Implementation of Leadership Strategy to Realize the Transformation Digital towards Smart Military University

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Abstrak

Proses digitalisasi menuju smart university memerlukan dukungan kepemimpinan yang memadai. Tujuan penelitian adalah menganalisis implementasi strategi kepemimpinan untuk mewujudkan transformasi digital menuju smart military university (SmU). Pendekatan mix method exploratory sequential design dipilih berdasarkan keunikan gaya kepemimpinan yang kaya dengan berbagai pendekatan karena tuntutan situasional dan perkembangan budaya. Pengumpulan data kualitatif dilakukan dengan wawancara mendalam. Partisipan penelitian terdiri dari pengambil keputusan strategis, dan staf akademik yang terlibat dalam proses transformasi digital. Data yang terkumpul dianalisis dengan menggunakan teknik analisis isi untuk mengidentifikasi tema-tema utama dalam kaitannya dengan smart military university. Analisis kuantitatif berdasarkan hasil analisis jalur untuk mendukung temuan kualitatif yang melibatkan 128 responden acak. Hasil penelitian ini menunjukkan bahwa penerapan strategi kepemimpinan yang efektif memiliki peran penting dalam mewujudkan transformasi digital menuju Smart Military University. Berbagai tantangan situasional menjadi faktor kunci dalam pelaksanaan berbagai kepemimpinan untuk mengoptimalkan efektivitasnya. Dapat disimpulkan bahwa pendekatan kepemimpinan militer yang dipadukan dengan transformasional untuk menginspirasi dan memotivasi perubahan. Pendekatan complexity leadership yang berfokus pada pengakuan bahwa proses transformasi digital cenderung tidak terduga dan kompleks, membantu institusi maupun individu untuk beradaptasi, lebih fleksibilitas, mendorong kolaborasi, dan kemampuan berpikir sistemik.Implikasi praktis dari penelitian ini adalah pentingnya mengembangkan kepemimpinan kolaboratif dan transformasional di antara para pemimpin militer untuk menghadapi tantangan dan peluang di era digital.

Kata Kunci: Budaya organisasi, kepemimpinan militer, kepemimpinan transformasional, kepemimpinan kompleksitas, smart military university.

Abstract

The digitalization process towards a smart university requires adequate leadership support. The research objective is to analyze the implementation of leadership strategy to realize Digital transformation towards a smart military university (SmU). The mix method exploratory sequential design approach was chosen based on the uniqueness of the leadership style which is rich with a variety of approaches due to situational demands and cultural development. Qualitative data collection was carried out by in-depth interviews. Research participants consist of strategic decision makers, and academic staff who are involved in the digital transformation process. The collected data was analyzed using content analysis techniques to identify the main themes in relation to the smart military university. Quantitative analysis based on the results of path analysis to support qualitative findings involving 128 random respondents. The results of this study indicate that the implementation of an effective leadership strategy has an important role in realizing digital transformation towards a Smart Military University. Various situational challenges are key factors in the implementation of various leaderships to optimize their effectiveness. It can be concluded that the military leadership approach is combined with transformational to inspire and motivate change. A complexity leadership approach that focuses on recognizing that digital transformation processes tend to be unpredictable and complex, helping institutions and individuals to adapt, more flexibility, encouraging collaboration, and systemic thinking skills. The practical implication of this research is the importance of developing collaborative and transformational leadership among military leaders to face challenges and opportunities in the digital era.

Keywords: Organizational culture, military leadership, transformational leadership, complexity leadership, smart military university.

1. INTRODUCTION

The study of leadership is increasingly broad and complex, especially with various organizational challenges, changes, and developments in information technology. One of the

important studies in leadership is related to the process of digitizing higher education towards a "smart military university". Regarding smart universities previous study suggests that the concept originates from the Internet of the Thing (IoT) (Noura et al., 2019). Other study put forward as a result of creative analysis developed with systems, technical platforms, smart features, as well as best practices for the next generation (Heinemann & Uskov, 2018). Digital transformation is a series of deep and coordinated cultural, changes to the structure of the workforce, and shifts in technology that enable educational models to operate in a direction with a value proposition (Bongiorno et al., 2017; Mazur et al., 2016). Other study argue that the concept of digital transformation has become the basis for transformation activities in Smart University (SmU) universities related to digital transformation, services, applications, events, facilities, human resources, governance, educational programs, or innovations that fundamentally designed to fulfill institutional goals (Fernández-Caramés & Fraga-Lamas, 2019). Additional, "smart" components to implement, maintain, and actively use distinctive "smart" features such as adaptation, sensing, inference, self-learning, anticipation, and self-optimization (Teixeira et al., 2021; Uskov et al., 2019). The concept of SmU is based on the idea that SmU as an intelligent system must implement and demonstrate significant maturity at various levels of "intelligence".

The digitization process towards a smart university requires adequate leadership support (Cortellazzo et al., 2019; Vlachopoulos, 2021). Leaders managing change processes in higher education and addressing the negative impacts of digitalization. Leaders as a valuable organizational resource (Bakker et al., 2023; Bakker & de Vries, 2021). Previous study suggests the role of leadership in digital innovation. However, there are challenges for leaders in dealing with the change process (Maniscalco, 2020). This leadership has a strong emphasis on influencing the performance of followers according to the leader's vision. Leadership describes whatever the people who are responsible do. Leadership effectiveness depends on the suitability between a person's leadership style and a particular situation (Aunga & Masare, 2017; Roman et al., 2019). But the analysis of the situation in the transformation process is not easy. There are complex situations in the transformation process. There is a change in values that creates tension and anxiety for members of the organization. Previous study show that the digitalization process has an impact on individuals and their personal lives, leading to a decline in the quality of mental health (Teepe et al., 2023). In order to realize a smart university, it is important for universities to have visionary leaders, develop a culture of innovation, encourage collaboration, and ensure the development of the right human resources. Through this combination, universities can become intelligent, adaptive, and relevant education centres in the digital era. The importance of cultural position in the development of a smart university (Alenezi, 2021; Pérez et al., 2021). Previous study adds the importance of building culture in realizing a smart university. Integrating leadership and culture in the transformation process is not easy (Van Kemenade, 2017).

In light of the far-reaching literature review, it becomes clear that there exists a hole relating to the need of leadership that fosters the cultivation of culture during the digital transformation process in higher education. Leaders act as important resources in ensuring the reception of novel methodologies, mentalities, and practices while perceiving the meaning of progress in supporting achievements. An extensive portrayal of these viewpoints is fundamental for fathoming their suggestions and forming logically pertinent ideas. To deal with these demands, an effective leadership approach is needed to optimize the process of change towards a smart military university. However, studies on leadership in the transformation process in higher education are still rare. Previous study suggest that managing technological change is one of the top concerns for leaders of educational institutions but there is a dearth of research providing concrete frameworks for managing this

type of change in the context of higher education (Guerra-López & El Dallal, 2021). Other study assert that digital transformation is an emerging field in both research and corporate practice, especially in the context of higher education, the embryonic nature of this area of research and development must be recognized (Rof et al., 2020).

This research contributes to the literature on contingency leadership in higher education. The contingency theory of leadership assumes that a leader's efficacy is contingent on whether or not their leadership style ensembles a specific condition (Dust & Ziegert, 2016; Zainal & Matore, 2019). Rendering to this theory, an individual can be an effective leader in one occurrence and an unsuccessful leader in another one. Contingency leadership is leadership that puts forward the work situation and organizational culture (Dust & Ziegert, 2016; Yilmaz & Flouris, 2017). An organization will benefit if it has a contingency leadership model, one of the advantages is when assigning tasks to followers and the tasks are structured and everything is explained in detail. Followers will not be burdened and will respect their leaders more. When the situation is well controlled, it will be easy to bring the company into a good organizational culture.The novelty of this research is to show the process of adopting and integrating contingency leadership values in the transformation process towards a smart military university. Fact events, empirical events at Unjani as a basis for formulating a conception of effective contingency leadership in the digital transformation process. The research objective is to analyze the implementation of leadership strategies to realize Digital transformation towards a smart military university.

2. METHODS

The research used mixed method exploratory sequential design approach. By using a mixed method approach, this research was able to gain a comprehensive and holistic understanding of how unique leadership styles, diverse approaches, and cultural development can support the transformation process at Unjani towards a smart military university. This approach combines qualitative advantages, namely case studies are based on the uniqueness of a rich leadership style with a varied approach in response to situational demands, as well as the development of a culture to support the digitalization process (Creswell & Clark, 2018). Through a quantitative explanatory, survey of staff and lecturers as many as 128 respondents to measure the influence and relationship between variables. In this approach, qualitative data collection is carried out through in-depth interviews with various research participants consisting of strategic decision makers at Unjani College, the Head of the Education Sector (Kabidik), lecturers, and academic staff involved in the digital transformation process.

The process of collecting qualitative data with in-depth interviews allows researchers to gain a deep understanding of the participants' experiences, views, and perceptions related to the concept of a smart military university. In-depth interviews allow the researcher to ask detailed questions and gain a broader view of the participants. The collected data were then analyzed using content analysis techniques to identify the main themes that emerged in the interviews. This analysis helps in understanding the views and experiences of participants related to digital transformation and the application of the smart military university concept. In addition to collecting qualitative data, quantitative analysis is also carried out using the results of path analysis. The development of leadership style measurement is based on qualitative findings, namely 1) military leadership style (ML), 2) transformational leadership style (TL), 3) complexity leadership style (CL). Cultural measurements were developed based on research findings such as the basic values of nationalism, patriotism, militancy and cultural characteristics in Unjani. Digitalization measurements refer to Heinemann & Uskov (2017), including 1) Software systems to be deployed by SmU, 2) Technologies to be

deployed by SmU, 3) Hardware systems to be deployed by SmU, 4) Smart curricula to be deployed by SmU, 5) Smart pedagogy to be deployed by SmU. This quantitative analysis aims to support the qualitative findings found through in-depth interviews. Random respondents as many as 58 people were involved in this quantitative analysis. Through path analysis, researchers can explore the relationship between variables that are relevant to the smart military university concept, namely leadership style and organizational culture.

3. RESULTS AND DISCUSSION

Result

The process of change towards digital transformation of higher education is a complex process. The interactions between leaders and subordinates and task structures are not easy to map, especially in critical condition. The complexity of the process of digitization is not easy to map. The relationship between leaders and subordinates becomes unclear at critical moments. The characteristics of a strong leader are not only in the foundation that oversees Unjani, at several levels of Unjani there is individual strength, which makes the leadership role effective when facing a crisis. In complex and critical situations, leaders act quickly with clear targets. Situation identification is supported by objective information. Another source said, "it's easy for leaders to get data with their capacity and network". For data sources, leaders are not only in universities.

The decision of the leadership in tertiary institutions under certain conditions really depends on the foundation. Nevertheless, in other conditions together formulate solutions and policies with a fast and decisive process. Although it is not easy to change a "contrasting" leadership style, the interaction between military and civilian leadership styles changes as the two interact. Even though it is more dominant with a military style, the combination of the two adjusts to the context and needs. The Foundation's vision and mission form the basis for the integration of the two. Achievements such as facilities and infrastructure to create a smart military university, readiness to become an inclusive educational institution, and ability to deal with times of crisis cannot be separated from the inherent character of the leadership, both in foundations, most of whom are former members of the military. At Unjani itself, high discipline, loyalty, and obedience underlie every change process has become daily life.

The effectiveness of leaders in influencing subordinates is not only supported by the situation. Unjani implements the principles of military governance in governance at Unjani reflected in the Unjani Orgas. The arrangement can be seen from the uniforms and clothing attributes, respect according to level and rank including ceremonies and morning assembly as an internalization of the values of the struggle. Consistency in implementing values and training is an important process in supporting the implementation of leadership strategies in the digitalization process. Two important aspects, namely leadership and organizational culture, are factors that determine the success of digital transformation. This can be seen from the various changes, namely the features identified as Smart University. The observation results show that significant changes can be seen from several features that show features as a smart tertiary institution. These changes include Web-lecturing systems, Smart classroom in-class, Cloud computing technology, and Web-lecturing technology. There are changes in the learning process that are felt by students, including an integrated academic database system, only with NIM numbers and passwords. Adaptive study program. The results of the inferential analysis regarding the influence of leadership strategy and organizational culture on smart military universities is show in Table 1.

Table 1. Regression test results with Smart Military University as the Dependent Variable

			Estimate	S.E.	T- Count	P
SmU	<---	ML	0.494	0.083	5.934	***
SmU	<---	TL	0.483	0.081	5.952	***
SmU	<---	CL	0.334	0.092	4.109	***
SmU	<---	OC	0.674	0.077	10.250	***

Base on Table 1 partial test results show that Military Leadership (ML), Transformational Leadership (TL), Complexity Leadership (CL), and Organizational Culture (OC) have T-values of 5.934, 5.952, 4.109, and 10.250. This shows that the calculated T value is in the area of acceptance of the hypothesis. Based on this, ML, TL, CL, and OC have a significant influence on the smart military university, so leadership and culture influence the smart military university. The test results show that culture is the dominant factor. Nevertheless, the existence of culture itself is a process that cannot ignore the influence of leadership. The test results show that there is a joint leadership influence on organizational culture as shown in Table 2.

Table 2. Regression Test Results with Culture as the Dependent Variable

			Estimate	S.E.	T- Count	P
BO	<---	KM	0.283	0.077	3.687	***
BO	<---	KT	0.316	0.074	4.292	***
BO	<---	KK	0.247	0.082	3.025	***

Table 2 shows the influence of Military Leadership (ML), Transformational Leadership (TL), and Complexity Leadership (CL) on Organizational Culture (OC). Based on the calculated T value, ML has a value of 3,687, TL has a value of 4,292, and CL has a value of 3,025. This shows that the calculated T value for transformational leadership has the highest value. So that the dominant factor forming organizational culture is transformational leadership (influence of 0.316* 0.316= 10%), and the lowest is leadership complexity. The mediation test results are shown in Table 3.

Table 3. Mediation Test Results

		Track			Estimate	Z-Count	P
SmU	<---	OC	<---	ML	0.124	3.388	***
SmU	<---	OC	<---	TL	0.180	3.838	***
SmU	<---	OC	<---	CL	0.110	2.848	***

Base on Table 3 show the results of the mediation test using the Sobel test show that organizational culture mediates the influence of leadership on a smart military university. Effective leadership influences the smart military university in two ways, namely directly and through organizational culture.

Discussions

Contingency leadership is a leadership style that emphasizes work situations and organizational culture. This theory was put forward by Fiedler, which stated that the best leadership style is determined by the situation. Organizational culture is a system that is shared by members that differentiates an organization from another (Henkel & Bourdeau,

2018; Shayya, 2018). Besides that, the performance and success of a leader do not only depend on the quality or method but also on the situation in which the leadership style works. There is an argument that each type of leadership is necessary at its time, meaning that certain leadership styles are necessary in certain situations and not appropriate in others (Anderson & Sun, 2017; Zacharo et al., 2018). There is no preeminent leadership style, nonetheless a leader will be supposed to be effective if his leadership style is in the event that they leadership style is as per the current circumstance (Baig et al., 2021; Nurhazizal et al., 2019). The situation can be related to group characteristics or group assignments. The state of the organization will get out of control if the leader cannot understand the current situation. An organization will benefit if it has a contingency leadership model, one of the advantages is when assigning tasks to followers and the tasks are structured and everything is explained in detail. Followers will not be burdened and will respect their leaders more. When the situation is well controlled it will be easy to bring the organization to a good organizational culture (Syakur et al., 2020; Wahyunianti Dahri & Aqil, 2018).

Despite these drawbacks, the contingency leadership style provides a framework that can enhance the effectiveness of the leadership role in digital transformation processes (Berkovich, 2016; Ilomäki & Lakkala, 2018). Various choices of leadership styles according to context are one of the advantages while still being dominated by military style, supported by individual characteristics that apply the values of fighting as the main characteristics of leaders. Cultural support formed based on General Achmad Yani's fighting values such as nationalism, patriotism, and militancy is instilled through a simple, routinely structured process. The success of the leadership role in the digitalization process toward a smart military university lies in the paradigm shift in leadership. Paradigm changes are not only based on the objectivity of the situation at hand. Leaders are aware of their roles and limitations. Military, complexity, and transformational approaches are important approaches in the transformation process (Damayanti & Jumiyati, 2020; Ramdan & Fauziah, 2019). The ideas and practices of military leadership have contributed to the leadership literature. Practically in the context of change, the values of military leadership can be adopted to direct change according to the assigned mission. In line with previous study conveying that strategies for finding resources and selecting new technologies require concepts originating from the military such as leadership, related to elements of mobilization and optimizing resources, or a long-term view (Bongiorno et al., 2017).

On the other hand, leaders have unique characteristics that make them a source of value for organizational members (Bakker et al., 2023; Bakker & de Vries, 2021). Unique characteristics as resources can be used effectively to ensure the health impairment process and the motivational processes of organizational members in the digital transformation process. The complexity of the digital transformation process is a challenge for leaders (Bongiorno et al., 2017; Cortellazzo et al., 2019). Therefore understanding the situation, which is the basis for using a situational approach, is not enough. Characteristics originating from General Achmad Yani's fighting values such as nationalism, patriotism, militancy, and loyalty, are very important.

In addition to situational leadership and character values, the digitization process requires cultural support as the basic patterns of assumptions, values, norms, and beliefs of organizational members. They are widely shared so that form the basis for behaviour and decisions within an organization. The review results further exhibit that digital culture, as a unique hierarchical cycle, assumes a significant part in understanding the digitalization interaction and impacting the outcome of change endeavors. These discoveries line up with the points of view who underline the meaning of computerized culture in establishing a digital situated climate (Khan et al., 2020; Rutten, 2018; Zhen et al., 2021). Previous study additionally features the greatest possible level of significance of computerized culture in

driving digital transformation (Melović et al., 2020). The organizational culture developed by Unjani reflects how individual members of the organization interact, communicate, and perceive their world including in their interactions with outsiders. Unjani's organizational culture, which was formed through the process of internalization, social interaction, learning, and outreach, continues to be maintained and developed through strengthening values, respect for appropriate behavior, and institutional demands. Culture has a strong influence on Unjani's achievement towards a smart university with a typical "military" style. Therefore, understanding and managing organizational culture is important for the success and sustainability of an organization in the digital transformation process (Durst et al., 2019; Sharabi, 2013; Westenberg & Rutten, 2017).

The results of the study show that culture can mediate the influence of contingency leadership on the formation of a smart military university. Culture is an "instrument" that encourages changes in behaviours and systems in daily activities. The leader drives the culture and establishes a strategic plan to guide the institution. The findings of this study provide valuable insights into effective situational leadership in realizing the digital transformation towards a Smart Military University. The practical implication of this research is the importance of developing collaborative and transformational leadership among military leaders to face challenges and opportunities in the digital era. However, the research was only conducted at one of Unjani's private universities. Further research can be expanded with a wider sample and other data collection methods such as longitudinal.

4. CONCLUSION

The success of realizing Unjani's smart military university cannot be separated from the leadership role that is applied situationally. A military leadership approach combined with transformational to inspire and motivate change. A complexity leadership approach that focuses on recognizing that digital transformation processes tend to be unpredictable and complex, helping institutions and individuals to adapt, more flexibility, encouraging collaboration, and the ability to think systemically. Leaders also encourage the growth of a distinctive culture, which is a blend of fighting values with a change, and innovation orientation that supports changes towards a smart military university. Effective leadership influences the smart military university in two ways, namely directly and through organizational culture.

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