineke et al., 2025). Adaptive cultures that cannot grasp failure as learning organization does not encourage experiment and rigid cultures that constrain innovation through hierarchy organization do that (Horvat et al., 2025; Al-Barghouthi, 2022). According to the findings, leadership is instrumental in reinforcing cultural values, which either promote or inhibit creativity (Akpa et al., 2021). Organizations that integrate such principles of transforming leadership in structured transactional mechanism will foster a culture of innovation that would be able to sustain long term competitive advantage.

Research Question 2: How do beliefs and practices influence innovation and creativity?

Organisational beliefs and practises have a major impact on the ability of the organisation to promote innovation and creativity. This finding is that corporate beliefs, adaptive organisational routines, and psychological safety together increase innovation capacity. The organizations that believe in innovation as a basic core belief foster the practice of experimentation, risks taking and continuous improvement; thus, leading to sustained competitive advantage (Yang et al., 2021; Ali et al., 2024). Change and new knowledge is a fundamental reason why a business's innovative capability structures, as organisations with rigid structures are not as flexible and are often unable to adapt to changes in the market (Temitope, 2022; Kostovyat and Rogov, 2024).

One of the most important factors that allow employees to challenge traditional norms and offer unconventional solutions is psychological safety. Employees in organisations that encourage trust and open communication and one that does not punish employees for failing are more apt to take intellectual risks (Susanto et al., 2023; Gozman and Willcocks, 2019). Such a culture fosters employees' confidence in creative problem solving (Puttaraju, 2021; Tu et al., 2019). Organisations that do not cultivate psychological safety tend to have employees that resort to defensive decision making by keeping the organisation stable while avoiding innovative solutions (Verdorfer and Schmid, 2024; Aguilera et al., 2024). Further, reward structures that encourage creativity further increase psychological safety by promoting employees' experimental problem solving versus risk averse behaviours (Paulus, 2023; Hubbart, 2024).

The adaptive organisational routines help creativity by keeping the balance between structure and flexibility so that employees can innovate without being held back by the rigid ones (Mahrinasari et al., 2021; Abdul-Azeez et al., 2024). When given autonomy to experiment on contained routines, employees become more competent at problem solving and the organization thus becomes more adaptive (Huang et al., 2022; Omachi and Ajewumi, 2024). Companies that allow for iterative feedback loops in their processes get continuous refinement of ideas, which make experimentation a norm of their culture (Taherdoost, 2024; Woods, 2022). However, the efficiency may be prioritized over the adaptability, thus the organizations may suppress the creativity unintentionally by discouraging deviations from the standard procedures (Woodhead et al., 2023; Hassan et al., 2021).

The insight of Schein's organisational culture theory is with respect to how deeply entrenched assumptions lead to creativity. Therefore, organisations with hierarchical structures often emphasise control to the extent that they deter the employees' willingness to take risks, while those fostering a learning-oriented culture facilitate knowledge sharing and open innovation (Akpa et al., 2021; Reineke et al., 2025). It also reveals that organisations which prioritise adaptability, psychological safety and corporate beliefs that support innovation are more creative and more likely to attain success in the long term.

Research Question 3: What is the impact of organizational structure on creativity and innovation?

The organisational structure has a big role in shaping creativity and innovation within firms. The findings mirror that mechanistic and organic structures attract different impact, mechanistic structures impose restrict and organic structures advance wonder and Guangzhou movieland preparation swagger (Naveed et al., 2022; Moon et al., 2018). Companies with mechanistic design focus on control, standardisation and operational efficiency, which curbs employees' experimental capacity to explore new ideas (Song, 2022; Rampa and Agogu  , 2021). This structure works well for industries that require precision and do not allow an environment that is changing rapidly (Bustinza et al., 2019; Lee, 2024).

On the other hand, organic structures encourage open communication and employee autonomy, which helps to resolve creative problems and knowledge sharing (Jerab & Mabrouk, 2023; D  ner & Efeog  lu, 2024). This structure is effective in technology driven industries as they need continuous innovation due to employees' ability to respond dynamically to challenges and this is only possible with decentralised decision making (Namim, 2023; Aktas et al., 2011). Fostering an environment where employees are free to experiment and take on the challenge of conventional wisdom increases an organisation's long-run innovative potential (Appio et. al, 2019; Awasthi et. al, 2019). Nevertheless, in organic structures operation discipline is difficult to maintain, and this makes firm face the challenge of balancing adaptability with efficiency (Mathew, 2019, Keskar, 2024).

In addition to the frameworks that shape the creative capacity of organisations, there are other frameworks that help the organisation make the decision. The hierarchical structure that is usually present in mechanistic organization refers to the concentration of authority at the top to provide the control, but it does block employee autonomy and engagement (Jerab, 2023; Thomas, 2023). It is said that employees working in rigid hierarchies are scared to offer unconventional solutions (Omachi and Ajewumi, 2024; Efunniyi et al., 2024). Conversely, decentralized structures empower employees by promoting open dialogue and encouraging risk-taking, key factors for fostering creativity (Altamimi et al., 2023; Tadesse Bogale and Debela, 2024). When decision-making is distributed across different organizational levels, employees take ownership of their contributions, enhancing motivation and commitment to innovation (Zhao and Ali, 2025; Ruijuan et al., 2023).

The impact of organizational structure on creativity aligns with Denison's organizational culture model, which highlights adaptability, consistency, mission, and involvement as key cultural attributes (Aguilera et al., 2023; Anning-Dorson, 2021). Organizations that integrate

structural flexibility while maintaining a clear mission and consistency achieve higher levels of innovation. The findings emphasize that a well-balanced structure, combining structured processes with employee empowerment, optimizes innovation and sustains long-term competitiveness (Christofi et al., 2024; Ruoslahti, 2020).

Research Question 4: What external factors influence organizational culture to foster innovation and creativity?

Many external factors have an effect on shaping the organisational culture that can or cannot support the innovation and creativity. Results are verified that competition in the market along with technological advancements, regulatory framework, globalization, and cross industry knowledge transfer have a massive role to play in encouraging cultural adaptability and innovative practice (Zaslavska and Zaslavska 2024; Ononiwu et al. 2024). Organisations that can integrate these external influences in their strategy are more likely to create an innovative culture that helps them to sustain long term competitiveness (Kandampully et al., 2023; Wilson et al., 2020). Even more, the rise of service innovation, digital transformation, and personalization of the customer experience requires companies to match cultural values with emerging industry trends (Patricio et al., 2020; Hao et al., 2024).

Now, organizations think about innovation using entirely different technologies. Artificial intelligence, automation and integration with the Internet of Things (IoT) has advanced decision-making process, increase in operational effectiveness and customer interaction (Yi and Ayangbah, 2024; Stone et al., 2020). Nevertheless, this digital transformation has also sparked a fear about data privacy and cybersecurity and therefore organisations had to comply with more stringent regulatory rules like the General Data Protection Regulation (GDPR) (Norval et al., 2021; Bharti and Aryal, 2023). However, those organisations that match their innovation efforts with their compliance strategies are better able to maintain market trust and sustainable growth (Díaz et al., 2021; Uzoka et al., 2024).

Adaptation to the market competition forces the organisations to use lean methodologies, agile development and design thinking to rapidly prototype and test innovative solutions (Syam and Sharma, 2018; Kumar et al., 2019). The companies that speed up the innovation cycle through digital tools and collaborative platforms are the companies that have a culture of risk taking and experimentation (Balakrishnan and Najana 2024, Rajaram and Tinguely 2024). However, the reliance on the algorithmic decision making may actually reduce diversity in the

creativities, biasing towards the current trends of the industry rather than to the disruptive innovation (Benhamida et al., 2021; Eger et al., 2025).

They both enable and constrain the innovation. In the context of the above-described policies promoting sustainable business models, such as the European Green Deal, firms were encouraged to incorporate eco-friendly solutions into their innovation strategies (Edler et al., 2023; Eckert and Kovalevska, 2021). Nevertheless, excessive bureaucratic oversight in healthcare and pharmaceutical industries can slow down the research and development processes, thereby slowing down the pace of breakthrough innovations (Girasa, 2020; Coccia, 2023). Such an organisation is able to sustain a culture which balances regulatory compliance with creative problem solving and supports long term innovation (De Pascalis and Brener, 2024, Alexander and Karametaxas, 2021).

The innovative ideas have been diffused globally with faster velocity owing to globalization and cross-industry knowledge transfer. Technological advancements found in many other industries are used by multinational corporations to improve the quality of their products and services, thereby improving their market positioning (Vetrivel et al., 2024; Chandratreya, 2025). Knowledge Sharing allows the integration of AI driven automation within the healthcare and fintech which are evidences of collaboration and innovation initiative between industries (Ebeh et al., 2024; Wu and Pambudi, 2024). Consequently, along with Denison's organizational culture model, that emphasizes adaptability as a predominant cultural attribute for the innovation sustenance (Aguilera et al., 2023; Anning-Dorson, 2021), these cross-industry interaction also align.

Organizations that encourage lives open to external influences will find themselves in environments favourable to creativity and innovation. Companies that consider market dynamics, technological development and integration with other industries in strategic addressing continue to grow and remain competitive in the long term (Attah et al., 2024; Ikwuanusi et al. 2024). Based on the findings, organisations are encouraged to continually reexamine their cultural frameworks to meet with the changing external sentiments such that the organisation remains resilient and keeps innovative potential intact (Guerrero, 2019; Alabi, 2025).

Research Question 5: In what ways can organizations evaluate organizational culture in fostering innovation and creativity?

Organizational culture plays a fundamental role in fostering innovation and creativity, as indicated by the findings that highlight involvement, consistency, adaptability, and mission as key determinants. The results confirm that organizations that emphasize employee involvement create an environment where individuals feel valued, empowered, and motivated to contribute to creative problem-solving (Oladimeji et al., 2023; Ejere and Jarbandhan, 2019). When employees actively participate in decision-making and innovation initiatives, they exhibit higher commitment to developing novel ideas (Rehman and Iqbal, 2020; Mati, 2022). Multinational firms such as Google and Amazon institutionalize participatory decision-making, reinforcing Denison's assertion that involvement strengthens an organization's capacity for innovation (Read and Smith, 2023).

Consistency ensures that innovation efforts remain structured and scalable, preventing the chaos that can arise from uncoordinated experimentation. Organizations with clear policies, strong cultural values, and well-established knowledge-sharing mechanisms enhance their ability to translate creative ideas into actionable innovations (O'Reilly and Tushman, 2021; Osarenkhoe et al., 2024). Research in Pakistan's telecommunications sector confirms that cultural consistency supports product innovation by providing a stable foundation for new developments (Ahmed et al., 2021). However, excessive rigidity in cultural consistency can limit risk-taking and disrupt the exploratory nature of innovation (Lange et al., 2023). Balancing structured processes with flexibility allows organizations to sustain long-term creativity (Miceli et al., 2021).

Adaptability is essential for responding to market changes and integrating new technological advancements. Organizations that cultivate an adaptive culture embrace experimentation, continuously refine strategies, and learn from failures (Karman, 2020; Alake et al., 2024). Findings in Ghanaian firms highlight that adaptability enhances corporate performance by enabling companies to respond effectively to competitive pressures (Asare-Kyire et al., 2023). The ability of technology firms such as Tesla and Apple to pivot rapidly in response to evolving consumer demands underscores the importance of cultural adaptability in sustaining innovation (Kumar, 2025). However, unregulated change without alignment to core organizational values may lead to strategic inconsistencies (Ghaleb, 2024).

A well-defined mission aligns innovation efforts with long-term strategic objectives, ensuring that creativity serves a larger organizational purpose (Wahyuningsih et al., 2019; Qasim, 2024). Organizations with strong mission clarity inspire employees to engage in research,

experimentation, and continuous learning (Oppong and Korang, 2024). For instance, companies like Microsoft and IBM invest heavily on R&D in order to align innovation with their corporate mission with the aim of staying atop the industry (Binns et al., 2022). Further research in the higher education institutions also shows that a clear mission helps the faculty members to engage in innovative teaching and research initiatives (Pudjiarti et al., 2024).

Since the interplay between these cultural attributes is reinforced by Denison's organisational culture model, which shows that stability and adaptability are both necessary for driving innovation (Aguilera et al., 2023; Anning-Dorson, 2021), we will argue that the combination of the above factors will constitute a good organisational culture. Essentially, those organizations that integrate these dimensions successfully create an environment in which their creativity is grown while keeping a strategic focus and some sort of coherence in the operation. According to these findings it is imperative that organizations regularly ascertain and revamp their cultural environments to guarantee sustainability of innovation as well as long term competitiveness.

CHAPTER SIX

CONCLUSIONS

6.1 Conclusion

The findings are consistent with the fact that the culture of the organisation, the leadership style, and the structuring flexibility are all factors that promote innovation and creativity. Organizations that encourage creative problem solving promote integration of transformational leadership principles that focus on vision, inspiration and intellectual stimulation achieve results. While there is no doubt about the innovation that such mechanisms enable, on the other hand, structured transactional mechanisms, such as clear performance expectations and reward systems offer stability of innovation efforts, keeping them aligned to strategic objectives. Between these leadership styles there is an optimal balance between innovation potential and long-term competitive advantage.

Often these structures are hierarchical, which controls and is efficient, it limits risk taking and creative engagement of employees. On the other hand, the more innovative organizations supercharge their innovation engine by promoting the culture of learning by allowing open knowledge sharing and decentralizing decision-making. Along with a mission and clear values, structural flexibility allows an organisation to weave creativity into the core of its operations. Creativity and long-term resilience are higher in organisations that promote adaptability, psychological safety and corporate beliefs that are aligned with innovation.

In addition to external factors such as market competition, technological developments, cross-industry collaboration, the role of the organisations' innovation capacity is also shaped. Such companies have the headstart as they align their cultural frameworks with the evolving external dynamics and have better chance to sustain long term growth. Firms that deal the digital transformation, data driven decision making and a collaborative approach in their strategic vision are adaptable and competitive. In the end, organisations must continuously revisit their cultural frameworks so they are in line with internal and external drivers of innovation. A sustainable culture of creativity is created when the environment is structured and processes

are put in place so that employees are empowered. Staying focused in the strategic while being flexible enables organisations to sustain innovation, resilience and a long-term success.

6.2 Implications of the Study

The results are most important for both academic research and managerial practise. The study emphasizes for organisations that they need to balance transformation and transactional leadership to optimise efficiency as well as creativity. Actively using transformational leadership strategies while keeping with the structures of accountability, such firms increase employee motivation and engagement in the innovation initiatives.

From a structural point of view, the research argues that organisations have to maintain the flexibility but the stability of the frameworks so that they can encourage creativity. Mechanistic structures ensure consistency while organic structures give adaptability to the organisation to respond as per the industry changes. Strong cultural foundation and incorporating decentralized decision making in a business allow the knowledge sharing and problem-solving abilities to flourish.

Finally, the study also draws attention to how the exogenous events – technological change, globalization, and regulatory framework – impact the organizational innovation. For companies that are proactive and laying themselves out in terms of industry trends and cross industry knowledge transfer in turns out that it gives a competitive edge. They should look at how regulatory frameworks can incentivise innovation with simultaneously ethical and security compliance.

In terms of academically, the findings complement the organisational theory by proving how the cultural adaptability, leadership styles, and structural designs work together to influence innovation. These concepts can later be applied for industry specific innovation driven cultures, and can further yield deeper insights into contextual variations of the same.

6.3 Contributions to the study

The contribution of this research is to the domain of organizational behavior and innovation management by proving empirical evidence of the impact of leadership, structure and cultural

adaptability on dimensions of innovation. The integration of transformational and transactional leadership model shows the connection between visionary leadership and structured performance mechanisms to maintain the expansion of ideas. The research also builds on organizational structure and creativity theory. The study makes use of a contrast of mechanistic and organic structure to help businesses balance the need to optimise operational efficiency with the need to maintain an environment where there can be an enabling environment for innovation. This implies that there is a need for firms to strategically balance stability and flexibility to stay competitive in such evolving industries.

An additional important aspect of the study had been to put emphasis on external factors like globalization, technological advancements, and regulatory frameworks in moulding of organizational culture. The findings suggest that firms that were creative and grew over the long term are those who are engaging in industry trends, industry strategies, and digital transformation strategies. Furthermore, it validates the relevance of Denison's organisational culture model to assess the cultural attributes that contribute to innovation. A structured approach to developing a cultural framework in organisations is offered by identifying the involvement, consistency, adaptability and mission as key determinants of innovation. As a result of applying this model, businesses can determine which elements in this model can be improved systematically and target which improvements.

6.4 Recommendations

Organizations should prioritize leadership strategies that balance transformational and transactional elements to maximize innovation outcomes. To inspire creativity, leaders should create intellectual stimulation and vision and ensure structured but also accountable ones for performance monitoring and incentives. By following this balanced approach, innovation will not be abandoned and the engagement will persist.

Structural flexibility should be integrated into organizational designs to encourage adaptability. Hierarchical structures may secure the operational stability but the firms should decentralise the decision making so as to allow creative autonomy. Companies should adopt hybrid structural models that combine efficiency-driven processes with open collaboration frameworks to foster innovation.

Proper assessment of external factors like technological advancement, market competition, and regulatory environment is a must for the firms to react proactively. Organizations should establish agile strategies that enable them to anticipate and adapt to industry changes while leveraging cross-industry knowledge transfers to drive continuous improvement.

The study recommends that organizations conduct regular employee engagement surveys and innovation audits to evaluate their cultural effectiveness. Barriers to creativity (ex: lack of autonomy, psychological safety concerns, rigid hierarchies) will all be identified to remove them from the business' innovation frameworks.

The long-term competitiveness should be sustained by the investment of research and development. Organizations should allocate resources to digital transformation, knowledge-sharing platforms, and collaborative ecosystems that facilitate continuous learning and innovation-driven growth.

lastly, businesses ought to aim at having strong organisational mission and their innovation strategy will align with that. The creative efforts are clearly tied to long term strategic objectives with cultural coherence.

6.5 Limitations of the Study

Several limitations should be acknowledged, first, the study focuses on broad organizational structures and leadership models, which may not fully capture industry-specific variations in innovation practices. Different sectors operate under unique regulatory, technological, and competitive constraints that influence their cultural approaches to innovation. Second, the study relies heavily on self-report measures and as a result may be over ridden by response biases. Employees may mistake subjective perceptions of the level of cultural support for innovation for objective assessments of organisational support for innovation.

Another limitation is the cross-sectional nature of the research. A longitudinal study of innovation is a dynamic process that will inform us on how cultural and structural change affects the long term creative and as well as the organisational success. Furthermore, the study identifies key external factors that determine innovation, but does not fully examine its interaction with internal organisational capabilities. Future research could investigate how firms integrate external market dynamics with internal cultural development strategies.

Several limitations should be acknowledged. The first part of the study considers broad organisational structures and leadership models that may not sufficiently reflect industry specific variations in innovation practise. Different sectors operate under unique regulatory, technological, and competitive constraints that influence their cultural approaches to innovation. Second, the measures relied on for the study are self-reported, and as a result response may be biased. Subjective perceptions may make employees estimate the amount of cultural support for innovation to be higher or lower than is actually the case.

Another limitation is the cross-sectional nature of the research. Innovation is a dynamic process that evolves over time, and a longitudinal study would provide deeper insights into how cultural and structural transformations impact long-term creativity and organizational success. Additionally, while the study identifies key external factors influencing innovation, it does not fully explore the interplay between these factors and internal organizational capabilities. Future research could investigate how firms integrate external market dynamics with internal cultural development strategies.

6.6 Suggestions for further studies

Future research should explore industry-specific applications of organizational culture and innovation models. Conducting comparative studies across different sectors, such as technology, healthcare, and finance, would provide deeper insights into how industry-specific variables influence cultural adaptability and creative potential. A longitudinal research approach would be valuable in tracking how organizations evolve their innovation strategies over time. Examining how leadership styles, structural adjustments, and cultural transformations impact long-term creativity and competitiveness would enhance the understanding of sustainable innovation management.

Further studies should investigate the role of digital transformation and artificial intelligence in shaping organizational culture. Exploring how AI-driven decision-making, automation, and virtual collaboration tools influence creativity would provide new perspectives on the intersection of technology and organizational behaviour. Another area for future exploration is the impact of national culture on innovation practices. Cross-cultural studies comparing organizations from different regions would help identify how cultural values and societal norms shape corporate attitudes toward risk-taking, experimentation, and adaptive learning.

Finally, additional research could focus on the relationship between psychological safety and organizational innovation. Understanding how trust, inclusivity, and employee well-being influence creative performance could provide valuable recommendations for enhancing workplace environments conducive to innovation.

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Appendices

APPENDIX A

Questionnaire

Demographic Data

This section is designed to gather essential background information about respondents, ensuring proper classification and contextual understanding of the data. The demographic variables selected are relevant to analysing organizational culture, leadership styles.

1. Industry Type

Which industry does your organization belong to?

- ☐ Banking
- ☐ Fashion
- ☐ Beverages (e.g., Coca-Cola)
- ☐ Media
- ☐ Other (please specify) _____

2. Job Role

What is your current position in the organization?

- ☐ Executive/Top Management
- ☐ Middle Management
- ☐ Supervisor/Team Lead
- ☐ General Employee

☐ Other (please specify) _____

3. Years of Experience

How long have you been working in this organization?

☐ Less than 1 year

☐ 1 – 3 years

☐ 4 – 6 years

☐ 7 – 10 years

☐ More than 10 years

4. Organization Size

What is the size of your organization?

☐ Small (1–50 employees)

☐ Medium (51–250 employees)

☐ Large (Above 250 employees)

5. Leadership Structure

How are decisions primarily made in your organization?

☐ Highly Centralized (Top-down decision-making with minimal employee input)

☐ Moderately Centralized (Some delegation, but top leadership makes final decisions)

☐ Decentralized (Employees and teams have significant decision-making autonomy)

SECTION A: Transformational and Transactional Leadership Styles and Their Impact on Innovation

Section 1: Transformational Leadership

TFL1-My organization's leadership inspires employees with a clear and compelling vision.

TFL2-Leaders in my organization encourage creativity and innovation among employees.

TFL3-My organization's leadership motivates employees beyond their self-interest for the benefit of the company.

TFL4-Leaders provide intellectual stimulation by encouraging new perspectives on problem-solving.

TFL5-My organization's leadership acts as a role model, setting high ethical and professional standards.

Section 2: Transactional Leadership

TSL1-My organization's leadership rewards employees for meeting performance targets.

TSL2-Leaders in my organization emphasize clear structures and defined responsibilities.

TSL3-My organization's leadership monitors employee performance closely and takes corrective actions when needed.

TSL4-Leaders primarily focus on short-term goals rather than long-term innovation.

TSL5-Employees are motivated by the incentives and penalties system set by leadership.

Section 3: Creativity and Innovation (Dependent Variable)

CI1-Employees in my organization are encouraged to propose and implement new ideas.

CI2-My organization invests in continuous learning and skill development to foster innovation.

CI3-There is a strong culture of experimentation and risk-taking supported by leadership.

CI4-My organization adopts new technologies and innovative processes to improve efficiency.

CI5-Leadership actively supports and funds innovative projects within the organization.

SECTION B: The impact of corporate beliefs, adaptive organizational routines, and psychological safety on fostering innovation and creativity within organizations.

Section 1: Corporate Beliefs

CB1-Our organization's core values encourage employees to explore new ideas.

CB2-Leadership actively promotes a culture of creativity and experimentation.

CB3-Employees believe that innovation is essential for the organization's long-term success.

CB4-The organization recognizes and rewards employees for innovative contributions.

CB5-Employees feel aligned with the company's vision for continuous improvement and innovation.

Section 2: Adaptive Organizational Routines

AOR1-Our organization frequently updates its processes to encourage creative problem-solving.

AOR2-Employees are given the flexibility to experiment with new ways of working.

AOR3-The organization quickly adapts to changes in the industry or market.

AOR4-Cross-functional collaboration is encouraged to generate new ideas and solutions.

AOR5-Employees are empowered to challenge outdated processes and suggest improvements.

Section 3: Psychological Safety

PS1-Employees feel comfortable sharing new ideas without fear of negative consequences.

PS2-Mistakes are treated as learning opportunities rather than failures.

PS3- Team members respect and value diverse perspectives when discussing new ideas.

PS4-Leadership encourages open discussions and constructive feedback.

PS5-Employees feel safe taking risks and experimenting with innovative approaches.

SECTION C: Leadership Empowerment, Decision-Making Structures, and Employee Creativity

Section 1: Organizational Decision-Making Structure (Independent Variable - Categorical)

Respondents will select the decision-making structure that best describes their organization:

Which of the following best describes your organization's decision-making structure?

- (a) Highly Centralized (Decisions made by top leadership with minimal employee input)
- (b) Moderately Centralized (Some delegation, but major decisions remain with top leadership)
- (c) Decentralized (Employees and teams have significant autonomy in decision-making)

Section 2: Employee Creativity and Risk-Taking (Dependent Variable - Continuous, Likert Scale 1-5)

(1 = Strongly Disagree, 5 = Strongly Agree)

ECR1-Employees in my organization are encouraged to take initiative without excessive approval processes.

ECR2-My organization values new and unconventional ideas from employees at all levels.

ECR3-Leaders actively support risk-taking when pursuing innovative solutions.

ECR4-Employees are given decision-making autonomy in their work processes.

ECR5-My organization experiments with new strategies to improve performance.

ECR6-Failure from innovative efforts is viewed as a learning opportunity rather than a penalty.

ECR7-Teams in my organization can implement creative solutions without needing multiple layers of approval.

ECR8-There is open communication between leadership and employees, allowing for idea-sharing.

ECR9-Employees feel empowered to contribute to organizational changes and innovations.

SECTION D: Market competition, technological advancements, regulatory frameworks, globalization, and cross-industry knowledge transfer have a significant positive impact on shaping organizational culture to foster innovation and creativity.

Section 1: Market Competition (MC)

MC1-Our organization continuously monitors market competition to adapt its innovation strategies.

MC2-Competitive pressure motivates our company to invest in new ideas and creative solutions.

MC3-Our industry's fast-changing competitive landscape encourages risk-taking and experimentation.

MC4-We actively benchmark competitors to improve our innovation and creativity.

MC5-Market competition drives our organization to adopt emerging trends and technologies.

Section 2: Technological Advancements (TA)

TA1-Our organization actively integrates emerging technologies to enhance creativity and innovation.

TA2-Technology adoption in our industry influences how we approach problem-solving and process improvements.

TA3-Digital tools and automation have improved collaboration and knowledge-sharing within our teams.

TA4-The use of artificial intelligence and data analytics supports decision-making for innovation.

TA5-Our company invests in training employees to effectively use new technologies for innovation.

Section 3: Regulatory Frameworks (RF)

RF1-Government regulations and policies impact our organization's ability to innovate.

RF2-Compliance with industry regulations sometimes limits our ability to explore creative solutions.

RF3-Our organization proactively adapts to changing regulatory requirements to maintain innovation.

RF4-The legal environment in our industry provides a structured framework that influences innovation practices.

RF5-Regulatory incentives (e.g., tax benefits, grants) encourage our organization to pursue new ideas.

Section 4: Globalization (GLO)

GLO1-Exposure to global markets has expanded our organization's approach to innovation.

GLO2-We incorporate international best practices to improve our creative processes.

GLO3-Collaboration with global partners enhances our company's ability to develop innovative solutions.

GLO4-Our company adapts products/services to meet the needs of diverse international markets.

GLO5-Access to global talent and expertise improves our organization's ability to innovate.

Section 5: Cross-Industry Knowledge Transfer (CIKT)

CIKT1-We actively seek insights from other industries to enhance our innovation capabilities.

CIKT2-Collaboration with companies outside our industry has led to creative problem-solving.

CIKT3-We encourage employees to explore trends and practices beyond our sector to drive innovation.

CIKT4-Knowledge-sharing platforms and industry events play a key role in shaping our innovation culture.

CIKT5-Cross-industry partnerships have helped our organization stay ahead of emerging trends.

Section 6: Organizational Culture for Innovation (OCI) [Dependent Variable]

OCI1: Our company promotes a culture of creativity and innovation.

OCI2: Employees are encouraged to take risks and experiment with new ideas.

OCI3: Knowledge sharing and collaboration are actively supported within our organization.

OCI4: The organization is flexible in adapting to changes and adopting new business models.

OCI5: Leadership actively fosters an innovative mindset among employees.

SECTION E: Organizational Culture Attributes and Innovation Performance

Section 2: Organizational Culture Attributes (Likert Scale 1-5)

(1 = Strongly Disagree, 5 = Strongly Agree)

Involvement

I1-Employees at all levels actively participate in decision-making and innovation initiatives.

I2-My organization encourages team collaboration to drive creative solutions.

I3-Leadership actively seeks employee input in shaping the company's strategic direction.

Consistency

C1-My organization has well-established values and principles that guide innovation efforts.

C2-Policies and procedures remain stable and predictable, ensuring structured support for innovation.

C3-There is a strong alignment between organizational values and employee behaviour in innovation-related activities.

Adaptability

A1-My organization quickly adapts to changes in the market and industry trends.

A2-Employees are encouraged to experiment with new approaches to problem-solving.

A3-Leadership supports continuous learning and flexibility to drive innovation.

Mission

M1-My organization has a clear long-term vision that promotes innovation and creativity.

M2-The company's mission prioritizes developing new and competitive solutions in the industry.

M3-Leadership ensures that innovation aligns with the organization's strategic goals.