



# A Review of Organizational Climate and Innovations in Public Sector Organizations: Role of Transformational Leadership

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# Abstract

The present study aims at establishing the linkage between organizational climate (OC) and innovations in public sector organizations with a focus on the role of transformational leadership. The study used secondary data retrieved from credible journal databases. Keywords were used to search for the articles in relation to the topic. Through the study, it has been revealed that, the public sector, just like the private, needs to innovate in order to maintain effective service delivery that positively responds to the ever-changing social-economical needs of the citizenry. Further, a positive linkage between organizational climate and innovation has been established where it has been revealed that a favourable organizational climate enhances innovations. The study has also revealed that transformational leadership plays a significant role in the linkage between organizational climate and innovations in the public sector. Finally, a model depicting the linkages of the investigated constructs has been developed. The findings of the study, together with the proposed framework, make this paper unique in as far as its contribution towards knowledge regarding public sector innovation is concerned.

Keywords: Organizational climate. Public sector innovation. Transformational leadership.

# Introduction

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It is an indisputable fact that all organizations exist to achieve some set objectives. For this to happen, the need for human resources to carry out various activities aimed at achieving the desired objectives cannot be overemphasized (Amalou, 2024). Since people are needed to achieve organizational objectives, the need for a conducive work environment for these people to discharge their duties to their full potential cannot be overemphasized. In an event that the employees feel that the environment is toxic, they feel demotivated and this, in the process reduces their morale to serve the organization with utmost dedication.

There is a general consensus across the globe that most public sector institutions across the globe have been underperforming thereby failing to meet the everchanging demands of citizens



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(Richards & Duxbury, 2015). Literature reveals the following as some of the challenges which public sector entities have been grappling with: ageing workers who are also demotivated due to poor incentive policies, inadequate financial resources to support operations and upsurge of attrition rates as people flock to the corporate for greener pastures (Mau, 2019). Laihonen and Kokko's (2019) hints that public sector is critical in any economy as it is entrusted with the responsibility of providing essentials to the citizenry. It therefore follows that when this sector of the economy is underperforming, service delivery to the citizenry is heavily compromised.

The concept of innovation in public sector is therefore driven by the quest to remain relevant and continue serving the citizens irrespective of their continuous changing demands (Ojiako et al., 2024). Without innovations, the public sector can no longer be relevant to the demands of the citizenry and this is a recipe for failure. Literature reveals that operations in the public sector have so far been influenced by a largely homogenous citizenry, where needs for goods and services were almost the same (Sangiorgi, 2015). However, as time elapses, the population grows and this leads to diverse demands of the citizenry for goods and services from their governments (Sangiorgi, 2015). Such being the case, at global level, there has been a widespread quest in the public sector to migrate from a traditional way of doing things to a more coherent one as a way of remaining relevant to the ever-changing demands of the citizenry (Sangiorgi, 2015).

McNulty and Ferlie's (2004) posit that since the 1980's, the strategy towards reforming the public sector has been referred to as the new public management (NPM). According to Sangiorgi's (2015), the NPM replaced the Public Administration approach which was mostly characterized by limitations like top-down bureaucracies. The NPM, therefore, adopted a decentralized, private sector-centered approach where citizens are at the centre of governments' operations. The NPM concept advances the notion that if the public sector adopts and implements private sector-inspired approaches, the former will enhance quality of services and cost-effectiveness (McNulty & Ferlie, 2004). However, Dunleavy et al.'s (2011) posit that we are now in the Digital Era Governance (DEG) where, with the help of digitization, governments have taken full control of services to the citizenry.

To effectively meet the ever-changing social demands of the citizenry, the need for innovations on the part of governments cannot be overemphasized (Arundel & Huber, 2013; Lakew & Gedifew, 2024; Pham et al., 2024; Rosa, Najberg, & Sousa, 2020). Literature reveals that the public sector contributes about 20 to 30% of the GDP for the third world countries thereby justifying the need for innovations in the sector to enhance the performance (Arundel & Huber, 2013).

Qiu and Chreim, 2022 posit that after the 2008 global financial meltdown, and taking into cognizance of the subsequent financial and environmental challenges, most governments worldwide are now resorting to innovations as a way of ensuring that they remain relevant. Literature further highlights that following the advent of the global Covid-19 pandemic whose effects have negatively affected the citizenry thereby putting much pressure on governments to still respond to competing priorities that require financial resources, innovations in the public sector is the best way to maintain effective public service delivery that responds to the social demands of the citizenry (Hartmann & Hartmann, 2020).

Several researchers have so far taken an interest to investigate innovations in the public sector as a way of enhancing service delivery and remain relevant to the demands of the citizenry (Agolla & Van Lill, 2017; Arundel & Huber, 2013; Borins, 2018; Enang, Asenova, & Bailey, 2022; Korac, Saliterer, & Walker, 2017; Osborne & Brown, 2011; Qiu & Chreim, 2022). However, despite a plethora of studies regarding innovations in public sector, a little is so far known regarding the role of transformative leadership in the relationship between organizational climate and innovations and this has led to knowledge gap regarding the subject area. Through review of literature, it has been revealed that most studies regarding innovations in public sector have so far dwelt much on factors that affect innovations (Agolla & Van Lill, 2017; Hossain & Yasmin, 2022), measuring public sector innovations (Arundel & Huber, 2013), types of innovations in public sector (Cinar et al., 2024), and leadership styles and their impact to innovations (Hansen & Pihl-Thingvad, 2019). The present study, therefore, aims at investigating the linkage between organizational climate and innovations where transformational leadership plays a moderating role. Under organizational climate, focus will be put on its elements of risk, organizational structure, and expected approval. To effectively cover the overarching goal of the present study, the following specific objectives will be pursued:

- 1. To understand the concept of innovation focusing on public sector.
- 2. To establish the role of transformative leadership in the relationship between organizational climate and innovation through risk, organizational structure, and expected approval.
- 3. To come up with a framework depicting the relationships.
- 4. The structure of the paper will therefore be as follows: Review of literature regarding the topic, methodology, presentation of findings, discussion, and conclusion.
- 2 Literature Review

#### 2.1 Public sector innovation

Public Sector Innovation (PSI) entails the adoption, creation and recreation of novel ideas in such a way that they should address a particular issue (Chen, Walker, & Sawhney, 2020). According to the authors, innovations in the public sector aim at bringing solutions to prevailing challenges. The authors identify several types of innovations within the public sector some of which hinge on products, services, process, product, technological, governance, and social innovations.

While innovation used to be more prominent in the private sector, recent studies indicate that the public sector has of late embraced the concept (Agolla & Van Lill, 2017). Walker, Berry, and Avellaneda's (2015) describes public sector innovation (PSI) as a way of doing new things like processes and procedures take shape in an organisation. Machado et al.'s (2018) views innovation as an agenda that contributes to the modernisation of government in times of facing complex problems. This entails that survival of organisations depends on how innovative they are.

Innovation in the private sector is skewed towards gains or profit making unlike the public sector where it is performed to improve performance and has great effect to the society (Machado et al., 2018). Initiation of new ideas and thinking out of the box is what makes innovation worthy pursuing (Korac, Saliterer, & Walker, 2017). Innovations in the public and private organisations have become the norm of doing business because of several compelling reasons. Innovation is now taken as a corporate business strategy, which in turn, helps organisations to continuously change business processes, services and products. Widespread economic decline across the globe is also one of the reasons whereby organisations have to find ways and means of surviving . Further to this, advent of democracy has compelled nations to change leadership every five years and each passing period, each new government comes with its own programmes and activities, with a view to fulfil campaign promises (Korac, Saliterer, & Walker, 2017). While innovators at private sector level are induced by rewards and are acknowledged for their work, those in the public sector rarely get rewards and recognition as their work is deemed as public service, hence their innovations become government property (Borins, 2018). Furthermore, innovators at public sector are merely commended for doing good work in the society. This recognition which in most

cases is intrinsic, satisfy the followers. Molloy et al.'s (2024) opine that intrinsic motivation is the fundamental driver for innovation.

Agolla and Van Lill's (2017) acknowledge that organisations must be ready to foster innovations for them to remain relevant. However, for innovations to take place, drivers are critical. These drivers can either be internal or external. Internal drivers include leadership (Hansen & Pihl-Thingvad, 2019; Korac, Saliterer, & Walker, 2017; Mohd Som et al., 2020); entrepreneurship (Agolla & Van Lill, 2017), and organisational resources (Borins, 2018). On the other hand, drivers outside the organisation include;political, economic, social, technological, ecological, legal, collaboration and networking Agolla and Van Lill's (2017). Leaders therefore have huge tasks to deal with both internal and external drivers that promote innovation.

Much as drivers tend to promote the growth of organisations through innovations, literature has also posited some factors that hinder effective innovations in organizations such as reliance on the available resources Agolla and Van Lill's (2017), low literacy levels and bureaucratic culture Wang, Meng, and Cai, 2019 and political influence Agolla and Van Lill's (2017). However, despite the negative impact of political interference towards public sector innovations, Korac, Saliterer, and Walker's (2017) argues that both administrative staff and political leadership are complementary.

#### 2.1.1 Transformational leadership

Performance of any organization largely depends on leadership. According to (Hartmann & Hartmann, 2020), leadership is the art of persuading people to work together towards a common goal. Further, in support of this submission, posits that leadership is a process of motivating other people to act towards achievement of desired goals. However, research has also demonstrated that it is not every leadership style that brings about success in an organization. Some leadership styles like transactional or laissez-faireare mostly associated with challenges (Maamari & Majdalani, 2017). Transactional leadership attribute of contingent reward is significantly related to innovation while management by exception (passive and laissez-faire) are negatively related to innovation since the leader is usually not concerned with what is happening as they fail to give direction in the event that the team goes astray. According to Samar Reyaz's (2024), laissez-faire takes hands off approach and make followers feel dis-engaged.

According to research conducted worldwide by a number of researchers, transformational leadership has stood out as the best form of leadership, capable of making innovation simple in organisations (Authors, 2016; Geijsel, Sleegers, & Van Den Berg, 1999; Maamari & Majdalani, 2017). Transformational leadership is the process whereby leaders and followers, raise one another to higher levels of morality and motivation. Theories of transformational leadership matter in a group setting. Maamari and Majdalani's (2017), highlights these theories as: idealised influence-enhancing relationship between leader and followers, where leader is taken as a role model and build trust among members because leaders have high level of moral values and corresponds to the charismatic qualities of a leader (Milan Shrestha, 2020) ; intellectual stimulation- looking for more creative solutions by promoting rational thinking, problem solving abilities and intelligence.; individualised influence- encouraging, supporting and coaching as well as giving personal attention and treating each employee individually; and inspirational motivation- communicating a vision for shared responsibility and inspires followers to think in new ways as well as bringing an extraordinary way of achieving goals and change in organizations.

Among the factors that make transformational leadership outstanding in an organization as compared to the other leadership styles is emotional intelligence. He argues that emotional intelligence is prerequisite for successful leadership. It is the characteristics of emotional intelligence that shape the discourse of an organisation. outlines the emotional intelligence characteristics as follows: understanding of employee emotions, ability to manage relationships, ability to understand emotions of others, and ability to manage others. Such emotional intelligence traits enable transformational leaders to better manage themselves and team members in the course of innovation (Maamari & Majdalani, 2017).

#### 2.1.2 Organizational climate

Organisation refers to a group of people coming together to achieve a common goal. Organizational climate, on the other hand, entails the perceptions, beliefs, and feelings which group members have regarding their working place (Maamari & Majdalani, 2017). Organizational climate embraces the views of employees in respect to their working environment (Maamari & Majdalani, 2017), how things are in the environment, nature of relationship within the group, forms of support and nature of hierarchy. Ahmed's (1998) posit that innovation is made simple in an organisation where there are opportunities of experimenting, acceptance of making mistakes, freedom to take risks and avoiding punishments. These attributes make the organisation conducive for members to innovate without fearing of loss of resources or sanctions for failure to achieve desired innovations when expenditure has already been incurred.

Kemala Ulfa and Madhakomala's (2022) opines that organizational climate has greatest effect of improving innovative work behaviour, which is the the basic foundation of an organization which reinforces brilliant work process, services and products.

Von Treuer and McMurray's (2012) identified antecedents of positive supportive climate for innovations which include; autonomy, cohesion, pressure, recognition, support, trust and family. Further, the authors posited seven characteristics of organizational climate namely responsibility, risk, structure, rewards, warmth and support, expected approval, and conflict. To this effect, various scholars have argued that positive organisational climate brings positive results.

# 2.2 Linkage between organizational climate and innovation

Shanker et al.'s (2017) argue that organisations which fail to innovate potentially diminish their ability to fight competition and run at risk of going out of the market. Innovation requires supportive environment in order to achieve meaningful results (Zuraik & Kelly, 2019). Merely focussing on innovative policies and processes but neglecting to create a supportive organisational climate for innovation can cause problems because innovation is regarded as a means for organisations to respond to turbulent market environment. Behaviours of group members arising from attributes of their leader, open up for innovation, regular encouragement by leaders, coaching, building a culture of innovation, autonomy, open environment and regular communication, will ignite followers' appetite for innovation and doing more than what is expected of them (Von Treuer & McMurray, 2012). Sönmez and Yıldırım's (2019), argues that as a way of fostering innovation, it is imperative to create an organisational climate that is non-threatening. Zuraik and Kelly's (2019) posit that, organisations need to be accommodative, entrepreneurial and creative in responding to demands of the group. Of the seven characteristics of organizational climate, this paper focuses on three namely risk taking, structure, and expected approval.

#### 2.2.1 Risk taking

Jalali and Sardari's (2015) postulates that risk taking is the willingness to commit more resources to a project where the cost of failure may be higher. Conditions under which one takes risks are always ambiguous in nature. Regardless of this fear, Jalali and Sardari's (2015) states that risk taking increases probability of identifying entrepreneurial opportunities. In fact, entrepreneurs are regarded as risk takers. In this respect, risk taking and innovativeness are related and have to be practised simultaneously in a group. In other words, innovations require taking some risks and failure to accept those risks would mean no innovations. Khorshid and Mehdiabadi's (2020) confirm that risk taking is inherently related to individuals' tendencies so that some people enjoy risk pursuits while others detest such activities. In order to avoid such tendencies, as postulated by

Khorshid and Mehdiabadi's (2020), risk management policies should be developed in organisations. Further to this, organisations should be able to encourage its members to take reasonable and calculated risks. The world over, new business opportunities originate from taking risks. This move enhances organisations from moving out of the status quo. Sumadi et al.'s (2024) call upon leaders to maintain a reasonable equilibrium between risk-taking and expansion and upholding the organization's unwavering commitment to fundamental objectives.

Tolerance for intelligent risk refers to a willingness to take calculated risks in order to achieve a desired outcome or goal. It is important for leaders to be able to identify and evaluate potential risks in order to make informed decisions and achieve success. Through idealized influence, leader and follower work to solve problems. Followers are encouraged to think outside the box. Yeo and Saboori-Deilami's (2017) posit that organizations are encouraged to outsource services which they do not possess. Khorshid and Mehdiabadi's (2020) insist on taking alternative route in solving problems. Further, through intellectual stimulation, followers are encouraged to be more creative. Embracing any new technology like the Fourth Industrial Revolution, popularly known as 4IR, entails taking a risk. Literature has proved that transformational leaders possess the trait of tolerating risks. Tolerating risks is therefore an essential transformational leadership trait necessary for technological advancements.

# 2.2.2 Structure

Just like organisational climate, structure has a bearing on the initiation and implementation of innovations. This calls for the dissection of the organisation and examine different internal stakeholders. According to Maamari and Majdalani's (2017), organisations have graduated from centralisation to decentralisation. In this respect, lower structures are given opportunities to make their own decisions without waiting for the mother body to make decisions for the followers. Structures should not be there to stop decision making process at any level of the organization.

Maamari and Majdalani's (2017) collaborated on the use of open structure in order to increase access to knowledge and information. Vigoda-Gadot et al.'s (2005) challenges organisations against using bureaucratic structure that is known for using strict rules and in the process delays innovation. Bureaucratic structure is significantly long. Scholars such as Hansen and Pihl-Thingvad's (2019), Maamari and Majdalani's (2017), and Vigoda-Gadot et al.'s (2005) collaborated on empowering the group by using transformational leadership structure. Transformational leadership style has attributes that seek to motivate followers to transcend their self-interests by developing, communicating and sustaining vision of the organisation (Maamari & Majdalani, 2017). Transformational leadership brings both leaders and followers together and make followers own the organisation and get motivated to do more than what is expected of them. The author describes transformational leadership as a modern approach towards leadership change from autocratic to friendly. Hao, Kasper, and Muehlbacher's (2012) posit that transformational leadership brings in a structure that is flexible, open and full of delegation. Sliwka et al.'s (2024) opines that it is extremely important to recruit more transformational leaders in an organisation because in themselves are a full force, capable of bringing an impact on organizational change.

Gentsoudi's (2024) complements by stating that transformational leadership inspires, motivates, empowers and stimulate followers intellectually, although transactional and laissez-faire leadership do not get some popularity. He sees transactional leadership emphasizing on individual goals instead of organizational or collective goals.

# 2.2.3 Expected approval

Expected approval of followers in an organisation, is termed as the loyalty and pride of followers with sincerity, relatedness and faithfulness towards the environment and work they do (Rishipal, 2019). Followers look at leadership with keen interest and get assurances if the leadership is pro-innovative and does not hold resources for innovations.

Expected approval as Vigoda-Gadot et al.'s (2005) argues, is further gained if followers are free to make decisions at their own level without waiting for top-bottom approach which is rather retrogressive. he found that when follower perceive their usefulness in the organisation, they get identified with the organisation they are in and become part of the brand. This gives them commitment to stay longer in an organisation.

Kim, Kang, and Lee's (2023) views job satisfaction as an approval for followers to commit themselves to innovations. It is further recognised that job satisfaction is better at public sector level than private sector level. Rishipal's (2019) confirms that job security is connected to better working conditions. Better working conditions give employees courage to show their full potential by being more innovative for the survival of the organisation.

# 2.3 Moderating role of transformational leadership in the relationship between organizational climate and innovations

Transformational leadership is a popular notion in management literature due to its relational and inspirational style. A number of researchers have extensively looked at it but unfortunately, very little has been studied particularly on its relationship with organisational climate as well as innovations. According to Authors's (2016), transformational behaviours create good organisational culture fertile for innovations. Behaviours such as vision articulation, fostering of group goals, expecting high performance, coaching, provision of individual support and challenging them to do more, steer group cohesiveness and hunger for innovation. Transformational leadership instils organisational climate that encourages creativity and risk taking (Scott & Bruce, 1994). In effect, successful innovation of new products, ideas and processes contribute to better operational and financial performance (Borins, 2018). The study allude that leaders have a critical role to play in ensuring that, together with their followers, they build good organisational climate and instil the spirit of innovation. Leaders can do this by following theories of transformational leadership that inspires followers (Authors, 2016; Scott & Bruce, 1994). In a nutshell, transformational leadership positively influences the relationship between organizational climate and innovations.

It should also be emphasized that some innovations require digital advancements. To this effect, Saharudin et al.'s (2024) emphasize the need for adoption of technology to boost innovations in organizations. According to the authors, in recent times, the word has witnessed an advent of several digital devices and platforms that aim at boosting innovations and timely communication in organizations. To this end, one cannot talk about innovations in recent times without thinking about digitization to enhance the process, in most cases. Nonetheless, since adoption of technological advancements for innovations entails change, the need for somebody to drive that change agenda cannot be overemphasized.

Literature reveals that digital transformation has a positive and significant impact on in-

novation (Al-Shammari, Aziz, & Jasimuddin, 2023; Liu et al., 2023; Nsisong Louis Eyo-Udo, 2024). Digital technology has reshaped traditional business models such that, there has been mushrooming of diverse array of cutting-edge technologies that have improved way organizations operate, interact with customers and creating value. The technologies include:

- 1. Artificial intelligence; robotics and machine learning human behaviour
- 2. Data analytics; analysis of large data set to get actionable insights
- 3. Cloud computing; providing on demand access to shared pool of computing resources
- 4. Internet of Things (IoT); Providing network of interconnected devices fitted with sensors, software and connectivity
- 5. Block chain technology; enabling secure, transparent and tamper-proof transactions.

### 3 Methodology

A review methodology was employed for the present study. Choice of the methodology was based on the fact that the present study mainly focused on gathering and amalgamating previous studies regarding innovation in public sector hence required a methodology that allows for building a study based on the existing knowledge as posited by (Snyder, 2019). According to the author, there is no other suitable research methodology that is capable of allowing for proper synthezing of previous study findings than literature review. The author further recommends literature review as the best methodology as it allows for the pooling together of previous study findings, and is capable of revealing previous study gaps which leads to development of both theoretical and conceptual models.

Literature presents myriad types of literature reviews available for a researcher like the systematic review, theoretical review, narrative review, mapping review, descriptive review, umbrella review, and meta-analysis (Paré et al., 2015). Despite a plethora of approaches, choice of a suitable approach for a particular study is mainly based on the study question to be answered as guided by researchers. As such, a narrative or integrative approach was opted for in the present study as it allows for synthesizing of previous studies. According to Snyder's (2019), an integrative review is the best choice when the aim of the study is to pool together different perspectives of the study area which is in line with the present study.

As a way of upholding to the principal of objectivity in the whole review process, four steps, as suggested by Snyder's (2019) were taken in the whole review process as follows: design, conduct, analysis, and presentation. Under the first step of designing, one of the key activities undertaken was the retrieval of the study materials. The process of acquiring the study materials was guided by the position where key words were used as inputs into computerized journal databases. The main database used for the present study was Scopus since literature has proved that so far, it is the largest journal database Kellens, Terpstra, and De Maeyer's (2013) with peer-reviewed papers thereby meeting the quality assessment which is one of the critical requirements under stage two of conduct. Other journal databases explored were Sage, Taylor and Francis, Elsevier, Emerald, Inderscience and Springer. The process of searching for the study articles was facilitated by the use of pre-selected relevant journals from the ABDC list. Some of these relevant journals are: International Review of Administrative Sciences, Journal of Public Administration Research and Theory, Public Management Review, International Review of Public Administration, and International Journal of Public Sector. The reference lists of the retrieved articles were also scrutinized and some relevant papers were sourced from there.

Three key words were used for the search of the articles: "organizational climate," "public sector innovation" and "transformational leadership." To be included for the present study, the paper had to be in English, relevant to the topic, not duplicated, and peer-reviewed. Before actual retrieval, the abstracts of the articles were being checked to affirm their relevance as guided by (Snyder, 2019). This process was followed by another scrutiny of the remaining papers by the subject experts..

#### 4 Findings

The present study has made a number of revelations regarding the linkage between organizational climate and public sector innovations, with transformational leadership as a moderator. Key among these revelations are as follows:

Firstly, it has been revealed that innovation is no longer a practice by the private sector alone. In the modern economy, effective performance of public sector organizations heavily relies on how innovative they are in such a way that they keep themselves abreast with the everchanging demands of the citizenry. To this effect, innovation is also taking centre stage in effective performance of the public sector.

Secondly, it has been revealed that conducive organizational climate; through allowing risks, structure that minimizes bureaucracies, and expected approval, enhances innovativeness.

Finally, it has been revealed that due to its ability to embrace change, motivate employees, and allow for employee autonomy, transformational leadership influence the relationship between organizational climate and innovation.

#### 5 Discussion

It should be emphasized that despite being not profit-oriented, the public sector still needs to meet the demands of its clientele who are the citizenry. These demands from the citizenry are not static; they keep changing as time goes. Such being the case, government products and services that used to meet the social demands of the people some decades ago, cannot be relevant to the current need. This therefore calls for the need for continuous improvements on the part of the public sector so that its goods and services should remain relevant to the current needs of its citizens. That continuous improvement entails innovations.

It is however, common knowledge that employees in organizations are the ones who are custodians of various innovative ideas. As such, the need for a conducive environment that can induce innovations cannot be overemphasized. This is possible when there is leadership that accepts risks, supportive structure, and expected approvals for innovations. The model below highlights the same.

## 6 Conclusion

The present study has added to the knowledge regarding public sector innovation by revealing the linkage between conducive organizational environment and innovation. Under the conducive environment, focus was put on accepting risks in the process of innovations, a structure that limits bureaucracies, and giving employees approvals to try new ideas without attaching some strings. It is expected that the present study findings will assist public sector managers in making informed decisions on how they can enhance innovation. Further, various researchers will also find a reference material. The framework proposed helps to further explain the linkages.

Transformational leaders have a clear vision for the future and understand the potential of

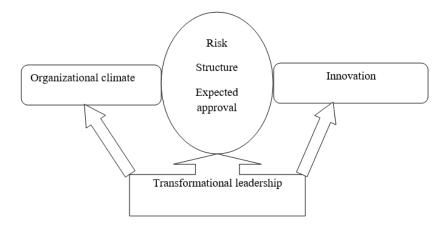


Figure 1. Linkage between organizational climate and innovations with transformational leadership as moderator

new ideas to drive business growth and improve operations. With their ability to create a conducive environment for employee autonomy, innovations thrive since employees explore their full potential. By fostering a culture of innovation, learning and experimentation, transformational leaders can create an environment that is conducive to adapting to new technologies for innovations. They also provide the necessary resources and support for their teams to learn and adopt new technologies, which helps to boost innovations. Positive attitude towards risk-taking, ability to promote participation, provision of autonomy, empowerment and openness to change are among the key traits for transformational leaders which can enable technological advancements necessary for innovations. It is expected that the present study findings will assist public sector managers in making informed decisions on how they can enhance technological transformation.

Being a paper that is built on review of secondary data where choice is the relevant papers was done by the authors, the paper lack statistically proven data to support the arguments advanced. However, despite this shortfall, the present study has added to the knowledge regarding linkage of organizational climate and innovation where transformational leadership has influenced the relationship.

#### References

- Agolla, J. E., & Van Lill, J. B. (2017). Insights into Kenya's public sector innovation: The case of managers. International Journal of Innovation Science, 9(3), 225–243. https://doi.org/10.1108/ IJIS-11-2016-0049
- Ahmed, P. K. (1998). Culture and climate for innovation. European Journal of Innovation Management, 1(1), 30–43. https://doi.org/10.1108/14601069810199131
- Al-Shammari, M., Aziz, W. A., & Jasimuddin, S. M. (2023). Editorial: Emerging trends in innovation management and entrepreneurship development in the 21st century: issues, challenges, and opportunities. Frontiers in Psychology, 14, 1145727. https://doi.org/10.3389/fpsyg.2023. 1145727
- Amalou, S. I. (2024). Organizational Climate and Performance in Higher Education: A Bibliometric Analyses Using Dimensions Database. Majapahit Journal of Islamic Finance and Management, 4(1), 1–24. https://doi.org/10.31538/mjifm.v4i1.55

- Arundel, A., & Huber, D. (2013). From too little to too much innovation? Issues in measuring innovation in the public sector. Structural Change and Economic Dynamics, 27, 146–159. https://doi.org/ 10.1016/j.strueco.2013.06.009
- Authors, F. (2016). Linking transformational leadership , creativity , innovation. Management Decision, 54(9), 2277–2293.
- Borins, S. (2018). Public sector innovation in a context of radical populism. Public Management Review, 20(12), 1858–1871. https://doi.org/10.1080/14719037.2018.1441430
- Chen, J., Walker, R. M., & Sawhney, M. (2020). Public service innovation: a typology. Public Management Review, 22(11), 1674–1695. https://doi.org/10.1080/14719037.2019.1645874
- Cinar, E., Simms, C., Trott, P., & Demircioglu, M. A. (2024). Public sector innovation in context: A comparative study of innovation types. Public Management Review, 26(1), 265–292. https: //doi.org/10.1080/14719037.2022.2080860
- Dunleavy, P., Margetts, H., Bastow, S., & Tinkler, J. (2011). New Public Management Is Dead—Long Live Digital-Era Government. Digital Era Governance: 16(3), 216–249. https://doi.org/10. 1093/acprof:oso/9780199296194.003.0009
- Enang, I., Asenova, D., & Bailey, S. J. (2022). Identifying influencing factors of sustainable public service transformation: a systematic literature review. International Review of Administrative Sciences, 88(1), 258–280. https://doi.org/10.1177/0020852319896399
- Geijsel, F., Sleegers, P., & Van Den Berg, R. (1999). Transformational leadership and the implementation of large-scale innovation programs. Journal of Educational Administration, 37(4), 309–328. https://doi.org/10.1108/09578239910285561
- Gentsoudi, V. (2024). The Nexus Between Transformational Leadership and Greece's Public Sector Performance: Educational Leadership Extension. Business Ethics and Leadership, 8(1), 107–115. https://doi.org/10.61093/bel.8(1).107-115.2024
- Hansen, J. A., & Pihl-Thingvad, S. (2019). Managing employee innovative behaviour through transformational and transactional leadership styles. Public Management Review, 21(6), 918–944. https://doi.org/10.1080/14719037.2018.1544272
- Hao, Q., Kasper, H., & Muehlbacher, J. (2012). How does organizational structure influence performance through learning and innovation in Austria and China. Chinese Management Studies, 6(1), 36– 52. https://doi.org/10.1108/17506141211213717
- Hartmann, M. R., & Hartmann, R. K. (2020). Frontline Innovation in Times of Crisis: Learning from the Corona Virus Pandemic. Policing (Oxford), 14(4), 1092–1103. https://doi.org/10.1093/police/ paaa044
- Hossain, M. Z., & Yasmin, T. (2022). Factors affecting public sector innovation during COVID-19 pandemic in Bangladesh: an analysis on three cases. International Review of Public Administration, 27(1), 1–14. https://doi.org/10.1080/12294659.2022.2044105
- Jalali, S. M., & Sardari, M. (2015). Study the Effect of Different Aspects of Customer Relationship Management (CRM) on Innovation Capabilities with Mediator Role of Knowledge Management (Case Study: Mahram Company). Mediterranean Journal of Social Sciences. https://doi.org/ 10.5901/mjss.2015.v6n6s6p343
- Kellens, W., Terpstra, T., & De Maeyer, P. (2013). Perception and Communication of Flood Risks: A Systematic Review of Empirical Research. Risk Analysis, 33(1), 24–49. https://doi.org/10. 1111/j.1539-6924.2012.01844.x
- Kemala Ulfa, C., & Madhakomala, R. (2022). Transformational Leadership, Organisational Climate and Organizational Trust; Is It Trigger to Innovative Work Behavior? Journal of Positive School Psychology, 2022(5), 1958–1969. http://journalppw.com
- Khorshid, S., & Mehdiabadi, A. (2020). Effect of organizational identification on organizational innovativeness in universities and higher education institutions of Iran, mediated by risk-taking capability. European Journal of Innovation Management, 24(4), 1430–1458. https://doi.org/10. 1108/EJIM-04-2019-0094

- Kim, J., Kang, H., & Lee, K. (2023). Transformational-transactional leadership and unethical proorganizational behavior in the public sector: does public service motivation make a difference? Public Management Review, 25(2), 429–458. https://doi.org/10.1080/14719037.2021.1974714
- Korac, S., Saliterer, I., & Walker, R. M. (2017). Analysing the environmental antecedents of innovation adoption among politicians and public managers. Public Management Review, 19(4), 566–587. https://doi.org/10.1080/14719037.2016.1200119
- Laihonen, H., & Kokko, P. (2019). Knowledge management and hybridity of institutional logics in public sector. Knowledge Management Research and Practice, 21(1), 1–15. https://doi.org/10.1080/ 14778238.2020.1788429
- Lakew, D. A., & Gedifew, M. T. (2024). The Relationship among Transformational Leadership, Job Satisfaction and Service Quality in Public Institutions of Amhara Regional State, Ethiopia. Pakistan Journal of Life and Social Sciences (PJLSS), 22(1). https://doi.org/10.57239/pjlss-2024-22.1.00134
- Liu, M., Li, C., Wang, S., & Li, Q. (2023). Digital transformation, risk-taking, and innovation: Evidence from data on listed enterprises in China. Journal of Innovation and Knowledge, 8(1), 100332. https://doi.org/10.1016/j.jik.2023.100332
- Maamari, B. E., & Majdalani, J. F. (2017). Emotional intelligence, leadership style and organizational climate. International Journal of Organizational Analysis, 25(2), 327–345. https://doi.org/10. 1108/IJOA-04-2016-1010
- Machado, M., Sousa, M., Rocha, V., & Isidro, A. (2018). Innovation in judicial services: a study of innovation models in labor courts. Innovation and Management Review, 15(2), 155–173. https: //doi.org/10.1108/INMR-04-2018-010
- Mau, T. A. (2019). Enhancing leadership capacity in the public sector: branding as an employer of choice. International Journal of Public Leadership, 15(3), 155–169. https://doi.org/10.1108/IJPL-05-2019-0019
- McNulty, T., & Ferlie, E. (2004). Process transformation: Limitations to radical organizational change within public service organizations. Organization Studies, 25(8), 1389–1412. https://doi.org/ 10.1177/0170840604046349
- Milan Shrestha, M. S. (2020). Transformational Leadership and its Dimensions: Contributions in Organizational Change among Schools. BSSS Journal of Management. https://doi.org/10.51767/ jm1107
- Mohd Som, R., Omar, Z., Ismail, I. A., & Alias, S. N. (2020). Understanding leadership roles and competencies for public-private partnership. Journal of Asia Business Studies, 14(4), 541–560. https://doi.org/10.1108/JABS-01-2019-0027
- Molloy, C., Bankins, S., Kriz, A., & Barnes, L. (2024). Innovating for the greater good: Examining innovation champions and what motivates them. Australian Journal of Public Administration, 83(1), 24–49. https://doi.org/10.1111/1467-8500.12577
- Nsisong Louis Eyo-Udo. (2024). Digital transformation as a catalyst for business model innovation: A critical review of impact and implementation strategies. Open Access Research Journal of Engineering and Technology, 6(2), 001–022. https://doi.org/10.53022/oarjet.2024.6.2.0085
- Ojiako, U., AlRaeesi, E. J. H., Chipulu, M., Marshall, A., & Bashir, H. (2024). Innovation readiness in public sector service delivery: an exploration. Production Planning and Control, 35(5), 437–460. https://doi.org/10.1080/09537287.2022.2089266
- Osborne, S. P., & Brown, L. (2011). Innovation, public policy and public services delivery in the UK. The word that would be king? Public Administration, 89(4), 1335–1350. https://doi.org/10. 1111/j.1467-9299.2011.01932.x
- Paré, G., Trudel, M. C., Jaana, M., & Kitsiou, S. (2015). Synthesizing information systems knowledge: A typology of literature reviews. Information and Management, 52(2), 183–199. https://doi. org/10.1016/j.im.2014.08.008
- Pham, T. P., Van Nguyen, T., Van Nguyen, P., & Ahmed, Z. U. (2024). The pathways to innovative work behavior and job performance: Exploring the role of public service motivation, transformational

leadership, and person-organization fit in Vietnam's public sector. Journal of Open Innovation: Technology, Market, and Complexity, 10(3), 100315. https://doi.org/10.1016/j.joitmc.2024. 100315

- Qiu, H., & Chreim, S. (2022). A tension lens for understanding public innovation diffusion processes. Public Management Review, 24(12), 1873–1893. https://doi.org/10.1080/14719037.2021. 1942532
- Richards, G. S., & Duxbury, L. (2015). Work-Group Knowledge Acquisition in Knowledge Intensive Public-Sector Organizations: An Exploratory Study. Journal of Public Administration Research and Theory, 25(4), 1247–1277. https://doi.org/10.1093/jopart/muu034
- Rishipal. (2019). Employee loyalty and counter-productive work behaviour among employees in the Indian hospitality sector. Worldwide Hospitality and Tourism Themes, 11(4), 438–448. https://doi. org/10.1108/WHATT-04-2019-0020
- Rosa, E. F., Najberg, E., & Sousa, M. d. M. (2020). Does PSM matter among innovative government managers? Revista de Gestao, 27(3), 263–279. https://doi.org/10.1108/REGE-05-2019-0059
- Saharudin, S., Ekawarna, E., Sulistiyo, U., Meditamar, M. O., & Kristiyono, S. (2024). Internal communication as a mediator in the relationship between transformational leadership and academic staff's readiness for change in higher education. JPPI (Jurnal Penelitian Pendidikan Indonesia), 10(4), 71–82.
- Samar Reyaz. (2024). The Influence of Leadership Styles on Employee Motivation and Job Satisfaction. International Research Journal on Advanced Engineering and Management (IRJAEM), 2(03), 339–344. https://doi.org/10.47392/irjaem.2024.0049
- Sangiorgi, D. (2015). Designing for public sector innovation in the UK: Design strategies for paradigm shifts (M. Deborah Cox, D. Lawrence Green, & D. Krzysztof Borodako, Eds.). Foresight, 17(4), 332–348. https://doi.org/10.1108/FS-08-2013-0041
- Scott, S. G., & Bruce, R. A. (1994). Determinants of Innovative Behavior: A Path Model of Individual Innovation in the Workplace. Academy of Management Journal, 37(3), 580–607. https://doi. org/10.5465/256701
- Shanker, R., Bhanugopan, R., van der Heijden, B. I., & Farrell, M. (2017). Organizational climate for innovation and organizational performance: The mediating effect of innovative work behavior. Journal of Vocational Behavior, 100, 67–77. https://doi.org/10.1016/j.jvb.2017.02.004
- Sliwka, A., Klopsch, B., Beigel, J., & Tung, L. (2024). Transformational leadership for deeper learning: shaping innovative school practices for enhanced learning. Journal of Educational Administration, 62(1), 103–121. https://doi.org/10.1108/JEA-03-2023-0049
- Snyder, H. (2019). Literature review as a research methodology: An overview and guidelines. Journal of Business Research, 104, 333–339. https://doi.org/10.1016/j.jbusres.2019.07.039
- Sönmez, B., & Yıldırım, A. (2019). The mediating role of autonomy in the effect of pro-innovation climate and supervisor supportiveness on innovative behavior of nurses. European Journal of Innovation Management, 22(1), 41–58. https://doi.org/10.1108/EJIM-05-2018-0088
- Sumadi, M. A., Sial, M. S., Gandolfi, F., & Comite, U. (2024). Impact of Big 5 Personality Intelligence on Transformational Leadership Process and Managerial Performance: A Case of the Middle East Gulf Region. Brazilian Business Review, 21(2), 1–21. https://doi.org/10.15728/bbr.2022.1349.en
- Vigoda-Gadot, E., Shoham, A., Schwabsky, N., & Ruvio, A. (2005). Public sector innovation for the managerial and the post-managerial era: Promises and realities in a globalizing public administration. International Public Management Journal, 8(1), 57–81.
- Von Treuer, K., & McMurray, A. J. (2012). The role of organisational climate factors in facilitating workplace innovation. International Journal of Entrepreneurship and Innovation Management, 15(4), 292–309. https://doi.org/10.1504/12.48078
- Walker, R. M., Berry, F. S., & Avellaneda, C. N. (2015). Limits on innovativeness in local government: Examining capacity, complexity, and dynamism in organizational task environments. Public Administration, 93(3), 663–683. https://doi.org/10.1111/padm.12159

- Wang, Z., Meng, L., & Cai, S. (2019). Servant leadership and innovative behavior: a moderated mediation. Journal of Managerial Psychology, 34(8), 505–518. https://doi.org/10.1108/JMP-11-2018-0499
- Yeo, C., & Saboori-Deilami, V. (2017). Strategic challenges of outsourcing innovation in global market. Asia Pacific Journal of Innovation and Entrepreneurship, 11(1), 5–16. https://doi.org/10.1108/ apjie-04-2017-017
- Zuraik, A., & Kelly, L. (2019). The role of CEO transformational leadership and innovation climate in exploration and exploitation. European Journal of Innovation Management, 22(1), 84–104. https://doi.org/10.1108/EJIM-10-2017-0142