



Driving team knowledge collaboration: The role of visionary leadership on team innovation



 Wahyu Abdillah Utomo^{1*}

 Heru Kurnianto Tjahjono²

 Ika Nurul Qamari³

^{1,2,3}Department of Doctoral Management, Universitas Muhammadiyah Yogyakarta, Special Region of Yogyakarta, Indonesia.

¹Email: wahyu.abdillah.psc21@mail.umy.ac.id

²Email: herukurnianto@umy.ac.id

³Email: ika_nr@umy.ac.id



(+ Corresponding author)

ABSTRACT

Article History

Received: 19 November 2024

Revised: 14 March 2025

Accepted: 27 March 2025

Published: 11 April 2025

Keywords

Employee
Knowledge collaboration
Organization
Team innovation
Visionary leadership.

JEL Classification:

O00; O15; O31.

Innovation is key to maintaining organizational competitiveness in today's globalized world. Leadership plays a crucial role in the success of innovation, with visionary leadership being particularly significant. Understanding how visionary leadership enhances team innovation through knowledge collaboration is essential. Team innovation occurs when members collaborate to generate new ideas and solutions, while knowledge collaboration involves sharing information, experiences, and expertise to achieve common goals. This collaboration is vital for innovation, as diverse knowledge can lead to more creative and effective solutions. This study employs an explanatory approach to analyze the relationship between these variables. A purposive sampling method was used to select 280 respondents, all of whom were innovation staff at nine palm oil mill companies, with a minimum of one year of employment. Hypothesis testing was conducted using Structural Equation Modeling (SEM) with Amos, allowing for a complex analysis of the relationships involved. The findings reveal that increasing visionary leadership positively impacts team knowledge collaboration and subsequently enhances team innovation. These insights underscore the importance of visionary leadership in fostering an environment that promotes collaboration and innovation, offering practical implications for organizations looking to improve team performance and drive successful innovation initiatives.

Contribution/ Originality: This study examines the concept of Team Knowledge Collaboration as a mediator between Visionary Leadership and Team Innovation, which still needs to be studied, especially in the palm oil industry. Most previous studies have focused on the high-tech sector, while the palm oil industry has unique challenges and characteristics that require further study, especially in Rokan Hulu.

1. INTRODUCTION

The modern era and globalization in the business field lead many companies to continuously improve their operations and win the competition. Anderson, Potočník, and Zhou (2014) assert that innovation plays a crucial role in a company's success. Innovation helps companies become more flexible in conducting their business operations and creates new opportunities for achieving business goals and ensuring sustainability. Innovation enables the company to be flexible in its business practices and opens new chances for achieving its business goals and sustainability (Farida & Setiawan, 2022).

The business sector itself keeps driving for future innovations; it will lead the company to adapt to changes in the market and conditions, improving their capacities and capabilities, expanding new market opportunities, and also

increasing the image of the brand and company (Anderson et al., 2014; Datta, Roy, & Kutzewski, 2021; Farida & Setiawan, 2022; Hughes, Lee, Tian, Newman, & Legood, 2018).

The role of innovation from employees and management is essential for the success of the company, contributing to impressive company performance and a satisfying company reputation. Improvement in company performance can be observed through the management's ability to create and implement various new strategies and creative ideas to produce innovations (Hughes et al., 2018). Therefore, innovation that takes place and occurs in a company is very dependent on management, especially the company's leadership and its leadership style.

Leadership is one of the factors in increasing employee innovation and creativity because leaders have the potential to create a good working atmosphere and allocate resources (Anderson et al., 2014; Jantz, 2017; Jensen, Andersen, Bro, et al., 2019; Rosing, Frese, & Bausch, 2011). Leadership is one of the factors in increasing employee innovation and creativity because leaders have the potential to create a good working atmosphere and allocate resources (Thahira, Tjahjono, & Susanto, 2020). On the other hand, the transformational leadership style also aims to inspire and motivate each employee to go beyond personal interests and commit to the company's common goals (Heru Kurnianto Tjahjono, Prasetyo, & Palupi, 2018). Transformational leaders provide direction, instill a long-term vision, and boost employee morale so that employees feel valued and motivated to contribute more to the company (Mikhriani, Qodri, & Prajogo, 2021). One leadership style that greatly encourages innovation in a company is visionary leadership. Visionary leadership is a multifaceted approach that involves inspiring and motivating followers through a clear and compelling vision. It is particularly effective in uncertain environments and can significantly enhance followers' engagement, creativity, and quality of work. However, it also poses challenges, such as the risk of leader burnout and the need to balance control with empowerment. Understanding these dynamics can help organizations leverage visionary leadership to achieve their strategic goals (Knippenberg & Stam, 2014). According to Obiwuru, Okwu, Akpa, and Nwankwere (2011), visionary leadership does not only depend on transactional rewards or transformational inspiration but also on the ability to anticipate the future and prepare the organization to face future challenges.

Visionary leaders ensure a balance between exploring new ideas and exploiting existing results so that innovation can occur with focus and have a real and significant impact on the company (Garrelfs, Kroh, Schultz, & Buengeler, 2022). Visionary leaders drive innovation by creating a strong vision and motivating teams, as well as directing the organization to become more adaptive and proactive in dealing with change, reducing resistance, and introducing more flexible systems (Kadir, Adebayo, & Olumide, 2020).

Innovation in a company usually occurs when employees feel appreciated when they submit ideas, which makes them continue to move to share more of their ideas (Grass, Backmann, & Hoegl, 2020). Visionary leadership can influence team innovation indirectly through team cohesion, which reflects team members' closeness and respect for one another (Imam & Zaheer, 2021). Leaders with visionary leadership can strengthen relationships between diverse team members and optimize the use of resources, thereby supporting the creation of new innovations (Eseryel, Crowston, & Heckman, 2021). Leaders with visionary leadership are able to increase innovation in teams by building strong cohesion. They not only inspire team members to innovate but also create an environment that supports collaboration, risk-taking, and the development of new ideas (Bernards, 2023).

A visionary leader not only directs the team's vision and strategy but also creates an environment that encourages intensive knowledge collaboration (Richardson, 2017). Team knowledge collaboration refers to the process by which team members actively share, integrate, and apply knowledge to achieve common goals (Kao, 2019). This process involves combining multiple perspectives from individuals with different knowledge and expertise backgrounds (Hall, Vogel, & Crowston, 2019). Having effective knowledge collaboration is crucial because it allows team members to combine different perspectives and expertise, which can ultimately result in creative and innovative solutions (Ronald & Marc, 2021).

However, there is still little research that discusses the interplay between visionary leadership, knowledge collaboration, and innovation. Research conducted by Van der Voet and Steijn (2021) showed that visionary leadership was positively related to increased team cohesion and team boundary management. Research conducted by Mascareño, Rietzschel, and Wisse (2020) showed that visionary leadership was positively related to team creativity and innovation, with creativity mediated by goal alignment but not team innovation. Another study conducted by Caridi-Zahavi, Carmeli, and Arazy (2016) shows an indirect influence between visionary innovation leadership and corporate innovation through connectivity. Moreover, most studies on visionary leadership and team innovation focus on sectors with high technology adoption, such as information technology and manufacturing, while research in the palm oil industry is still very limited. As the researchers found, the palm oil industry has unique challenges and characteristics that require more in-depth study on how visionary leadership can drive innovation, especially in Rokan Hulu. The concept of team knowledge collaboration, which involves cooperation and knowledge exchange among members, has the potential to be an important mediator in the relationship between visionary leadership and team innovation. However, the role of team knowledge collaboration in this context has not been widely explored, especially in the palm oil industry. Empirical studies investigating the role of team knowledge collaboration in the relationship between visionary leadership and team innovation in this sector are very rare. Therefore, there is an urgent need to conduct contextual empirical studies in palm oil companies to understand how team knowledge collaboration can be optimized to support innovation.

2. THEORITICAL FRAMEWORK AND LITERATURE REVIEW

2.1. Visionary Leadership and Team Innovation

Visionary leadership emphasizes the importance of having a clear, aspirational, and inspiring vision in guiding and inspiring others (Nanus, 1992). A visionary leader is able to formulate a compelling vision that guides and motivates team or organization members toward achieving common goals (Nanus, 1992). Visionary leaders not only inspire followers with a clear vision of the future but also demonstrate the ability to motivate and guide them toward achieving that vision (Knippenberg & Stam, 2014).

The research on visionary leadership is based on a model developed by Bass (1985), which focuses on the importance of leaders in developing and giving inspiration of vision for the company. This model is related to adaptation to innovation, change, emotional connection with the members, and environmental awareness, showing contemporary challenges as well as needs in the organizational context. Through in-depth empirical research, it is defined as a key factor in organizational success, with a strong relationship between visionary leadership and better performance. It also tends to develop a compelling vision and encourages the members to achieve the goals (Alobeidli, Ahmad, & Jabeen, 2024).

Research conducted by Van der Voet and Steijn (2021) explains that there is a relationship between visionary leadership and team innovation. Visionary leadership is essential in multidisciplinary teams to strengthen internal cohesion, which drives innovation. Visionary leadership can be claimed to enable leaders to build and deliver more innovation. Leaders will have the ability to motivate and inspire employees to create a clear vision and mission for the company and will build a good and positive work environment (Cinnioğlu, 2020; Jensen, Andersen, Bro, et al., 2019; Mascareño et al., 2020).

Research conducted by Mascareño et al. (2020) strengthens the idea that there are positive results related to the relationship between visionary leadership and team creativity and innovation through goal alignment. Based on theoretical studies and several previous studies, it can be concluded that visionary leaders have formulated a company vision that accommodates common goals and then fight for it through role models, inspiration, and motivation for employees to move compactly and simultaneously to achieve the vision, especially innovation in work methods and product results. Therefore, the researcher proposes the following hypothesis:

Hypothesis 1: There is an influence of visionary leadership on team innovation.

2.2. Visionary Leadership and Team Knowledge Collaboration

Visionary leadership is based on the transformational and charismatic leadership models (Knippenberg & Stam, 2014). Visionary leadership emphasizes the importance of having a clear, aspirational, and inspiring vision when guiding and inspiring others. A visionary leader will inspire, motivate, shape a vision and mission, and provide harmony for their organization (Cinnioğlu, 2020). A visionary leader fully realizes that achieving the noble and great vision of the company cannot be accomplished by themselves as a 'superman,' but can only be achieved through a 'super team,' namely a work team that moves in unison, works hand in hand, and is sincere in sharing knowledge, skills, and experience.

Groups or teams can collaborate. According to Wood and Gray (1991), the concept of collaboration is an interactive process involving various parties working together to achieve common goals that cannot be achieved individually. Collaboration involves more than just cooperation; it is a deep integration of different resources, skills, and knowledge to create more effective and innovative solutions. Each organization member collaborates on the knowledge they possess. According to Yi (2009), knowledge sharing is the transferring or dissemination of knowledge from one individual, group, or organization to another. Knowledge is essential for organizations to develop strategies that create a competitive advantage. Knowledge can be a strategic resource owned by a company because it can be its intellectual capital in developing its advantages over other companies (Rehman & Iqbal, 2020).

Visionary leadership plays an important role in encouraging team knowledge collaboration. By forming a shared vision, it creates a collaborative environment, encourages innovation, facilitates continuous learning, overcomes obstacles, increases commitment and motivation, and builds networks and relationships. Visionary leaders help teams share and manage their knowledge more effectively, ultimately improving the performance of the team and the organization as a whole (Torres, 2019). Based on the theory and support of previous research, and by the formulation of the problem, the researcher proposes the following hypothesis:

Hypothesis 2: There is an influence of visionary leadership on team knowledge collaboration.

2.3. Team Knowledge Collaboration and Team Innovation

Knowledge within the company can influence innovation. This is because innovation involves employees and their knowledge to produce a better idea for change for the company (Granstrand & Holgersson, 2020). According to Van der Voet and Steijn (2021), sharing and discussing ideas within a team increases creativity. Knowledge collaboration creates an environment where ideas can be explored, improved, and implemented, which is the basis of innovation. Knowledge collaboration is a key element in driving team innovation. By sharing and integrating knowledge, teams can increase creativity, solve problems more effectively, and generate innovative ideas that add value to the organization (Castaneda & Cuellar, 2020).

Nonaka and Takeuchi (1995) proposed knowledge sharing as an essential element in the framework of organizational knowledge creation, which this model relates to. In this theory, knowledge sharing is seen as a process in which tacit and explicit knowledge is exchanged between individuals in the organization, creating new knowledge and innovation. Research conducted by Van der Voet and Steijn (2021) explains that when team members with different backgrounds, expertise, and perspectives collaborate, they bring various ideas and potential solutions. This diversity enriches the idea base and allows the team to explore more innovative possibilities.

Research conducted by Sørensen and Torfing (2011) explains that collaboration creates a work environment supporting experimentation and learning. Collaborative teams tend to be more open to trying new approaches and learning from failure, which is essential to innovation. Another study that will strengthen this hypothesis relationship is research conducted by Zhang, Wang, and Xiao (2023), which explains that knowledge collaboration partially mediates the relationship between network size, network connection strength, network heterogeneity, and corporate innovation. The researcher proposes the following hypothesis based on the formulation of the problem and the underlying theory:

Hypothesis 3: There is Influence of Team Knowledge Collaboration on Team Innovation.

2.4. Visionary Leadership, Team Knowledge Collaboration, and Team Innovation

The companies need to have effective leadership. Effective leaders can inspire and motivate team members. Leaders can create a clear and compelling vision that motivates the team to work toward a common goal. By providing support and encouragement, leaders help team members feel valued and motivated to give their best (Ronald & Marc, 2021). Effective leaders have strong communication skills. Leaders should be clearly on purpose to convey vision, strategy, and goals to the team (Mascareño et al., 2020). Effective leadership can be known as a combination of inspiration, coping skills, motivation, strategy formulation skills, timely decision making, strong communication, team member empowerment, coaching, and conflict management (Aslam, 2020). Kearney, Shemla, van Knippenberg, and Scholz (2019) note that one leadership style that is considered to be able to deal with dynamic environmental changes is visionary leadership. Visionary leadership relies on a vision of the future to inspire and guide the company toward long-term goals. Visionary leaders are able to communicate a clear and compelling picture of the future, thus motivating team members to work together to achieve a shared vision (Knippenberg & Stam, 2014). Visionary leaders are able to communicate this vision in a way that motivates and directs the team towards achieving long-term goals that will enhance innovation (Xie et al., 2018). Visionary leadership becomes one of the leaders who is considered to bring strategic companies (Ateş, Tarakci, Porck, van Knippenberg, & Groenen, 2020). Visionary leadership reflects how corporate leaders emphasize human and social capital development as well as investment and development of the company's internal knowledge.

Team innovation is related to the capability to generate new ideas, develop new products or processes, and implement changes that can improve an organization's performance and competitiveness. Team innovation often requires creative thinking, collaboration, and risk-taking (Barnová et al., 2022). West and Anderson (1996) state that team innovation is more influenced by social and interpersonal processes within the team than by structural characteristics or available resources. The quality of innovation is more determined by the composition of the team, especially the proportion of innovative members, while the level of innovation is more dependent on group processes such as participation and task orientation. Creativity and innovation within the team also contribute to team member motivation and satisfaction. At the time, when the members feel that their ideas are appreciated and utilized, they have the will to continue developing (Grass et al., 2020). Creativity and innovation among team members are important elements that will help determine the continuity and success of a team (Oh & Choi, 2020).

There is a relationship between leadership development and the capacity to create and support innovative teams, according to research by Fachrunnisa, Adhiatma, and Tjahjono (2020), which demonstrates that when employees are cognitively engaged, the effectiveness of management and leadership practices in promoting innovation increases significantly.

West et al. (2003) state that the lesser and poorer aspects of teamwork may mediate the relationship between ambiguity or conflict about leadership and team innovation. Visionary leadership can enhance team innovation both directly and through increased knowledge collaboration. Visionary leaders create an environment where knowledge is shared openly and new ideas can flourish, which ultimately fosters team innovation.

This research is important for understanding the mechanisms underlying this relationship and provides practical insights for the company to enhance its innovative capacity through leadership and knowledge collaboration (Gardner, Karam, Alvesson, & Einola, 2021). For this reason, the final hypothesis that the researcher proposed is as follows:

Hypothesis 4: There is an influence of visionary leadership on team innovation, mediated by team knowledge collaboration as a mediating variable.

2.5. The Research Framework

The conceptual framework, shown in Figure 1, was developed according to the theoretical framework for research and evaluation.

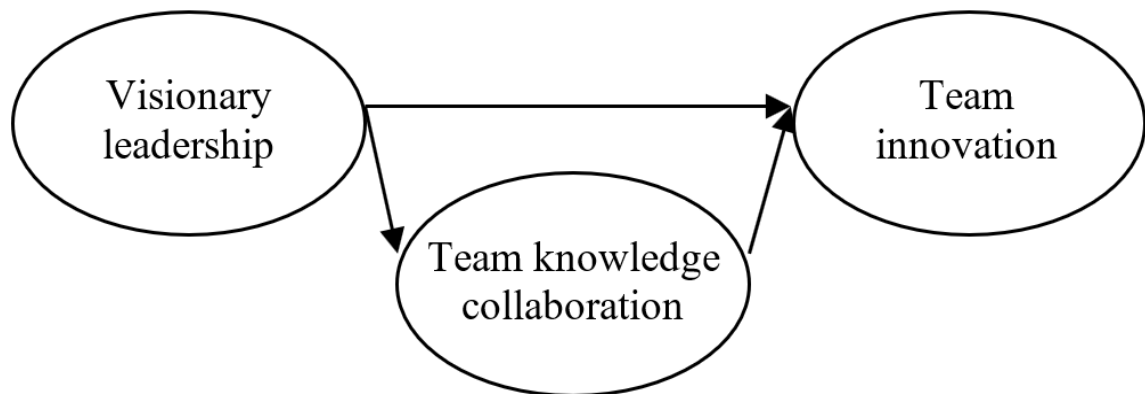


Figure 1. Conceptual framework.

Based on the image above, this study attempts to prove that visionary leadership encourages innovation, visionary leadership fosters the practice of sharing knowledge, and knowledge collaboration can catalyze the influence of visionary leadership on innovation.

3. RESEARCH METHOD

3.1. Data Analysis Method

Explanatory research, which clarifies the topic of research, includes this type of research based on its objectives (Neuman, 2014). Sekaran and Bougie (2017) classify this research as applied and basic, based on its benefits. This explanatory research will explain the relationship between variables theoretically and through field testing.

This research uses a quantitative approach, namely a research method that explains phenomena through objective and systematic measurements of parts of the phenomenon and relationships represented in numerical form. Quantitative research aims to explain phenomena to produce generalizations, namely truths in reality that can apply to specific populations (Cooper & Schindler, 2013). Surveys, which are quantitative procedures for describing the attitudes, behaviors, and characteristics of research samples, collect the data in this study. The type of survey used is a cross-sectional survey, where data collection is carried out at a particular time (Creswell & Creswell, 2018).

3.2. Participant

A population is a group of people, events, or other objects that can be studied and conclusions drawn (Creswell & Creswell, 2018). The population used in this study consisted of 725 employees from the innovation staff of nine palm oil mill companies in Rokan Hulu Regency. The sampling technique employed was non-probability sampling using the purposive sampling method. The purposive sampling method has characteristics that the researcher has determined according to the inclusion criteria (Creswell & Creswell, 2018). The sample criteria in this study were company employees who had worked for at least one year and were permanent employees. Based on the provisions, 280 respondents from all innovation staff at nine existing palm oil companies were selected to be used as respondents.

3.3. Techniques and Data Analysis

3.3.1. Descriptive Analysis

It provides information about variables without testing the hypothesis. This type of analysis is only applied deliberately to present and analyze data by performing calculations to clarify the characteristics of the data. It is also based on the subject as well as the variable used (Sekaran & Bougie, 2017).

3.3.2. Analysis of Structural Equation Modelling (SEM)

Hypothesis testing using analysis of Structural Equation Modeling (SEM) based on Tjahjono, Basuki, and Palupi (2021) indicates that this SEM method is known as a combination of two statistical methods: factorial analysis for testing the model and the regression concept through the structural model. SEM is a data analysis technique that describes and determines the influence of the variables used. SEM is capable of accommodating the simultaneous complexity of the models. These are simultaneous models created by one or more dependent variables explained by one or more independent variables.

4. THE MEASUREMENT OF VARIABLE

4.1. Visionary Leadership

Visionary leadership gives the leader to have the ability to inspire and motivate others with a clear and compelling vision for the company (Utomo, Udin, & Haryono, 2022). Visionary leaders are able to see opportunities and challenges that others may not see and have the ability to formulate innovative long-term strategies that focus on the end goal they want to achieve. Not only do they influence with ideas and plans, but they also influence with their infectious commitment and enthusiasm, motivating the entire team or organization to move together toward the vision (Mascareño et al., 2020). Visionary leadership also involves the ability to deal with change and lead by example, building a dynamic and vibrant work environment that supports continued growth and development (Bunnoiko & Atthirawong, 2017).

Visionary leadership involves two interrelated dimensions in creating and realizing a long-term vision for the organization: leader behavior to avoid deviation and leadership effects. Leader behavior to avoid deviation refers to the leader's efforts to ensure that subordinates continue to behave in accordance with the company's vision, while leadership effects include the impacts felt by employees as a result of the leadership style implemented by the leader (Da Fonseca, Chimenti, & Campos, 2023; Nordberg, Linddahl, & Klingberg, 2023). Visionary leadership has a significant influence on the innovation of a team through the roles of team cohesion, knowledge collaboration, and boundary management of the team. Visionary leaders are able to articulate an inspiring and motivating vision, thereby encouraging team members to work closely and effectively. Strong team cohesion allows members to feel connected and committed to a common goal, while team knowledge collaboration ensures that innovative ideas can be shared and developed effectively. Team boundary management plays a critical role in managing interactions with the external environment and in ensuring that the necessary resources and information are available to support the innovation process.

This operational definition presents the following indicators of visionary leadership.

The system provides metrics related to visionary leadership in developing a company's sustainability strategy. Among these indicators are:

Table 1 shows the indicators of visionary leadership.

Table 1. Indicators of visionary leadership.

Code	Indicator
VL1	Leaders create a clear vision for the company's sustainability.
VL2	Leaders strive to ensure that teams work towards the company's vision.
VL3	Leaders always describe the vision so that employees can contribute well.
VL4	Leaders always raise employees' enthusiasm in achieving the vision of the company.
VL5	Leaders are optimistic about the company's future conditions and prospects.

Source: Jensen, Andersen, and Jacobsen (2019) and Van der Voet and Steijn (2021) developed for this research.

4.2. Team Innovation

The conceptual definition of team innovation refers to a team's capability to create new concepts, ideas, and creative solutions and apply innovation in their work (Yeakey, 2000). It not only includes the aspect of creating new

ideas but also the process of transforming them into products, services, or processes that are valuable to the company (Yeakey, 2000). Team innovation involves working together among teams to solve problems, explore different approaches, and combine their knowledge and expertise to create and gain innovative results. It also takes courage to take risks, experiment, and learn from failures to continuously improve and develop better solutions (Mascareño et al., 2020).

The operational concept of team innovation includes two main indicators the implementation of team innovation and the opportunity to create team innovation. The implementation of team innovation is related to the ability to implement innovative ideas into real actions, which is able to provide added value to the company (Saif, Hussin, Husin, Alwadain, & Chakraborty, 2022). It also includes concrete steps such as implementing new solutions, defining new products for the market, or improving processes of work with new methods developed by the team (Saif et al., 2022). Meanwhile, team innovation opportunities highlight the team's ability to identify and explore new opportunities for innovation. This involves introducing and exploring new ideas, creatively solving problems, and researching markets and industry trends to find gaps or unmet needs (Yeboah, 2023). This operational definition emphasizes the team's concrete actions in implementing innovation and its ability to proactively seek out new opportunities that can lead to further innovation.

Based on this operational definition, here are several items used for team innovation.

The text lists the indicators that are related to innovation and teamwork to improve the quality of the company's products and services. The indicators in question are as follows:

Table 2 shows various indicators of a team's innovation.

Table 2. Items of team innovation.

Code	Indicator
TI1	Team members are able to implement new ideas that support improvements in the quality of the company's products and services.
TI2	The company supports teams that innovate.
TI3	Team members are able to create new services, methods, or procedures that reflect innovation.
TI4	The company gives consideration to methods and procedures for improving performance.

Source: De Dreu (2006) and Van der Voet and Steijn (2021) developed for this research.

4.3. Team Knowledge Collaboration

Team knowledge collaboration can be measured through two main indicators: internal team collaboration and external team collaboration. Internal team collaboration refers to the level of interaction and exchange of knowledge between team members within an organization or a particular work unit. This can be measured through the frequency and depth of collaboration between individuals, such as how often team members share information, experiences, or expertise with fellow team members, the extent to which discussions and joint learning occur between them, and how effective they are in solving problems together. On the other hand, external team collaboration indicates the level of team involvement and collaboration with external entities or parties outside the organization. This can include business partners, clients, or other parties outside the organization involved in a joint project or initiative. This indicator can be measured through the level of team participation in meetings or joint activities with external entities, the extent to which the team collaborates in solving problems or exploring opportunities with external parties, and how effective they are in building mutually beneficial working relationships. By measuring these two indicators, we can understand the extent to which team knowledge collaboration occurs both internally and externally to the organization, which in turn can provide insight into the ability of the team to leverage existing knowledge and resources to achieve common goals.

Based on this operational definition, here are several indicators used for team knowledge collaboration.

Indicators of team knowledge collaboration in accomplishing organizational objectives are shown in Table 3. Among these indicators are:

Table 3. Items of team knowledge collaboration.

Code	Indicator
TKC1	Team members are always ready to find and share new and useful information.
TKC2	The team ensures all tasks are completed on time based on the standards set by the company.
TKC3	The team effectively coordinates and communicates with others on purpose to maintain a positive working environment and also to achieve company goals.
TKC4	Team members often drop creative and innovative ideas during meetings for the company.
TKC5	Team members are able to evaluate ideas, plans, and strategies critically and objectively.
TKC6	Team members possess technical skills that can be utilized in solving problems.
TKC7	Team members actively motivate each other and also encourage staying focused on the goals.
TKC8	The team works efficiently in carrying out tasks based on their job desk.
TKC9	Team members work well together and support each other in doing jobs and achieving the goals.

Source: Yi (2009); Belbin (2015) and Nonaka and Takeuchi (1995) developed for this research.

5. RESULTS AND DISCUSSION

5.1. Structural Model Analysis

In this study, a hypothesis test was conducted to obtain a model structure for how team knowledge collaboration can mediate visionary leadership and team innovation. Innovation in a company usually occurs when employees feel appreciated when they submit ideas. Visionary leadership can influence team innovation indirectly through team cohesion, which reflects team members' closeness and respect for one another. Leaders with visionary leadership can strengthen relationships between diverse team members and optimize the use of resources. Leaders with visionary leadership are able to increase innovation in teams by building strong cohesion.

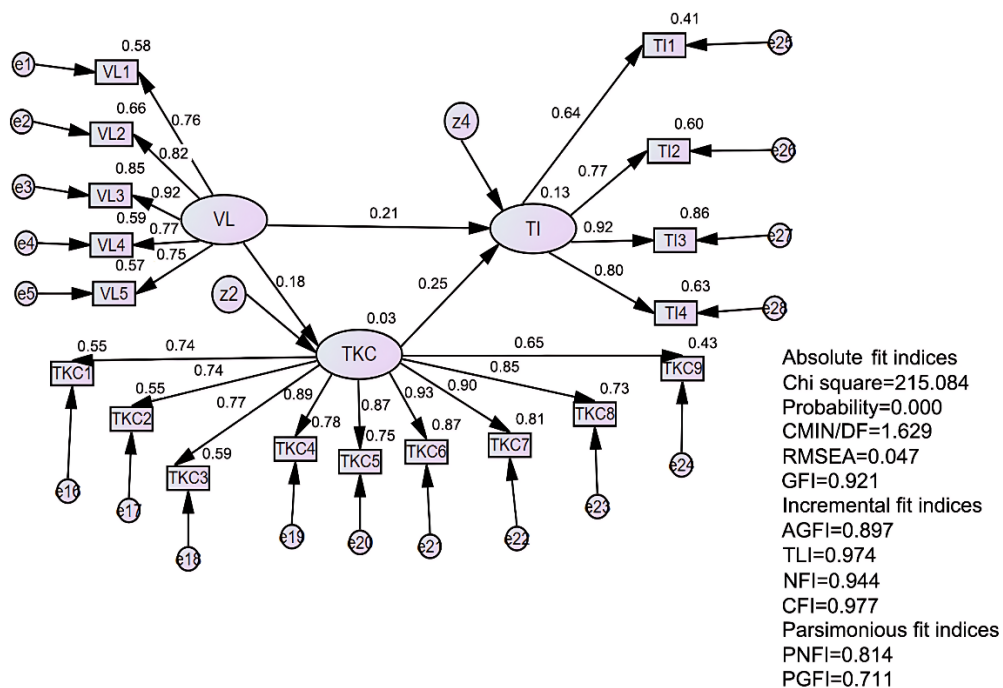
**Figure 2.** Full image of structural model.

Figure 2 full image of structural model of Team Knowledge Collaboration as a mediator between Visionary Leadership and Team Innovation

This figure illustrates how well the model fits the analyzed data using a variety of fit indices and provides a general overview of the structure of the relationships between the variables in the research model. This information is important for the validation and assessment of the model in research.

5.2. Standardized Regression Weights

Standardized regression weights are crucial in route analysis and structural models because they highlight the relative importance of each variable within the larger model.

Standardized Regression Table 4 regression analysis relies heavily on weights, particularly when path analysis or structural models are involved. Following data standardization, the contribution of each independent variable to the dependent variable is displayed in this table.

Table 4. Standardized regression weights.

Variable	Influence	Variable	Estimate
TKC	<---	VL	0.182
TI	<---	VL	0.212
TI	<---	TKC	0.250
VL5	<---	VL	0.754
VL4	<---	VL	0.766
VL3	<---	VL	0.924
VL2	<---	VL	0.815
VL1	<---	VL	0.760
TI1	<---	TI	0.643
TI2	<---	TI	0.774
TI3	<---	TI	0.925
TI4	<---	TI	0.797
TKC9	<---	TKC	0.652
TKC8	<---	TKC	0.852
TKC7	<---	TKC	0.902
TKC6	<---	TKC	0.933
TKC5	<---	TKC	0.866
TKC4	<---	TKC	0.885
TKC3	<---	TKC	0.771
TKC2	<---	TKC	0.744
TKC1	<---	TKC	0.739

Table 5 shows regression weights.

Table 5. Regression weights.

Variable	Influence	Variable	Estimate	S.E.	C.R.	P	Annotation
TI	<---	VL	0.164	0.051	3.228	0,001	Significant
TKC	<---	VL	0.170	0.060	2.819	0,005	Significant
TI	<---	TKC	0.208	0.055	3.756	0,000	Significant

Note: Description:
VL: Visionary leadership
TKC: Team knowledge collaboration
TI: Team innovation.

5.3. Discussion

5.3.1. The Influence of Visionary Leadership on Team Innovation

The first hypothesis proposed is that there is an influence of visionary leadership on team innovation. Based on the results of the regression weights shown in Table 5, the value of C.R. was found to be 3.228, and the value of p was 0.001. The value of C.R. was positive, and the value of $p < 0.05$. This means that this first hypothesis is accepted, indicating that there is a positive influence of visionary leadership on team innovation.

Innovation plays an important role in the competitiveness and volatility of the business sector, which is shaped by continuous change and the development of knowledge and technology. The ability of employees to generate and

implement new ideas greatly influences their business innovation. Leadership is widely considered an influential factor that tends to give appropriate resources, support, and a good environment to create and implement new ideas and develop the employees' motivation and ability to deal with challenges (Bagheri, Akbari, & Artang, 2022).

One of the leadership styles that influences employee innovation is visionary leadership. It is an important move to drive company success; it is also essential for creating and implementing a new vision. Visionary leadership is future-oriented, daring to take risks and being proactive, and it tends to invest in fostering more innovation. Visionary leadership cares about changing the way people view things that are needed as urgent and important and seeks shared norms, values, and beliefs (Farhan, 2024).

As previously mentioned, visionary leadership aims to convey a clear and inspiring vision to the team. The inspiring vision will help the team understand their long-term goals. A strong understanding of what is to be achieved makes team members more likely to create creative and innovative solutions that align with the vision.

A strong and clear vision can also be a wonderful source of motivation for team members. Understanding that what is being done has a larger purpose keeps the team motivated to give their best to the company. Visionary leaders often serve as inspiring examples for their teams, encouraging them to strive for excellence and do better. It also encourages the team to do the same things that the leader asks them to do and to provide more innovative ideas, thereby increasing team innovation.

Visionary leadership, which is implemented by the leaders in the company, is proven to increase employee creativity (Ye et al., 2024). They can stimulate employee creativity by helping employees to understand the vision and by encouraging them to share the same vision, building a positive climate for creativity (Zhou, Zhao, Tian, Zhang, & Chen, 2018). Visionary leaders often foster creativity and innovative thinking by providing their teams with the freedom to experiment, try new ideas, and think creatively. They create a welcoming and valued environment that inspires team members to explore new and innovative ideas. Such an atmosphere will have an impact on enhancing team innovation.

Based on the indicators used in visionary leadership and team innovation, the descriptive analysis shows that visionary leadership is included in the positive category, as is team cohesion. In visionary leadership, the leader has been excellent at encouraging the team to work based on the vision, explaining the contributions that employees can make, raising their enthusiasm, and instilling optimism about the future. The leader is also in the fairly excellent category for having a clear vision. A good condition of visionary leadership will help increase team innovation. This phenomenon is also shown by the results of the descriptive analysis of team innovation, where team members excelled at implementing new ideas and supporting improvements in their work, generating new services, methods, or procedures, and providing suitable methods and procedures to help improve performance.

Company leaders who have a clear vision for the sustainability of the company and strive to ensure that the team works according to the company's vision make them understand things to do deliberately to help reach the vision. Understanding the vision and adding an explanation of the contributions and causes will make them feel encouraged to share more innovations. This then causes team members to be able to create new services, methods, or procedures to improve their performance at work. This research is linear, with Van der Voet and Steijn (2021) stating that visionary leadership is positively connected to improved team innovation. The influence of visionary leadership and team innovation can be seen through teamwork. The vision will unite the members by generating a shared understanding and help drive them to achieve the success of the company. Research conducted by West et al. (2003) explains that there is a relationship between leadership type and team innovation. Furthermore, leadership ambiguity and conflict regarding team leadership are also negatively related to team processes regarding clarity of goals, level of participation, commitment to quality, and support for innovation.

5.3.2. The Influence of Visionary Leadership on Team Knowledge Collaboration

The second hypothesis used is that visionary leadership influences team knowledge collaboration. According to the result of regression weights shown in Table 5, the C.R. was 2,819, and then the value of p was 0.005. If the value of C.R. is positive, then $p < 0.05$ means that the second hypothesis is accepted and that there is a positive influence of visionary leadership on team knowledge collaboration.

Visionary leadership takes a significant role in driving team knowledge collaboration. By creating a shared vision, creating a collaborative environment, encouraging innovation, facilitating continuous learning, overcoming obstacles, increasing commitment and motivation, and building networks and relationships, visionary leaders help teams share and manage their knowledge more effectively. It tends to contribute deliberately to help improve the performance of the employees and the company (Torres, 2019).

Based on what is described above, a visionary leader can articulate a clear and inspiring vision for the team. This vision provides a strong framework for all team members, helping them understand the common goal and why knowledge collaboration is needed to achieve that vision. When the team's goals and vision are well understood, they are more open to sharing knowledge, ideas, and resources. Visionary leadership will motivate team members to think more critically and explore new ideas. Collaboration can be done in a group or team scope. According to Wood and Gray (1991), collaboration is an interactive process involving various parties working together to achieve common goals that cannot be achieved individually.

Collaboration involves more than just cooperation; it integrates different resources, skills, and knowledge to create more effective and innovative solutions. According to Yi (2009), knowledge sharing is the transfer or dissemination of knowledge from one individual, group, or organization to another.

Visionary leadership will drive open communication and support effective information flow among the members (Utomo, Tjahjono, & Qamari, 2024). Such behavior builds an environment where team members feel comfortable sharing their ideas, experiences, and knowledge without fear of criticism or negative judgment. Transparent communication, supported by mutual trust, will foster more effective team knowledge collaboration. Rehman and Iqbal (2020) state that knowledge has become an important part of an organization's strategy to create a competitive advantage. Knowledge is a strategic resource and refers to the company's intellectual capital in developing its advantages over other companies. A visionary leader will inspire the team to work together more effectively to achieve common goals and also set high standards for the quality of work and team performance. This condition encourages team members to achieve their best and promotes knowledge collaboration that leads to innovative and high-impact solutions. Ultimately, this will have an impact on improving team knowledge and collaboration.

Looking at the indicators of visionary leadership and team knowledge collaboration, a leader with a clear vision provides consistent direction to team members to figure out and share new, useful information, ensure tasks are completed on time and to high-quality standards, and coordinate well with other teams. High morale strengthens the willingness to share knowledge with others outside the team. In addition, the leader's optimism about the company's future position influences the team members' enthusiasm to seek and share new information, complete tasks to high-quality standards, and coordinate well with other teams. This optimism generates an environment that makes teams feel confident and excited to contribute to their full potential.

5.3.3. The Influence of Team Knowledge Collaboration on Team Innovation

The third hypothesis used is that team knowledge collaboration affects team innovation. Based on the results of the regression analysis shown in Table 5, namely CR of 3,756, a p -value of 0.000 is obtained. The CR value is positive, so $p < 0.05$; it can be interpreted that the second hypothesis is accepted, and there is a positive influence of visionary leadership on team knowledge collaboration.

Knowledge collaboration can effectively integrate, complement, and share knowledge from different subjects and time spans, thereby achieving practical knowledge innovation and application (Utomo et al., 2024). Experts generally

believe that knowledge collaboration is a process of knowledge activity in which multiple actors with knowledge resources collaborate to achieve knowledge innovation. Knowledge collaboration is also considered a management model and strategic tool for organizations. Through team knowledge collaboration, team members will inspire and stimulate each other to generate new ideas. Furthermore, open discussions and interactions allow ideas emerging from one individual to be further developed or combined with ideas from different individuals, resulting in better innovative solutions.

Team knowledge collaboration enables more effective dissemination and knowledge exchange across organizations or teams. Rahmi and Indarti (2019) stated that knowledge sharing is a valuable input for innovation because it has complex and interdependent social characteristics. Sharing knowledge between team members will stimulate mutual learning and encourage team innovation. Continuous knowledge sharing will contribute to team, unit, and organization innovation. Therefore, teams that prioritize sharing knowledge among team members or between teams generate new ideas and facilitate team innovation activities.

Another study that will strengthen this hypothesis relationship is a study conducted by Zhang et al. (2023), which explains that knowledge collaboration partially mediates the relationship between network size, network connection strength, network heterogeneity, and corporate innovation. The concept of "collaboration," according to Wood and Gray (1991), is explained as an interactive process involving various parties working together to achieve common goals that cannot be achieved individually. Strong collaboration requires open and effective communication. Good communication helps ensure that innovative ideas can be identified, developed, and implemented successfully.

5.3.4. The Influence of Visionary Leadership on Team Innovation with Team Knowledge Collaboration as a Mediating Variable

This test is used to determine the effect of visionary leadership on team innovation with team knowledge collaboration as a mediating variable; testing is done through the Sobel test and assisted by Winnifred's Mediation Program (WIMP). It can be seen that the $p\text{-value} \leq 0.05$, then it can be interpreted that H_0 is rejected, and the $p\text{-value} > 0.05$ means that H_0 is accepted.

The outcomes of Sobel test can be seen in the Table 6:

Table 6. The results of the Sobel test.

Information input	Input statistical	<i>P-value</i>
Unstandardized coefficient of IV -> Mediator (a):	0.170	-
Standard error of IV -> Mediator (se a):	0.060	-
Unstandardized coefficient of M->DV with IV in eqn (b):	0.208	-
Standard error of M->DV with IV in eqn (se b):	0.055	-
Two-tailed p-value		
Sobel's z	2.267	0.0155
Aroian's z	2.218	0.0159
Goodman's z	2.320	0.0152

There is a role for team knowledge collaboration to mediate the influence of positive visionary leadership on team innovation. From the results of the Sobel test shown in Table 6, it can be seen that the value of Sobel's z was 2.267, and the value of p was 0.0155. The value of $p < 0.05$ indicates that hypothesis 4 (H_4) is accepted, meaning that team knowledge collaboration can mediate the positive influence of visionary leadership on team innovation.

Visionary leaders will help to share more knowledge and experiences; this encourages creativity by improving communication and engagement among employees. Such collaboration will increase the knowledge capacity of employees by enhancing their motivation to acquire new skills and information. Therefore, visionary leaders need to foster knowledge sharing to help improve creativity by encouraging participation in open discussions and enabling employees to create and share more innovative ideas and plans (Alobeidli et al., 2024).

According to what is explained above, it is said that visionary leadership often articulates a clear vision of the future direction and goals to be achieved by the team through an effective communication process. With a clear vision and goals established, knowledge is needed to find effective ways to achieve these goals. In this condition, team members will try to share and integrate various perspectives and knowledge from various team members so that it will improve team knowledge and collaboration.

Through good team knowledge collaboration, it will open up space for open dialogue and discussion between team members, allowing for new and different ideas to emerge (Utomo et al., 2024). By sharing experiences and knowledge, team members can stimulate each other's creativity and develop ideas that may lead to innovations. In addition, effective team knowledge collaboration allows for better and more mature solutions to innovative challenges. Joint evaluations and in-depth discussions facilitate the critical testing of ideas and the identification of previously unexplored weaknesses or potentials. This allows the team to improve team innovation with the team's ability to implement new ideas that support improvements in the quality of the company's products and services, as well as new procedures that reflect creativity.

6. CONCLUSION

The result is that the better the visionary leadership, the better the team innovation. If the leader has good visionary leadership, it will impact the employees' team innovation, which is improving; the better the visionary leadership, the better it will be for team knowledge collaboration. If the leader has excellent visionary leadership, it will help increase team knowledge collaboration. The positive influence of visionary leadership on team innovation is mediated by team knowledge collaboration. The more good visionary leadership there is, the more team knowledge collaboration there is, and it leads to improved team innovation.

This study also has several limitations; among others, the limitations found in previous research serve as empirical evidence related to the model used. It presents more limitations between variables based on previous research; the sample is restricted to certain employees of the company, so the results cannot be generalized to other sectors of business. Additionally, the model tested was only one type of visionary leadership, which raises the question of which type of leadership can be deliberately implemented to improve team innovation.

Further research that can be conducted includes more investigation into the factors that can impact team innovation and the use of relevant and robust theories to strengthen the research model. It should involve a larger number of samples from various industries or sectors of business, the size of the company, and other variables, which will improve the generalization of the results obtained. Comparisons to other leadership styles can help determine which style is best for fostering team innovation.

7. POLICY IMPLICATIONS

Organizations need to implement training programs that focus on developing visionary leadership styles. Workshops, seminars, or mentoring programs that emphasize communication skills, motivation, and the ability to build a long-term vision can accomplish this. Organizations must create an environment that supports innovation. This can include providing adequate resources, implementing flexible policies, and rewarding teams that successfully create innovations. Performance evaluation systems should be adapted to include indicators of innovation and collaboration. These features will encourage team members to focus not only on short-term results but also on the ongoing innovation process.

Funding: This study received no specific financial support.

Institutional Review Board Statement: The Ethical Committee of the Universitas Muhammadiyah Yogyakarta, Indonesia, has granted approval for this study on 28 October 2023 (Ref. No. 108/D.2-III/X/2023).

Transparency: The authors state that the manuscript is honest, truthful, and transparent, that no key aspects of the investigation have been omitted, and that any differences from the study as planned have been clarified. This study followed all writing ethics.

Data Availability Statement: Upon a reasonable request, the supporting data of this study can be provided by the corresponding author.

Competing Interests: The authors declare that they have no competing interests.

Authors' Contributions: All authors contributed equally to the conception and design of the study. All authors have read and agreed to the published version of the manuscript.

REFERENCES

- Alobeidli, S. Y., Ahmad, S. Z., & Jabeen, F. (2024). Mediating effects of knowledge sharing and employee creativity on the relationship between visionary leadership and innovative work behavior. *Management Research Review*, 47(6), 883–903. <https://doi.org/10.1108/MRR-02-2023-0144>
- Anderson, N., Potočník, K., & Zhou, J. (2014). Innovation and creativity in organizations: A state-of-the-science review, prospective commentary, and guiding framework. *Journal of Management*, 40(5), 1297–1333. <https://doi.org/10.1177/0149206314527128>
- Aslam, M. (2020). Leadership in challenging times of academic libraries. *Global Knowledge, Memory and Communication*, 69(3), 135–149. <https://doi.org/10.1108/GKMC-03-2019-0038>
- Ateş, N. Y., Tarakci, M., Porck, J. P., van Knippenberg, D., & Groenen, P. J. (2020). The dark side of visionary leadership in strategy implementation: Strategic alignment, strategic consensus, and commitment. *Journal of Management*, 46(5), 637–665. <https://doi.org/10.1177/0149206318811567>
- Bagheri, A., Akbari, M., & Artang, A. (2022). How does entrepreneurial leadership affect innovation work behavior? The mediating role of individual and team creativity self-efficacy. *European Journal of Innovation Management*, 25(1), 1–18. <https://doi.org/10.1108/EJIM-07-2020-0281>
- Barnová, S., Treľová, S., Krásna, S., Beňová, E., Hasajová, L., & Gabrhelová, G. (2022). Leadership styles, organizational climate, and school climate openness from the perspective of Slovak vocational school teachers. *Societies*, 12(6), 192. <https://doi.org/10.3390/soc12060192>
- Bass, B. (1985). Leadership and performance beyond expectations. *The New England Quarterly*, 67(4), 650. <https://doi.org/10.2307/366438>
- Belbin, M. (2015). Team roles in a nutshell. *Belbin*, 1(1), 1–16.
- Bernards, B. (2023). Do visionary and servant leaders reduce cognitive uncertainty of professionals? A study of team-based settings in public organizations. *Public Management Review*, 25(6), 1059–1081. <https://doi.org/10.1080/14719037.2021.2005326>
- Bunnoiko, K., & Atthirawong, W. (2017). Confirmatory factor analysis towards visionary leadership of supply chain managers in the manufacturing industry of Thailand. *Journal for Global Business Advancement*, 10(4), 395–414. <https://doi.org/10.1504/JGBA.2017.086518>
- Caridi-Zahavi, O., Carmeli, A., & Arazy, O. (2016). The influence of CEOs' visionary innovation leadership on the performance of high-technology ventures: The mediating roles of connectivity and knowledge integration. *Journal of Product Innovation Management*, 33(3), 356–376. <https://doi.org/10.1111/jpim.12275>
- Castaneda, D. I., & Cuellar, S. (2020). Knowledge sharing and innovation: A systematic review. *Knowledge and Process Management*, 27(3), 159–173. <https://doi.org/10.1002/kpm.1637>
- Cinnioğlu, H. (2020). A review of modern leadership styles in perspective of industry 4.0. *Agile Business Leadership Methods for Industry 4.0*, 1–23. <https://doi.org/10.1108/978-1-80043-380-920201002>
- Cooper, D. R., & Schindler, P. S. (2013). *Business research methods* (12th ed.). New York: McGraw-Hill/Irwin.
- Creswell, W. J., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). Los Angeles: SAGE Publications.

- Da Fonseca, A. L. A., Chimenti, P., & Campos, R. D. (2023). 'Take my advice': Entrepreneurial consumers and the ecosystemic logics of digital platforms. *Technological Forecasting and Social Change*, 193, 122601. <https://doi.org/10.1016/j.techfore.2023.122601>
- Datta, S., Roy, S., & Kutzewski, T. (2021). *Unlocking strategic innovation*. London: Routledge.
- De Dreu, C. K. (2006). When too little or too much hurts: Evidence for a curvilinear relationship between task conflict and innovation in teams. *Journal of Management*, 32(1), 83-107. <https://doi.org/10.1177/0149206305277795>
- Eseryel, U. Y., Crowston, K., & Heckman, R. (2021). Functional and visionary leadership in self-managing virtual teams. *Group & Organization Management*, 46(2), 424-460. <https://doi.org/10.1177/1059601120955034>
- Fachrunnisa, O., Adhiatma, A., & Tjahjono, H. K. (2020). Exploring the role of knowledge sharing on employee creativity and innovation performance: The mediating role of digital literacy. *Journal of the Knowledge Economy*, 11(2), 743-765.
- Farhan, B. Y. (2024). Visionary leadership and innovative mindset for sustainable business development: Case studies and practical applications. *Research in Globalization*, 8, 100219. <https://doi.org/10.1016/j.resglo.2024.100219>
- Farida, I., & Setiawan, D. (2022). Business strategies and competitive advantage: The role of performance and innovation. *Journal of Open Innovation: Technology, Market, and Complexity*, 8(3), 163. <https://doi.org/10.3390/joitmc8030163>
- Gardner, W. L., Karam, E. P., Alvesson, M., & Einola, K. (2021). Authentic leadership theory: The case for and against. *The Leadership Quarterly*, 32(6), 101495. <https://doi.org/10.1016/j.leaqua.2021.101495>
- Garrelfs, C., Kroh, J., Schultz, C., & Buengeler, C. (2022). *Why visionary leadership may limit employees' contribution to ideation contests*. Paper presented at the Academy of Management Annual Meeting Proceedings, 2022(1). <https://doi.org/10.5465/AMBPP.2022.164>
- Granstrand, O., & Holgersson, M. (2020). Innovation ecosystems: A conceptual review and a new definition. *Technovation*, 90, 102098. <https://doi.org/10.1016/j.technovation.2019.102098>
- Grass, A., Backmann, J., & Hoegl, M. (2020). From empowerment dynamics to team adaptability: Exploring and conceptualizing the continuous agile team innovation process. *Journal of Product Innovation Management*, 37(4), 324-351. <https://doi.org/10.1111/JPIM.12525>
- Hall, K. L., Vogel, A. L., & Crowston, K. (2019). Comprehensive collaboration plans: Practical considerations spanning across individual collaborators to institutional supports. *Strategies for Team Science Success: Handbook of Evidence-Based Principles for Cross-Disciplinary Science and Practical Lessons Learned from Health Researchers*, 587-612. https://doi.org/10.1007/978-3-030-20992-6_45
- Hughes, D. J., Lee, A., Tian, A. W., Newman, A., & Legood, A. (2018). Leadership, creativity, and innovation: A critical review and practical recommendations. *The Leadership Quarterly*, 29(5), 549-569. <https://doi.org/10.1016/j.leaqua.2018.03.001>
- Imam, H., & Zaheer, M. K. (2021). Shared leadership and project success: The roles of knowledge sharing, cohesion and trust in the team. *International Journal of Project Management*, 39(5), 463-473. <https://doi.org/10.1016/j.ijproman.2021.02.006>
- Jantz, R. C. (2017). Vision, innovation, and leadership in research libraries. *Library & Information Science Research*, 39(3), 234-241. <https://doi.org/10.1016/j.lisr.2017.07.006>
- Jensen, U. T., Andersen, L. B., Bro, L. L., Bøllingtoft, A., Eriksen, T. L. M., Holten, A.-L., & Salomonsen, H. H. (2019). Conceptualizing and measuring transformational and transactional leadership. *Administration & Society*, 51(1), 3-33. <https://doi.org/10.1177/0095399716667157>
- Jensen, U. T., Andersen, L. B., & Jacobsen, C. B. (2019). Only when we agree! How value congruence moderates the impact of goal-oriented leadership on public service motivation. *Public Administration Review*, 79(1), 12-24. <https://doi.org/10.1111/puar.13008>
- Kadir, A. N. J., Adebayo, T. A., & Olumide, S. A. (2020). Visionary leadership and staff innovative behaviour in public colleges of education in Kwara State, Nigeria. *International Journal of Education*, 12(2), 63-72. <https://doi.org/10.17509/ije.v12i2.18998>
- Kao, C.-C. (2019). Development of team cohesion and sustained collaboration skills with the sport education model. *Sustainability*, 11(8), 2348. <https://doi.org/10.3390/su11082348>

- Kearney, E., Shemla, M., van Knippenberg, D., & Scholz, F. A. (2019). A paradox perspective on the interactive effects of visionary and empowering leadership. *Organizational Behavior and Human Decision Processes*, 155, 20-30. <https://doi.org/10.1016/j.obhdp.2019.01.001>
- Knippenberg, D. V., & Stam, D. (2014). Oxford handbooks online. In *Choice Reviews Online* 50(11), 452-453.
- Mascareño, J., Rietzschel, E., & Wisse, B. (2020). Envisioning innovation: Does visionary leadership engender team innovative performance through goal alignment? *Creativity and Innovation Management*, 29(1), 33-48. <https://doi.org/10.1111/caim.12341>
- Mikhriani, T. H. K., Qodri, Z. M. E., & Prajogo, W. (2021). The urgent need for transformational leadership in the globalizing world [a study of limited liability companies (PT) in Yogyakarta]. *Psychology and Education*, 58(5), 2054-2065.
- Nanus, B. (1992). Visionary leadership: Creating a compelling sense of direction for your organization. *Article*, 137. <https://doi.org/10.1093/iclqaj/41.1.137>
- Neuman, W. L. (2014). Social research methods: Qualitative and quantitative approaches in teaching sociology. In (Vol. 30): Pearson. <https://doi.org/10.2307/3211488>
- Nonaka, I., & Takeuchi, H. (1995). *The knowledge-creating company how Japanese companies create the dynamics of innovation*. New York: Oxford University Press in Book Summary.
- Nordberg, A., Linddahl, A., & Klingberg, E. (2023). The impact of visionary leadership bachelor in business administration title: The impact of visionary leadership, A qualitative study of visionary leadership and its impact on organizational cultures within the marketing industry. Bachelor's Thesis. Växjö, Sweden: Linnaeus University
- Obiwuru, T. C., Okwu, A. T., Akpa, V. O., & Nwankwere, I. A. (2011). Effects of leadership style on organizational performance: A survey of selected small scale enterprises in Ikosi-Ketu council development area of Lagos State, Nigeria. *Australian Journal of Business and Management Research*, 1(7), 100. <https://doi.org/10.52283/nswrca.ajbmr.20110107a11>
- Oh, M., & Choi, S. (2020). The competence of project team members and success factors with open innovation. *Journal of Open Innovation: Technology, Market, and Complexity*, 6(3), 51. <https://doi.org/10.3390/JOITMC6030051>
- Rahmi, D. Y., & Indarti, N. (2019). Examining the relationships among cognitive diversity, knowledge sharing and team climate in team innovation. *Team Performance Management: An International Journal*, 25(5/6), 299-317. <https://doi.org/10.1108/TPM-11-2018-0070>
- Rehman, U. U., & Iqbal, A. (2020). Nexus of knowledge-oriented leadership, knowledge management, innovation and organizational performance in higher education. *Business Process Management Journal*, 26(6), 1731-1758. <https://doi.org/10.1108/BPMJ-07-2019-0274>
- Richardson, B. M. (2017). An innovative transitional care program improves community health. *The Journal of Nursing Administration*, 47(7/8), 357-358. <https://doi.org/10.1097/NNA.0000000000000493>
- Ronald, B., & Marc, L. (2021). The leadership challenge in times of the COVTD 19 pandemic-An empirical investigation on the impact of transformational leadership on motivation and team performance. *Advances in Management*, 14(3), 1-21.
- Rosing, K., Frese, M., & Bausch, A. (2011). Explaining the heterogeneity of the leadership-innovation relationship: Ambidextrous leadership. *The Leadership Quarterly*, 22(5), 956-974. <https://doi.org/10.1016/j.leaqua.2011.07.014>
- Saif, M. A., Hussin, N., Husin, M. M., Alwadain, A., & Chakraborty, A. (2022). Determinants of the intention to adopt digital-only banks in Malaysia: The extension of environmental concern. *Sustainability*, 14(17), 11043. <https://doi.org/10.3390/su141711043>
- Sekaran, U., & Bougie, R. (2017). *Research methods for business: A skill-development approach* (6th ed.): Wiley.
- Sørensen, E., & Torfing, J. (2011). Enhancing collaborative innovation in the public sector. *Administration & Society*, 43(8), 842-868. <https://doi.org/10.1177/0095399711418768>
- Thahira, A., Tjahjono, H. K., & Susanto, S. (2020). The influence of transactional leadership on organization innovativeness (OI) mediated by organizational learning capability (OLC) in medium small enterprise Kendari city. *Jurnal Manajemen Bisnis*, 11(1), 90-104. <https://doi.org/10.18196/mb.11190>
- Tjahjono, H. K., Basuki, A. T., & Palupi, M. (2021). Application of SEM in organizational behavior studies. *UPP STIM YKPN*.

- Tjahjono, H. K., Prasetyo, F., & Palupi, M. (2018). Kepemimpinan transformasional pada organizational citizenship behavior dan komitmen afektif. *Jurnal Manajemen dan Pemasaran Jasa*, 11(2), 217-232.
- Torres, D. G. (2019). Distributed leadership, professional collaboration, and teachers' job satisfaction in US schools. *Teaching and Teacher Education*, 79, 111-123. <https://doi.org/10.1016/j.tate.2018.12.001>
- Utomo, W. A., Tjahjono, H. K., & Qamari, I. N. (2024). Effect of visionary leadership on team innovation: Understanding mediating roles of team cohesion. *Team Knowledge Collaboration and Team Bound-ary Management*, 272-284. <https://doi.org/10.53935/jomw.v2024i4.374>
- Utomo, W. A., Udin, U., & Haryono, S. (2022). Visionary leadership and employee quality in the public service sector. *International Journal of Applied Economics, Finance and Accounting*, 12(2), 31-37. <https://doi.org/10.33094/ijaefa.v12i2.542>
- Van der Voet, J., & Steijn, B. (2021). Team innovation through collaboration: How visionary leadership spurs innovation via team cohesion. *Public Management Review*, 23(9), 1275-1294. <https://doi.org/10.1080/14719037.2020.1743344>
- West, M. A., & Anderson, N. R. (1996). Innovation in top management teams. *Journal of Applied Psychology*, 81(6), 680. <https://doi.org/10.1037/0021-9010.81.6.680>
- West, M. A., Borrill, C. S., Dawson, J. F., Brodbeck, F., Shapiro, D. A., & Haward, B. (2003). Leadership clarity and team innovation in health care. *The Leadership Quarterly*, 14(4-5), 393-410. [https://doi.org/10.1016/S1048-9843\(03\)00044-4](https://doi.org/10.1016/S1048-9843(03)00044-4)
- Wood, D. J., & Gray, B. (1991). Toward a comprehensive theory of collaboration. *The Journal of Applied Behavioral Science*, 27(2), 139-162. <https://doi.org/10.1177/0021886391272001>
- Xie, Y., Xue, W., Li, L., Wang, A., Chen, Y., Zheng, Q., & Li, X. (2018). Leadership style and innovation atmosphere in enterprises: An empirical study. *Technological Forecasting and Social Change*, 135, 257-265. <https://doi.org/10.1016/j.techfore.2018.05.017>
- Ye, F., Ke, M., Ouyang, Y., Li, Y., Li, L., Zhan, Y., & Zhang, M. (2024). Impact of digital technology usage on firm resilience: A dynamic capability perspective. *Supply Chain Management: An International Journal*, 29(1), 162-175. <https://doi.org/10.1108/SCM-12-2022-0480>
- Yeakey, G. W. (2000). *Hersey and Blanchard's situational leadership theory: Applications in the military*.: Nova University.
- Yeboah, A. (2023). Knowledge sharing in organization: A systematic review. *Cogent Business & Management*, 10(1), 2195027. <https://doi.org/10.1080/23311975.2023.2195027>
- Yi, J. (2009). A measure of knowledge sharing behavior: Scale development and validation. *Knowledge Management Research & Practice*, 7(1), 65-81. <https://doi.org/10.1057/kmrp.2008.36>
- Zhang, Y., Wang, D., & Xiao, X. (2023). Network characteristics of innovation ecosystem: Knowledge collaboration and enterprise innovation. *Science, Technology and Society*, 28(3), 488-510. <https://doi.org/10.1177/09717218231161216>
- Zhou, L., Zhao, S., Tian, F., Zhang, X., & Chen, S. (2018). Visionary leadership and employee creativity in China. *International Journal of Manpower*, 39(1), 93-105. <https://doi.org/10.1108/IJM-04-2016-0092>