

Digital Leadership in Higher Education Facing the Challenges Towards Society 5.0

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Abstract— this research describe trends of leadership development which is not only require a comprehensive of understanding the concepts but also mastering various relevant soft-skills techniques, according to the position, situation and challenges faced. This research aim to find the solution regarding the digital leadership in higher education. Issues of leadership and digitalization become trends in the last six years. Digitalization demands a fundamental overhaul which is a very important skill set in an organization. Digital technology is the main trigger for fundamental changes in various aspects of life including in higher education in the future. This is essential to make a solution regarding digital leadership towards the society era 5.0. This paper describes a challenge, opportunity, and solution that can be used especially for a leader using digitalization to face future issues. By using the qualitative method combining with literatur rivew in this research will provide theories and survey regarding the digital leadership facing society 5.0 in several universities in Pekanbaru. The main goal is to create a concept and have a good solution regarding the issues.

Keywords— *Digital Leadership, Higher Education, Challenges, Society 5.0*

INTRODUCTION

The Digital leadership is a provision for a leader so that he can direct the organization he leads to transform towards digital. A transformation that is carried out is called a disruption, which is a period of fundamental innovation and massive change that changes the entire existing system and order in new ways [12].

Several research results that discuss digital leadership include the results of research from AlAjmi entitled *The impact of digital leadership on teachers' technology integration during the COVID-19 pandemic in Kuwait*. In this study, researchers discuss the digital leadership of teachers in Kuwait. When education is hit by the COVID-19 pandemic, school principals must adopt a policy of implementing digital literacy by ensuring that teachers and students acquire and utilize digital tools and platforms. This study aims to explore the impact of digital leadership

among principals on teacher technology integration during the COVID-19 pandemic in Kuwait. This research was conducted with a quantitative study using two surveys, Principal Technology Leadership Assessment, and Teacher Technology Integration Survey. The sample consisted of 113 principals and 404 teachers from state primary schools in Kuwait. The result is that digital leadership among principals has a positive impact on the integration of teacher technology during the COVID-19 pandemic [13].

The trend of leadership development requires not only a comprehensive understanding of concepts but also mastery of various relevant soft-skill techniques, according to the position, situation and challenges faced. Everyone has the potential to improve leadership in both the context and the challenge. It takes a special effort, and a willingness to learn. This has to come from within a person. Understanding of leadership is still lacking, need to increase higher capabilities. Before explaining Society 5.0, the R era of Industry 4.0 / Digital evolution, global influences, macro, and micro situations are becoming more complex, more difficult to predict, and changing very quickly [1].

Digital technology is the main trigger for fundamental changes in various aspects of life including how businesses are managed and leadership is run. Digital technology triggers not only episodic changes but also continuous and disruptive changes in the business environment. Digital leadership as a consequence of the development of digital technology is the fifth generation of the development of the concept of leadership [2].

Digital technology is used to create new business models that are different from the original business model and can provide new values or create new sources of income. It can be seen that shuttle service providers do not have their vehicles, but the model has proven successful and is widely used by the community [3].

With unexpected changes in competition, consumer behavior, and different job designs, inevitably the

superiors (team leaders, supervisors, managers, and directors) apply distance leadership or remote leadership. Using digital technology as a vehicle to direct dispersed work team members to stay focused on achieving business goals efficiently and effectively, is where we see the strategic role of digital leadership. It does not only play a role in overcoming changes in the leadership context from direct-contact, on-site, and centralized leadership to remote, distance, and virtual leadership. But it must also encourage the digitalization process within the organization to achieve sufficient maturity (digital mastery, digital maturity) to support organizational achievements.

METHODOLOGY

The method used in this research is combining the literature review and qualitative descriptive method by using questionnaire. The reviews taken from various sources such as books, international journals, and others. The questionnaire is shared among the top until middle management in several universities. This research illustrates how important leadership is in facing challenges in the era of society 5.0. The review accompanied by a synthesis from the author is expected to be a comprehensive reading, material to be able to find scientific solutions to solving problems, especially related to digital leadership.

FINDING AND DISCUSSION

The need for effective leadership with digital literacy skills is also discussed in the results of research published by Antonopoulou et al entitled *Transition from Educational Leadership to e-Leadership: A Data Analysis Report from TEI of Western Greece*. According to the results of research that has been carried out, Universities are not completely out of this need for effective leadership, because they face the same challenges as other organizations and the development of effective university leadership is important for the normal functioning and success of higher education. Among the various forms of educational leadership, the application of transformational leadership in higher education is recognized as the most appropriate, because it focuses on the division of leadership among academic members who have sufficient ability to collectively manage the various leadership responsibilities required in different contexts. The findings of this study indicate that leadership outcomes have a strong positive correlation with transformational leadership and a large negative correlation with passive to avoid leadership, confirming that higher levels of transformational leadership imply greater efficiency and satisfaction for workers, and higher levels of leadership

transformational. transformational leadership coexists with high levels of digital leadership implementation [16].

In line with Antonopoulou et al., Zeike et al. also presented the results of their research on the importance of digital leadership skills in an institution or organization in a publication entitled *Digital Leadership Skills and Associations with Psychological Well-Being*. Due to increasing digitization, today's world of work is changing rapidly and presenting managers with new challenges. Digital leadership is an important factor in managing these challenges and has become a key concept in discussions about what types of skills managers need for digital transformation. The main research question explored by this study is whether digital leadership is associated with psychological well-being in top-level managers. Based on qualitative pilot studies and relevant literature, researchers developed a new scale for digital leadership in managers. Researchers conducted an online survey with a sample of 368 top-level managers from major German ICT organizations. Using stepwise logistic regression analysis, the potential effects of digital leadership on psychological well-being were analyzed. Logistic regression analysis showed that better skills in digital leadership were significantly associated with higher well-being. The results also show that gender, age, and managerial experience do not affect the built model. In other words, this study provides valuable insight into the relationship between digital leadership and manager well-being [17].

Results from Another study which is a literature review on digital leadership published by Benavides et al. conclude based on research that has been done that today's digital transformation must be accompanied by digital leadership in higher education institutions. Higher education institutions have been impregnated by the technological advancements brought by Society 5.0, and are forcing institutions to face digital transformation in all dimensions. The Kitchenham Protocol was conducted by the authors to answer the research questions and selection criteria for taking eligible papers. Applying a digital transformation approach to the higher education domain has evoked the spirit of change, as it makes it possible to describe the complex relationships between actors in the technology-enabled education domain. The purpose of this study is to summarize the typical characteristics of the digital transformation implementation process that has occurred in universities [17].

Meanwhile, if you want to measure how well a person's development and mastery of digital leadership are, the operationalization of the concept developed by van Wart can be used. This operationalization describes digital leadership in six dimensions or aspects, as seen in fig. 1.



Figure 1 Six digital leadership competencies

It can be explained that some of these aspects are (1) Technological skills—aspects of technical skills related to digital technology that must be mastered by the leader, (2) Communication skills—skills to utilize technology for more effective communication in a scope that is not limited by time or place, (3) Social skills—skills to build a social system that is conducive to supporting changes towards better digital maturity, (4) Team building skills—the ability to build and direct work teams virtually to achieve the expected synergy, (5) Change management—the ability to manage culturally strategic changes in the organization, and (6) Trustworthiness—the ability to develop, improve, and maintain the trust of followers and partners to continue to synergize and collaborate in achieving organizational goals. Figure 1 provides a general illustration of the concept of e-Leadership as six e-competency [18].

The result of the questionnaire shown that 85 % strong agreed of the digital leadership must have in level of middle until top management in universities. However this research need futher detailed research regarding which part of aspect will indicated leader with digital leadership.

CONCLUSION AND RECOMMENDATION

The challenges of future digital leadership in Society 5.0 involve many aspects that must be prepared as early as possible by higher education leaders. Several alternative solutions in digital leadership include improving Technological skills, Communication skills, Social skills, Team building skills, Change management, and Trustworthiness. In addition to maintaining digital leadership practices, it is also necessary to pay attention to visionary leadership, digital era learning culture,

professional excellence, systematic improvement, and digital citizenship in the future.

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