The Role of Leadership in Riding the Metaverse Era: The Stakeholders Perspective

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ABSTRACT

Metaverse as a new world is a virtual environment that integrates virtual technology so that humans are connected to the future in a virtual but reality-like form. This research aims to describe the leadership role and the level of urgency in riding the metaverse era based on stakeholder perspectives. Qualitative and quantitative approaches generate important data as a reference for developing business leadership roles in the metaverse era. The results explained that the metaverse does not move alone with technology, but also leadership competencies to see the future, equalize knowledge and skill needs, transfer metaverse mindset, and drive innovation. It can be concluded that stakeholders also believe that the development of the metaverse is played by leaders who create their leadership style based on the metaverse mindset.

Keywords: Leadership, metaverse, metaverse stakeholders.

1. INTRODUCTION

The metaverse offers its users a multitude of activities to indulge in, including but not limited to socializing, gaming, shopping, learning, and working.Among the concerns that demand careful consideration are privacy, security, accessibility, and the possibility of generating digital disparities.To sum up, the metaverse is an idea that envisions a completely immersive virtual space where individuals can communicate, generate content, and participate with others.Despite being in its nascent phases of growth, the metaverse holds the promise of revolutionizing a wide range of areas and introducing fresh prospects for creativity and cooperation. (O'brien & Chan, 2021)

Leadership in the metaverse era is a topic of growing interest and research. As virtual reality becomes more prevalent, it is important to understand how leadership can be adapted to this new environment. According to Jinwook & Dongkeun (2022), virtual reality can be used as a tool for observation, exploration, and appreciation of objects. This suggests that leadership in the Metaverse era may involve new methods of observation and exploration.

Additionally, (Chen, 2023b)discusses the four levels of organizational change that will be brought about by the future Metaverse office, including flexible leadership. Figueiredo (2023) suggests that the Metaverse holds potential for creating embodied learning experiences to enhance traditional pedagogical methods, which may require new forms of leadership. As Metaverse technology continues to develop, it is important for leaders to adapt and explore new ways of leading in this virtual environment.

The stakeholders of metaverse business include teachers and students in educational environments, local communities, universities, and large corporations, the banking industry, the financial market, individual users, and organizations (Çengel & Yildiz, 2022; Chen, 2023a; Durak & Cankaya, 2022; Hastuti *et al*., 2023; Huang *et al*., 2022; Hussain, 2023; Tan *et al*., 2023; Yukhno & Umarov, 2022).

2.   LITERATURE REVIEW

2.1. Leadership in Digital Era

Leadership in the digital era has become a critical topic of research in recent years. This literature review provides an overview of the existing literature on leadership in the digital era, including various leadership styles, their impact on organizational performance, and the need for new leadership theories.

Several studies have examined the concept of digital leadership, including its impact on sustainable performance (Khaw *et al*., 2022), the skills required for effective leadership in the digital era (Thanh Mai *et al*., 2022), and the characteristics of leadership in the era of digital transformation (Klein, 2020). Other studies have focused on the need for visionary leadership in the digital era (Elvi Rahmi *et al*., 2023) and the evolution of digital leadership (Karakose *et al*., 2022).

The literature also highlights the importance of digital leadership in various sectors, including business organizations (Araujo *et al*., 2021), higher education (Gupton, 2017), and telecommunication enterprises (Thanh Mai *et al*., 2022). The studies suggest that digital leadership requires a combination of technical skills, adaptability, rapid decision-making, and problem management.

In conclusion, this is highlights the importance of digital leadership in the current era of digital transformation. The review emphasizes the need for new leadership theories that encompass emerging leadership styles and the importance of developing the necessary skills for effective digital leadership.

The leadership in the digital era highlights the importance of developing specific skills and competencies to effectively lead in a rapidly changing technological landscape. The identified key skills include media communication, rapid decision making, problem management, adaptability, technical skills, and the ability to influence, inspire a shared vision, be proactive, avoid blaming others, be visionary, and be innovative. The literature also emphasizes the importance of digital leadership in managing the challenges of digital transformation and developing a positive customer experience orientation. (Araujo *et al*., 2021; Dubchenkova *et al*., 2022; Padolina- Alcantara, 2023; Thanh Mai *et al*., 2022; Zeike *et al*., 2019; Zhong, 2017)

2.2. Metaverse Era

The metaverse era is a new era of networking and computing that has significant impacts on various fields, including education, arts, hospitality, and entrepreneurship. The Metaverse era

provides new opportunities for cultural marketing, public performance dance art, and cosmetics market. However, it also presents challenges such as privacy and security threats, transparency of public information, and communication culture. The literature review highlights the need for further research on the impacts of the Metaverse era on various fields and the development of new solutions to address the challenges it presents.(Darto *et al*., 2022)

3.   RESEARCH METHODOLOGY

This study has been designed by researchers using a mixed methods approach, refers to research that integrates both qualitative and quantitative elements in a single study. The purpose of mixed methods research is to gain a better understanding of the research problem by combining the strengths of both qualitative and quantitative research methods. Halcomb (2019) highlights that mixed methods research involves the use of both qualitative and quantitative data collection and analysis techniques. The integration of both approaches in mixed methods research provides a more comprehensive understanding of complex phenomena.

The informants involved are metaverse business stakeholders in Indonesia such as academics, IT practitioners, consulting, and representatives from META Indonesia Company as one of the pioneers of metaverse in Indonesia. A qualitative approach is to explore the role of leadership in business in the metaverse era. While, the 38 respondents involved in this study who are involved in the metaverse business provide an assessment of leadership role in metaverse.

The process of analyzing research data begins with determining the role of leadership competencies and role formulated by metaverse business stakeholders. Then, respondents' assessments were used to determine the weight of leadership role in the metaverse era. The result is metaverse leadership roles and competencies that can be formulated for reference and understanding of leadership in the metaverse era.

4.   FINDINGS

4.1. Metaverse Mindset

Currently, various companies have flocked to digital transformation due to the demands of the times and the development of digital technology. It seems that this is not only about sophisticated equipment, but also requires people who have a mindset in line with technological developments. A digital mindset is seen as the key for companies in carrying out digital transformation (Anand & Krishna, 2019).

Digital mindset is key in fostering a metaverse mindset that understands metaverse components in business such as Non Fungible Token (NFT), Blockchain, Augmented Reality (AR), Virtual Reality (VR), Extended Reality, Cyber Security, and Cloud Computing. Based on the results of the stakeholder study, there are several factors underlying the metaverse mindset (including its readiness), namely knowledge, hard skills, soft skills, and attitude. In fact, the center of this metaverse development is human development itself. The key lies in the mindset that humans have. Although in generation Z it seems that the digital mindset is not yet adequate, perhaps because their experience is still limited. Yet this is the basis for the metaverse mindset.

In addition, the stakeholder review mentioned that knowledge of the metaverse may be increasing but skills and attitude are still a challenge in terms of human capital. This is demonstrated by the knowledge of metaverse concepts and the digital environment, but the mastery of programming, software, applications, digital markets, and metaverse leadership is not yet prominent (this measurement scale is still under study).

In reality, the metaverse is constantly moving and creating new jobs that demand human resources with specific skills and roles. As understood by metaverse stakeholders, both academics and business practitioners, these include:

a) Metaverse Architect
b) Metaverse Developer
c) Metaverse Designer
d) Metaverse Content Creator
e) Metaverse Community Manager
f) Metaverse Customer Support
g) Metaverse Entrepreneurs

4.2. Human Riding The Metaverse

The development of technology is often associated with the disruption of human roles. Even in the world of Human Resource, various Artificial Intelligence technologies have been able to perform some technical activities through digital platforms.

Human is always a human (Osaci, 2023). Based on years of experience in the field of human resources, an HR consultant proves that people are the key to transformation. The various characters and uniqueness of humans in the organization are the capital that drives transformation, especially in the metaverse era which demands a large role for humans. Humans as elements within the organization's circumference control the pace of the organization internally. As said by Jack Welch that if the rate of change outside exceeds the rate of change inside, the end is near. So the metaverse is not a disruption, it is driven by humans with a mindset and vision far into the future. But the metaverse can be a disruption for people in an unresponsive pace of organizational change.
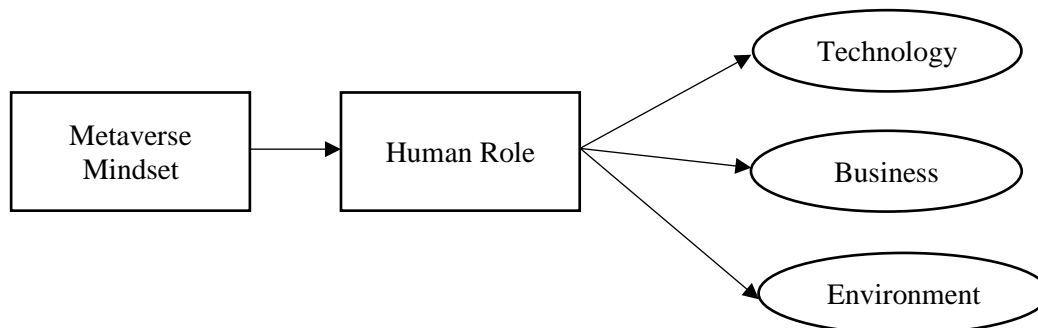

Figure 1. Human Metaverse Mindset Role

4.3. Leadership Role

The metaverse is not just about technology, new worlds, virtual spaces, or sophisticated platforms that deliver us to virtual worlds that are similar to reality. Business leaders agree to "put people first" in the metaverse business movement. There are at least several main roles of humans as leaders in the metaverse, namely:

(1) Goal-driven

(2) Control organization

(3) Sender

(4) Situation Savers

Driver. Business leaders play a crucial role in driving organizations towards success through the vision and mission they create as organizational targets. A vision is defined as the projected mental image of the products, services, and organization that a business leader wants to achieve (Caridi-Zahavi *et al*., 2016). It provides a sense of mission or purpose and serves as a source of inspiration for employees (Caridi-Zahavi *et al*., 2016; Parveen & Adeinat, 2019). A mission, on the other hand, defines the purpose and reason for the organization's existence and supports strategic principles (Oliveira *et al*., 2021). It sets the direction for decision-making and guides various departments and stakeholders towards desired outcomes (Alex Alblas *et al*., 2014).

Leaders who operate according to a transformational leadership style, which relies on a commitment to a vision, have a goal of connecting with their employees' emotional drivers to achieve desired business outcomes (Parveen & Adeinat, 2019). They minimize anxiety and work pressure experienced by employees, fostering a positive work environment (Parveen & Adeinat, 2019). Additionally, leaders with a long-term orientation set the vision, mission, and long-term goals of the organization, which can alter business performance (Jha & Bhattacharyya, 2020).

The vision and mission created by business leaders should be aligned with sustainability goals and integrated into the organizational strategy (Alblas *et al*., 2014). By incorporating sustainability into the vision and mission, organizations can design and deliver sustainable products and services (Alblas *et al*., 2014). This demonstrates a commitment to environmental and social responsibility, which is increasingly important in today's business landscape.

Furthermore, business leaders are responsible for effectively communicating the vision and mission to all stakeholders (Caridi-Zahavi *et al*., 2015). Clear and concise communication helps build a sense of purpose and direction among employees, fostering a strong organizational culture and commitment to achieving the desired outcomes (Caridi-Zahavi *et al*., 2015). Leaders must also lead by example and embody the values and principles outlined in the vision and mission (Caridi-Zahavi *et al*., 2015). This builds trust and credibility, motivating employees to work towards the organizational targets (Caridi-Zahavi *et al*., 2015).

Control Organization. Business leaders serve as the controllers of an organization, responsible for directing and guiding the efforts of the organization towards its goals Dawley *et al* (2004). They play a crucial role in decision-making and policy-making, ensuring that the organization progresses in the right direction (Negeri *et al*., 2023). Effective leaders possess the aptitude, knowledge, skills, and strategy to control and guide the organization (Negeri *et al*., 2023).

Leadership style also influences the level of control exerted by business leaders. Transformational leaders, for example, seek followers' opinions and regularly involve them in decision-making processes. This increased involvement enhances employees' association with the business, strengthens their role within the organization, and amplifies perceptions of control (Bernhard & O'Driscoll, 2011).

Create and Transfer Vision. Leaders play a crucial role in transferring vision, knowledge, and experience within an organization. Research has shown that leaders can facilitate knowledge transfer by providing a clear vision and communicating it effectively to their followers (Kohles *et al*., 2013). This involves sharing knowledge, expanding learning capacity, and creating new knowledge (Zydziunaite *et al*., 2021). Leaders also play a role in creating an environment that supports knowledge transfer, such as by providing resources and promoting a culture of continuous learning (Al-Gharibeh, 2011).

Organizational leadership has been found to have a significant influence on knowledge transfer within a multinational construction organization (Idris *et al*., 2015). Effective leadership in this context involves managing knowledge, facilitating its transfer, and promoting its development (Al-Gharibeh, 2011). Leadership recognizes the importance of knowledge transfer and takes proactive measures to ensure that it continues even in the face of challenges such as the retirement of experienced employees (Diala & Cummings-White, 2013).

In addition to transferring knowledge, leaders also play a role in transferring skills and experience. Research has shown that leaders gain transferable skills through their experiences, and these skills can have long-term impacts on their professional lives and careers (Chase *et al*., 2020). These transferable skills can be applied in various contexts and contribute to the overall growth and development of leaders.

Overall, leaders have a multifaceted role in transferring vision, knowledge, and experience. They provide a clear vision, communicate it effectively, and create an environment that supports knowledge transfer. They also transfer skills and experience that can have long-term impacts on their own professional development and the growth of the organization. Effective leadership is crucial for successful knowledge transfer and organizational success.

Situation Savers. Research has explored the relationship between leadership and crisis management, highlighting the importance of different leadership styles and competencies in effectively navigating through crisis situations. One study found that transformational leadership style has a positive impact on crisis management in organizations (Alkhawlani *et al*., 2019). The study suggests that leaders with prior crisis experience are more capable of handling crisis situations. This highlights the importance of leaders' knowledge and expertise in crisis management.

Another study proposed a conceptual framework that aligns leadership, culture, and crisis management with each stage of crisis management and types of crisis (Bhaduri, 2019). The framework includes four types of leadership: directive, transactional, cognitive, and transformational. It emphasizes the need for organizations to develop leadership competencies and a crisis-prone culture to effectively tackle crisis events (Bhaduri, 2019).

It is important for future research to further investigate the relationship between leadership, culture, and crisis management (Bish *et al*., 2015). Additionally, more research is needed to understand how changing demographics and technology affect leadership and crisis management (Bhaduri, 2019).

Leadership Role. The proposed leadership roles in the metaverse business supported by the literature above explain the support for the priority of leadership roles initiated by stakeholders in the metaverse business. So how is metaverse leadership relevant to the current state of metaverse business? The next discussion will address this. On the other hand, research shows that leadership has an effect on sustain business operations, especially on covid-19 pandemic (Victoria Tibon, 2022).

4.4. Metaverse Leadership

Business transformation has been driven by the power of the metaverse possessed by leaders (human). The various impacts of the metaverse drive have been favorable as depicted in Figure 2.
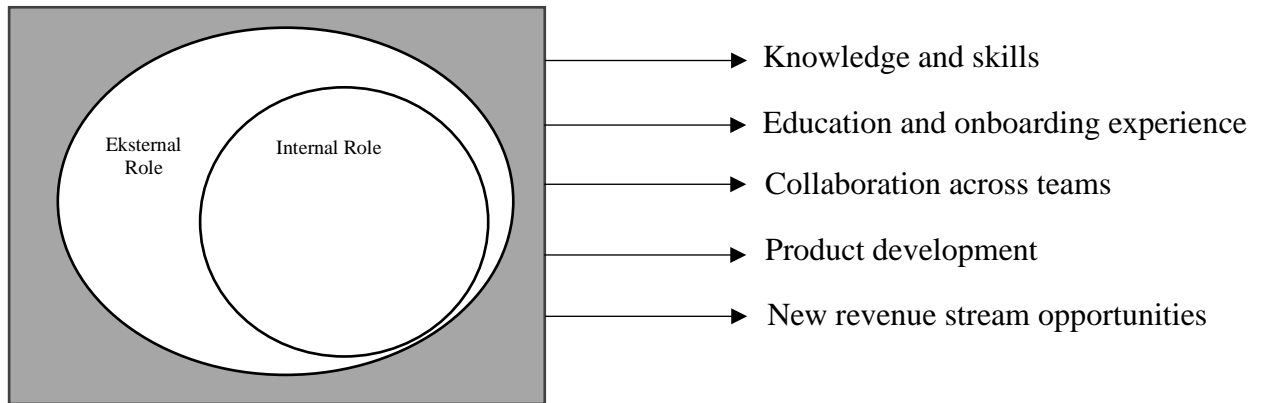
→ Knowledge and skills

→ Education and onboarding experience

→ Collaboration across teams

→ Product development

→ New revenue stream opportunities

Figure 2. Metaverse drive

The academic argument in this study states that the biggest problem in the adaptation of business actors in the metaverse era comes from the individual. For example, it is related to their competence, which causes limited business access to developments outside the organization that are very fast. The leader's mentality in facing the challenges of the metaverse has succeeded in encouraging increased knowledge and skills.

Even in the aspect of education and experience building, the metaverse has facilitated better through the various platforms available. Collaboration between parties is easier to do because the boundaries of distance and time are getting thinner. This indirectly opens up greater opportunities for creativity and innovation that drive business product development. Then what is the further impact? Of course, adding new sources of income.

Previous research also corroborates the above argument. The research highlights the importance of understanding the technological aspects of the metaverse, such as the virtual platforms and tools used for communication and collaboration. It also emphasizes the significance of considering the people involved, including their skills, roles, and interactions within the virtual environment. Additionally, the study emphasizes the role of information sharing and management, as well as the need for effective processes and workflows to facilitate collaboration in the metaverse. (Boughzala *et al*., 2012)

In conclusion, metaverse leadership refers to the leadership practices and strategies employed within virtual worlds or metaverses. Research in this area is still emerging, but studies on team collaboration in virtual worlds and virtual leadership provide valuable insights. Metaverse leaders need to understand the technological aspects of the virtual environment, foster collaboration among team members, and navigate the unique challenges and opportunities presented in virtual settings. (Boughzala *et al*, 2012; Boughzala, M., Carillo, K., & Favier, M. 2012).

Table 1. Leadership Role in Metaverse Era

No	Role	Respondents	Average Scores	Sig. (2-tailed)	% Index	Category
1	Drive the Goal		4.42	0.000	88%	Very Strong
2	Organization control	38	3.84	0.001	77%	Strong
3	Create and transfer the vision		4.71	0.006	94%	Very Strong
4	Savers the situation		3.87	0.001	77%	Strong

Table 1 shows the assessment results of respondents involved in the metaverse business randomly; the stakeholders in the metaverse business such as metaverse startups, business consultants, and metaverse readiness researchers in Indonesia. This assessment measures the leadership roles for the bisTimes New Romanis metaverse discussed in section 4.3. The form presents the assessment with a score of 1 to 5 which means 1 is the weakest role to 5 is the strongest role. Thus, the assessment is objective based on the perspectives of the stakeholders in the metaverse business.

They assessed the role of (human) leadership in the metaverse business. Overall, the roles offered from the stakeholder discussion results were rated as having a very strong role related to the mission and goals of the metaverse business company. While the role related to control and calming the company situation is in the strong category only.

The results present a strong perspective that the strongest metaverse leader role is "vision and purpose" which is related to the metaverse mindset. So that the leader is able to see various opportunities in the future, which generally cannot be seen by the members in the team.

Research on goal-setting theory has shown that setting clear and specific goals can enhance task motivation and performance Locke & Latham (2002). When team members have a clear understanding of the vision and goals of the organization, it provides them with a sense of direction and purpose, which can increase their motivation and commitment to achieving those goals (Lynn & Kalay, 2015; Lynn & Kalay, 2015).
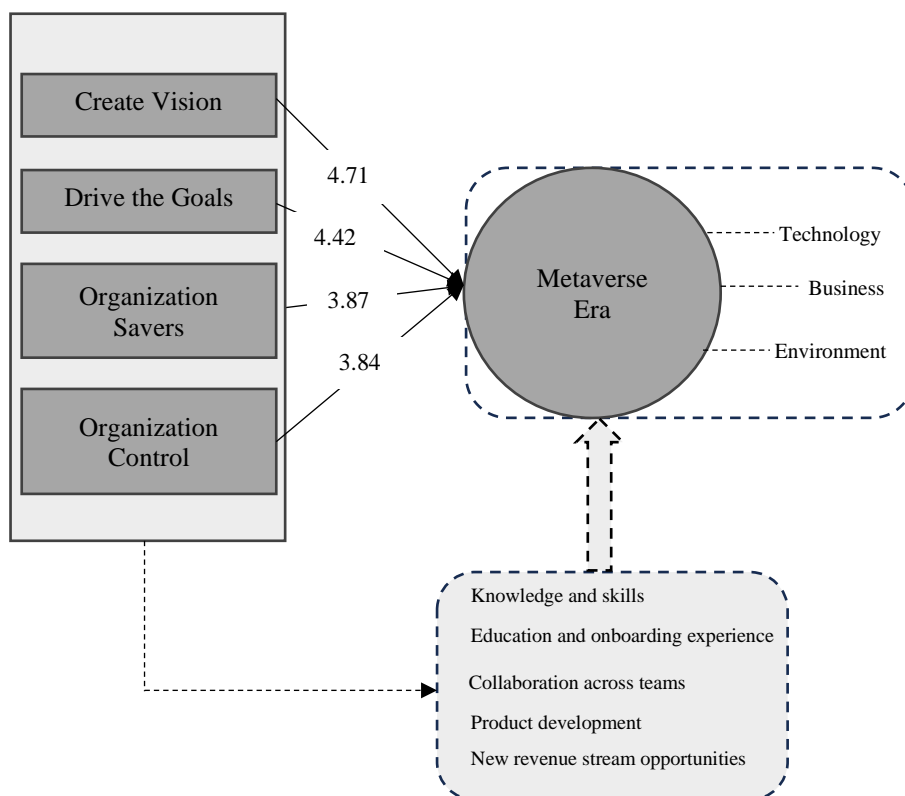

Figure 3. Leadership Role in Riding The Metaverse Era

Furthermore, goal orientation, both at the individual and team level, plays a role in influencing team members' behavior and performance. Studies have found that individuals with a strong goal orientation are more likely to engage in creative activities and exhibit higher

levels of motivation (Zhang *et al*., 2018). Similarly, team-level goal orientation has been shown to impact knowledge sharing and collaboration among team members (Zhang *et al*., 2018).

The results of this research have been corroborated by various literatures conducted over time with consistent results. The research by (Novel *et al*., 2023) emphasizes that the role of leaders in business acceleration in the metaverse era. Thus, the role of metaverse leadership has come to a solid conclusion; starting from the dominance of the human role in the creation of new visionary goals for future metaverse technology. This leads to the strengthening of knowledge and skills through metaverse education and experience, synergized collaboration resulting in a metaverse product. Finally, of course, what is expected is revenue and profit. (See Figure 2)

To summarize all the findings, the leadership role model in the metaverse era is presented in figure 3.

5. CONCLUSION

The conclusion of the findings of this research refers to the power of humans as leaders who drive business organizations in the metaverse era. Initially, the metaverse mindset was dominated by the development of advanced technology that created a virtual world. However, the discussion of stakeholders consisting of academics, IT practitioners, consulting, and representatives from META Indonesia Company as one of the pioneers of metaverse in Indonesia in this study concluded the dominance of humans in the development of the metaverse era. The role of leadership is described in 4 roles, namely create vision, drive the goals, organization savers and control (see figure 3). This role is manifested in the development of knowledge and skills to develop organizations and products so as to ultimately bring wider income opportunities. The assessment of respondents also resulted in the role of leadership in the development of the metaverse era in the excellent category.

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