

EMERGING TRENDS AND ORGANIZATIONAL DRIVERS OF METAVERSE ADOPTION FOR REMOTE WORK: QUANTITATIVE INSIGHTS FROM THE FMCG INDUSTRY

Chaiyasoonthorn W., Sombat P., Chatpibal M., Chaveesuk S.*

Abstract: Adopting and using metaverse technologies for remote work is increasingly becoming a focal point for organizations across industries, including the Fast-Moving Consumer Goods (FMCG) sector. This study aims to investigate the organizational drivers that influence the intention to use the metaverse for remote work within the FMCG industry. Using the extended TAM framework, the study investigated the effects of various constructs on organizational adoption intentions, including leadership support, performance expectancy, effort expectancy, organizational culture, social influence, and facilitating conditions. Primary data was collected from 341 respondents comprising executives and middle managers from representative multinational FMCG companies. The analysis was conducted using correlation analysis and multiple regression analyses. The results revealed that social influence, organizational culture, performance expectancy, leadership support and facilitating conditions significantly influenced the intention to adopt metaverse in remote work. Corporate culture was also found to have a significant influence on found corporate culture to significantly affect effort expectancy, performance expectancy, social influence and facilitating conditions. The research recommended the importance of cultivating a supportive corporate culture. The top-level management should actively support and champion metaverse adoption initiatives. Additionally, firms operating in the FMCG sector should invest in robust network infrastructure, compatible hardware, and software necessary for metaverse adoption.

Key words: metaverse management, metaverse chain management, metaverse adoption, FMCG, remote work

* **Wornchanok Chaiyasoonthorn**, Assoc. Prof., KMITL Business School, King Mongkut's Institute of Technology Ladkrabang, Bangkok, Thailand;

✉ email: wornchanok.ch@kmitl.ac.th,

ORCID: 0000-0001-5936-5299

Paneepan Sombat, Ph.D. KMITL Business School, King Mongkut's Institute of Technology Ladkrabang, Bangkok, Thailand;

✉ email: Paneepan.so@kmitl.ac.th,

ORCID: 0009-0006-7711-258X

Manoj Chatpibal, Ph.D. KMITL Business School, King Mongkut's Institute of Technology Ladkrabang, Bangkok, Thailand;

✉ email: manoj.ch@kmitl.ac.th,

ORCID: 0000-0001-7925-9880

Singha Chaveesuk, Assoc. Prof., KMITL Business School, King Mongkut's Institute of Technology Ladkrabang, Bangkok, Thailand;

✉ corresponding author: singha.ch@kmitl.ac.th,

ORCID: 0000-0002-5256-409X

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Introduction

Over the years, the internet has evolved from the initial network of computers used for academic research to the current public network of large computers forming the Metaverse platform. The concept of a Metaverse involves a digital platform on the internet that provides a digital space for user interaction (Wang, 2022). Indeed, the Metaverse converges the physical and digital worlds, enabling users to work and interact. The digital space forming the Metaverse comprises various 3D evolving technologies on the internet, including Artificial intelligence (AI), Virtual Reality (VR), Augmented Reality (AR), the Internet of Things (IoT), and blockchain, that allow users to interact using avatars (Mozumder et al., 2022). The key features of the Metaverse concept include the ability to allow easy access to virtual reality spaces through internet-enabled devices, including mobile devices (Zaharia et al., 2022). Other vital features of the Metaverse include the shared digital environment, diverse applications, and digital commerce (Ooi et al., 2023; Yaqoob et al., 2023; Culhane and Mangaliso, 2023; Khan, et al., 2023; Rydecki, Chład, 2023).

The evolution of the internet and the emergence of the Metaverse provide opportunities for adopting and applying the concept in business. With the continued application of emerging technologies in business, the Metaverse allows firms to improve their operations and boost efficiency in various ways, including using new collaborative working methods, such as video conferencing, among other operations (Cha, 2022; Turnea et al., 2022). In the Fast-Moving Consumer Goods (FMCG) industry, businesses can utilize Metaverse platforms to build stronger customer relationships and build strong FMCG brands (Trivedi and Negi, 2023). There are various ways in which firms in the FMCG industry can utilize the Metaverse platform. For instance, companies can use the Metaverse platform to perform marketing and brand building through integrating virtual marketing strategies. The continued technological advancements and the effect of global pandemics such as COVID-19 contributed to the emergence of remote working practices in the FMCG industry. Remote working involves the business practice where employees practice their job activities from different locations other than the usual organizational office place of business (McPhail et al., 2024; Remeikienė et al., 2023). Often, employees working remotely are devoid of the distractions common in the workplace, allowing increased focus and greater concentration for increased productivity (Mello et al., 2023).

Despite the continued evolution of the Metaverse and its significance in boosting business development and efficiency, there remains a gap in the willingness to adopt the Metaverse for remote work within the FMCG industry. Some of the organizational drivers hindering the adoption of Metaverse remote work within

FMCG businesses include security concerns. In the workplace, organisations often set up secure equipment that can access sensitive business documents, which raises security concerns when workers work away from the office (Amaizu et al., 2024; Chen, 2023; Androniceanu, 2023; Alabduljader, 2022; Melnychenko, 2021). Also, remote working risks productivity, as remote workers lack consistent supervision. Distractions in remote working environments can lead to risks to productivity, adversely affecting the overall production of the business. To address this gap, this study aimed to explore the organizational drivers of metaverse adoption for remote work: a qualitative analysis in the FMCG industry.

Literature Review

Various theories can be used to explain the idea of technology adoption in business. For instance, the extended Technology Acceptance Model (TAM) outlines the theoretical foundations of the intention to use new technology, including perceived ease of use and usefulness (Al-Adwan et al., 2023; Kwilinski, 2023; Dat and Hung, 2023). Similarly, the Unified Theory of Acceptance and Use of Technology (UTAUT) also builds on the TAM theory and proposes various constructs influencing the intention to use new technology.

The extended technology acceptance theory explains the idea of technology adoption based on social forms, including voluntariness, image, and subjective norms, as the determining factors in the acceptance or rejection of new technology systems (Al-Adwan et al., 2023). Similarly, the model also incorporates the cognitive determinants in accepting and adopting new technology, including the perceived ease of use, output, and job relevance. In this theory, therefore, businesses are likely to adopt new technology based on the perceived ease of use and its perceived usefulness to the company. Granić (2023) informs that the TAM 2 theory underlines the aspect of output quality as a determinant in the likelihood of a positive perception of technology.

The Unified Theory of Acceptance and Use Technology (UTAUT) outlines technology adoption and acceptance as being determined by behavioural intention. Based on the model, the likelihood of adopting new technology systems depends on various constructs, including performance expectancy, effort expectancy, social influence, and facilitating conditions (Guo et al., 2024). For instance, under the performance expectance construct, technology adoption is based on the degree to which the user believes the new technology can assist in job performance. Also, under the effort expectancy construct, adopting new technology is based on the degree of ease with which the user associates the technology. Under the social construct, the ease of technology adoption is based on the user's perception of the importance of technology to society (Kumar et al., 2023). Similarly, based on the facilitations conditions, the ease of technology adoption is based on the user's belief in the capability of the organization's technical infrastructure to support the system. The UTAUT model can, thus, be used to explain the adoption of new technology in the business, including the Fast-Moving Consumer Goods (FMCGs) businesses,

based on antecedents such as organizational culture, leadership, and support and commitment to change.

In the current business environment, where increased productivity and efficiency play a critical role in success, incorporating new technology is thus vital for business growth. The UTAUT model allows management to determine factors within the organization that influence the adoption of new technology. Dasgupta and Gupta (2013) assert that organizational culture is one of the antecedent UTAUT models to determine the user adoption and acceptance of new technology. For instance, organizational culture influences acceptance of new technology through the impact on the perceived performance expectancy of the users. Where the organizational culture motivates performance, the employees are likely to accept new technology to improve their performance.

Charismatic leadership is also an antecedent of the UTAUT model in adopting and accepting new technology (Dasgupta and Gupta, 2019; van Dun and Kumar, 2023). Often, charismatic leadership is associated with increased performance expectancy. Neufeld et al. (2007) declare that leadership is important if the goal is to enhance organizational performance, particularly through the support and encouragement of technology adoption. This perspective bolsters the effectiveness of leaders who actively facilitate and promote technological advancements within their teams/organizations. Thus, they not only pave the way for improved operational efficiency and performance but also cultivate an innovative culture and progress. Leaders prioritizing support and guidance in adopting technology are considered instrumental for team motivation. This motivational element is vital as it directly impacts the willingness and morale of team members to embrace innovative technological tools and processes, resulting in a more resilient, productive, and competitive organizational setting. Furthermore, it is hypothesized that companies that prioritize learning, experimentation, and ongoing enhancement are more inclined to cultivate a favourable mindset to adopt new technology (de Carmo Caccia-Bava et al., 2006; Kamarudin et al. 2024).

Various empirical studies indicate the adoption of remote work technologies within various industries that can be incorporated into the Fast-Moving Consumer Goods (FMCGs) industry. The study by Sahut and Lissillour (2023) analyzed the adoption of remote working after the Covid-19 lockdown. While it was necessary to engage in remote working practice during the pandemic, the research determined that adopting remote working practice after the COVID-19 lockdown was determined by the user's behavioural intentions, behavior expectations, and the facilitating conditions. Similarly, Battisti and Leonidou (2022) attribute various psychological drivers to employees' adoption of remote working.

For instance, behavioural variables such as job satisfaction and technostress play a critical role in the employees' motivation to adopt new technology. The FMCG industry can thus adopt the various factors influencing remote working adoption, including improving the facilitating conditions and motivating the employees' behavioural intentions and expectations to promote remote working technology

adoption. Research on adopting the Metaverse and similar technologies in the business environment indicates the potential for businesses to discover new ways to improve their efficiency and productivity. Owens et al. (2011) affirm that metaverse technology capabilities and virtual world projects are critical in enhancing virtual projects. Incorporating the Metaverse technology capabilities comes with enhancing communication and interaction of the project team members and representation, leading to clarity of the project requirements and coordination. Metaverse technologies in the business environment also merge the interplay of social behavior and technology capabilities. Chen et al. (2023) aver that the incorporation of Metaverse in the business supply chain knowledge sharing indicates that constructs such as performance expectancy and facilitating conditions play a critical role in developing trust along the business supply chains and motivating the behavior intentions to adopt the metaverse technology.

Various drivers influence the adoption of the Metaverse technologies for remote work in business organizations. For instance, Al-Sharafi et al. (2023) articulate that a range of drivers, including psychological, social, technological, economic, and privacy and security factors in organizations, influence the adoption of Metaverse technologies for remote working practice. Indeed, like any emerging technology, the Metaverse adoption is driven by the users' hopes and fears of its impact on remote working. Jin (2024) articulates that the adoption of metaverse technologies in remote working practice by organizations could be based on the users' trust or mistrust of the technology in various aspects, including social phobia, digital inequality, digital transparency, and security, among other elements. The Metaverse presents potential benefits to organizational performance and efficiency; thus, addressing the organizational drivers of technology adoption will address the issues of the technology's adoption for remote working practice.

Conceptual framework

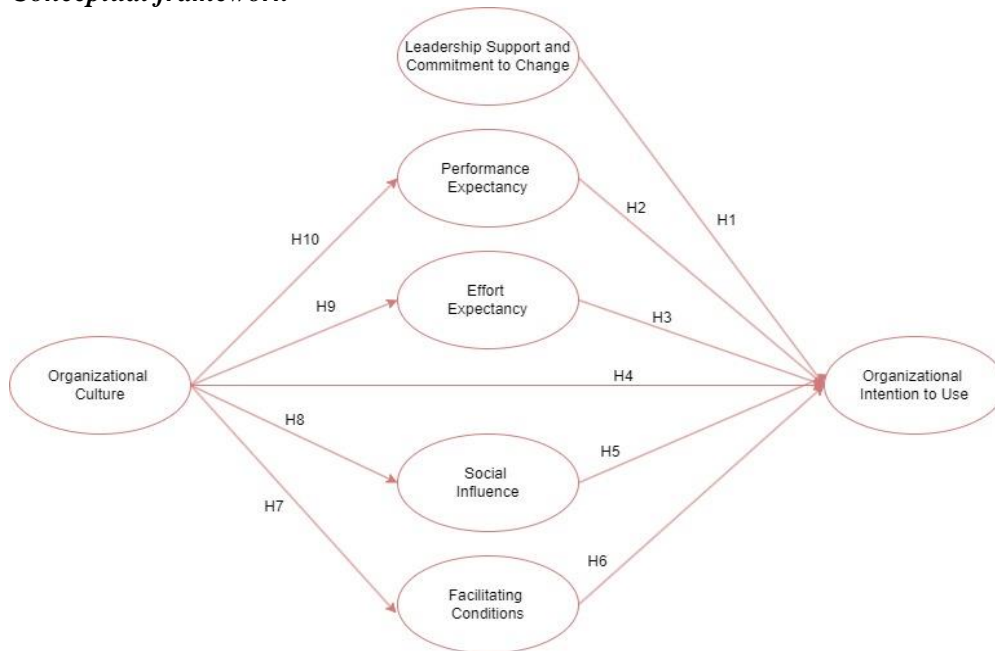


Figure 1: Conceptual Framework of the Study

From the theoretical literature and the critical review of empirical literature, this study proposed a conceptual framework depicted pictorially in Figure 1. The framework comprised six independent variables - performance expectancy, effort expectancy, social influence, facilitating conditions, organizational culture, and leadership support and commitment to change. The dependent variable is organizational intention to use. However, the effect of organizational change on the other independent variables was evaluated. The developed hypotheses are stated as follows.

H1: Leadership support and commitment to change positively and significantly influence organizational intention to use metaverse for remote work.

H2: Performance expectancy positively and significantly influences organizational intention to use metaverse for remote work.

H3: Effort expectancy positively and significantly influences organizational intention to use metaverse for remote work.

H4: Organizational culture positively and significantly influences organizational intention to use metaverse for remote work.

H5: Social influence positively and significantly influences organizational intention to use metaverse for remote work.

H6: Facilitating condition positively and significantly influences organizational intention to use metaverse for remote work.

H7: Organizational culture positively and significantly influences facilitating conditions regarding the use metaverse for remote work.

H8: Organizational culture positively and significantly influences social influence regarding the use metaverse for remote work.

H9: Organizational culture positively and significantly influences effort expectancy regarding the use metaverse for remote work.

H10: Organizational culture positively and significantly influences performance expectancy regarding using metaverse for remote work.

Research Methodology

This research adopted the quantitative survey research design. The population of the study was the decision-makers and stakeholders within FMCG multinational companies considering Metaverse adoption for remote work. Considering that this is a broad population, a representative sample was selected. The data was collected from a list of FMCG multinational companies representing different sub-sectors. These sub-sectors included food and beverage, personal care, household products, health and wellness, and confectionery. The survey utilised a structured instrument (closed-ended questionnaire) to collect data from executives and middle managers involved in decision-making related to technology adoption and remote work practices within FMCG multinational companies. The research targeted at least 400 respondents. The target was to collect data from 80 respondents from each listed sub-sector to achieve sufficient statistical power for the analysis. The study adopted convenience sampling with a stratified approach to ensure representation across different departments and functions within each company. This provides a diverse sample that captures various perspectives.

The questionnaire was developed by adopting the extended TAM model, with various constructs including performance expectancy, effort expectancy, social influence, facilitating conditions, organizational intention to use, the additional constructs of organizational culture, and leadership support and commitment to change. A cover letter was attached to the questionnaire explaining the study's purpose, including confidentiality assurances and instructions for completing the survey. The questions were developed using a 5-point Likert scale (5 = strongly disagree to 1 = strongly agree). The survey questions/items were generated for each construct based on existing literature and expert consultations. The survey was hosted on Google Forms, while the data was collected by electronically distributing the link to the questionnaire to the participants via email between October 2, 2023, and December 29, 2023. The questionnaire had two major sections – the demographic section (collected data on aspects such as age, gender, etc.) and the study constructs questions.

The first data analysis technique adopted was the descriptive statistics (e.g., means, standard deviations, frequencies) of the demographic characteristics of the respondents. The correlation analysis was then conducted to evaluate the relationship between the study variables. A regression analysis was adopted to assess the

relationship between the hypotheses and confirm them. The study ended up collecting data from 374 respondents. From these respondents, 341 responses were considered suitable for usage after adjusting for missing data and outliers.

Research Results

The first analysis was descriptive statistics of the demographic analysis of the respondents of the study. The aspects evaluated included the age, gender, marital status, etc. of the respondents. The results indicated that considering the gender, the majority were male (60%), while females were the least (36%). However, some also stated that they were non-binary (4%). The age brackets of the respondents were also evaluated, where the majority was in the age brackets 41 – 50 years (48%), followed by those who were 31 – 40 years (20%). A significant proportion were also those between 20 and 30 years of age. The highest education level of the respondents was evaluated. The majority were those with a bachelor's education (42%), followed by those with a master's level (28%), and then those with high school or equivalent (16%). The study went further to evaluate the years of experience of the managers in the FMCG sector the managers were working. The results indicated that the majority had more than 15 years of experience (28%), followed by those who had 5-9 years of experience (26%) and then those with 10 – 15 years of experience (26%). The company size of the respondents was also evaluated, where the majority were found to be medium-sized companies (51 – 500 employees), comprising 52%, followed by small companies (1 – 50 employees), at 35%. The classification of the companies was based on the classification by Verwijns (2023). The last aspect evaluated was the management position of the respondents, where the majority of respondents were middle managers (62%). The results of these descriptive statistics are summarized in Table 1.

Table 1. Descriptive Statistics

Gender	Count (n)	Percentage (%)
LGBT	13	4
Female	122	36
Male	206	60
Total	341	100
Age	Count (n)	Percentage (%)
20-30 years	53	16
31-40 years	69	20
41-50 years	164	48
51-60 years	38	11
above 60 years	17	5
Total	341	100
Education	Count (n)	Percentage (%)
High school and equivalent	53	16
Bachelors	143	42
Masters	97	28
Doctorate	48	14
Total	341	100
Experience in FMCG Industry:	Count (n)	Percentage (%)
Less than 5 years	68	20
5-9 years	89	26
10 - 15 years	88	26
Above 15 years	96	28
Total	341	100
Company Size	Count (n)	Percentage (%)
Small (1-50 employees)	118	35
Medium (51-500 employees)	176	52
Large (over 500 employees)	47	14
Total	341	100
Management Position	Count (n)	Percentage (%)
Executive (e.g., CEO, CFO)	68	20
Middle Manager (e.g., Department Manager, Team Leader)	210	62
Other lower management level	63	18
Total	341	100

Correlation analysis

The Pearson correlation analysis was conducted at a 95% confidence level to evaluate the relationship between the variables (Figure 2). The specific interest was the relationship between the independent variable (organization intention to use) and other independent variables (performance expectancy, effort expectancy, social influence, facilitating conditions, organizational culture, and leadership support and commitment to change).

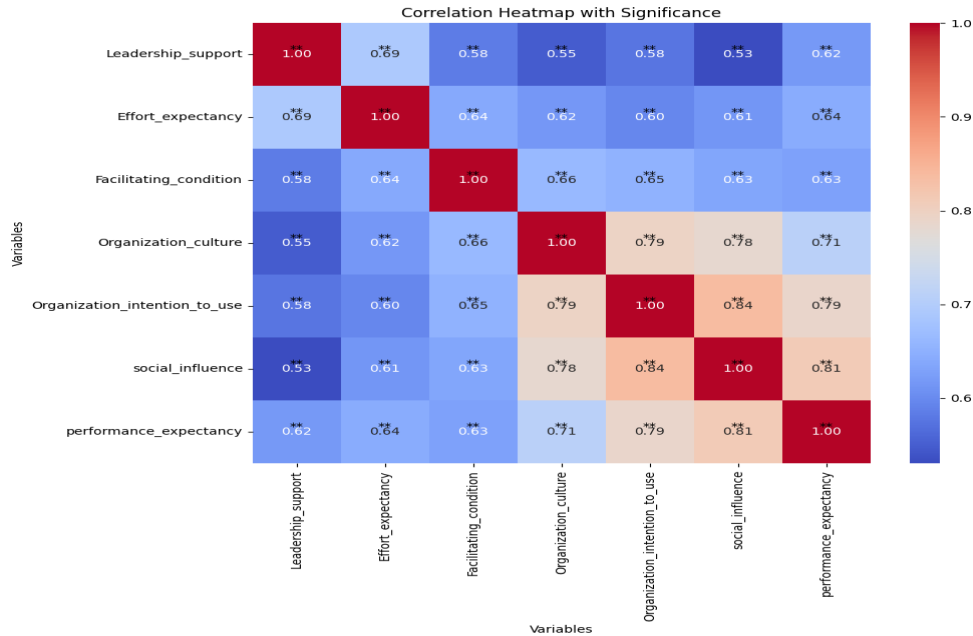


Figure 2: Correlation Analysis Results

Furthermore, it is hypothesized that companies that prioritize learning, experimentation, and ongoing enhancement are more inclined to cultivate a favourable mindset to adopt new technology. From the heatmap scenario presented in Figure 2, it was observed that there were positive and significant relationships between the independent variables (performance expectancy, effort expectancy, social influence, facilitating conditions, organizational culture, and leadership support and commitment to change) and organization intention to use. From statistics, the correlation between the correlation between organization intention to use and social influence was the highest ($r = 0.84, p < 0.05$) was the highest, followed by the correlation between organization intention to use and performance expectancy ($r = 0.79, p < 0.05$). At the same level was the correlation between the organization's intention to use and organizational culture ($r = 0.79, p < 0.05$). The least correlated was the organization's intention to use and leadership support ($r = 0.58, p < 0.05$). The positive relationship implied that an increase in the independent variables would lead to a positive growth in the organization's intention to use.

Regression analysis

The regression analysis was conducted to investigate the effects of the independent variables (performance expectancy, effort expectancy, social influence, facilitating conditions, organizational culture, and leadership support and commitment to change) on the dependent variable (organizational intention to use). The results are summarized herein; the results revealed that the adjusted R-squared was 0.78, which indicated that 78% of the variation in the independent variable (organizational intention to use metaverse) was explained by the independent variables included in the model. The overall model was also significant since the p-value was less than 0.05 $F(6, 334) = 195.70, p=0.000$. Regarding the relationship between the variables, leadership support was found to have a significant and positive effect on the organizational intention to use metaverse for remote work in the FMCG Industry ($\beta = 0.0815, p=0.042$). This supported H1. Performance expectancy was found to have a significant and positive effect on the organizational intention to use metaverse for remote work in the FMCG Industry ($\beta = 0.2097, p=0.000$). This supported H2. Effort expectancy was found to have an insignificant and negative effect on the organizational intention to use metaverse for remote work in the FMCG Industry ($\beta = -0.0551, p=0.190$). This did not support H3.

Organizational culture was found to have a significant and positive effect on organizational intention to use metaverse for remote work in the FMCG Industry ($\beta = 0.2835, p=0.000$). This supported H4. Social influence was found to have a significant and positive effect on organizational intention to use metaverse for remote work in the FMCG Industry ($\beta = 0.3939, p=0.000$). This supported H5. Facilitating condition was found to have a significant and positive effect on the organizational intention to use metaverse for remote work in the FMCG Industry ($\beta = 0.0809, p=0.000$). This supported H6. Results are summarized in Table 2.

Table 2. Organizational Metaverse Intention Regression Results

R-squared:	0.78					
Adj. R-squared:	0.78					
F-statistic:	195.70					
Prob (F-statistic):	0.00					
Log-Likelihood:	-91.71					
AIC:	197.40					
BIC:	224.20					
Variables	Coefficients	Std err	t	P> t	[0.025	0.975]
const	0.0688	0.123	0.559	0.577	-0.173	0.311
Leadership support	0.0815	0.04	2.041	0.042	0.003	0.160
Effort expectancy	-0.0551	0.042	-1.312	0.19	-0.138	0.028
Facilitating condition	0.0809	0.041	1.975	0.049	0.000	0.162
Organization culture	0.2835	0.046	6.191	0.000	0.193	0.374

Social influence	0.3939	0.052	7.644	0.000	0.293	0.495
Performance expectancy	0.2097	0.049	4.302	0.000	0.114	0.306
Omnibus:	2.439	D. Watson:	1.993			
Prob (Omnibus):	0.295	Jarque-Bera	2.523			
Skew:	0.018	Prob(JB):	0.283			
Kurtosis:	3.420	Cond. No.	67.8			

A regression analysis was also conducted to analyze the effect of organizational culture on performance expectancy, effort expectancy, social influence, and facilitating conditions. The results are summarized in Table 3. The results indicated that organizational culture significantly and positively influences facilitating conditions regarding the use of metaverse for remote work ($\beta = 0.6365$, $p=0.000$), confirming hypothesis H7. Organizational culture was found to significantly and positively influence social influence regarding using metaverse for remote work ($\beta = 0.7991$, $p=0.000$), hence confirming hypothesis H8. Organizational culture significantly and positively influences effort expectancy regarding the use of metaverse for remote work ($\beta = 0.6088$, $p=0.000$), hence confirming hypothesis H9. Organizational culture significantly and positively influences performance expectancy regarding the use of metaverse for remote work ($\beta = 0.7179$, $p=0.000$), hence confirming hypothesis H10.

Table 3. Regression Results on the Effect of Organizational Culture

	Effort expectancy	Facilitating condition	Social influence	Performance expectancy
const	1.5457*** (0.1615)	1.3601*** (0.1487)	0.7948*** (0.1314)	1.0950*** (0.1480)
Organization culture	0.6088*** (0.0424)	0.6365*** (0.0390)	0.7991*** (0.0345)	0.7179*** (0.0388)
R-squared	0.3784	0.4398	0.6129	0.5020
R-squared Adj.	0.3765	0.4381	0.6117	0.5005
R2	0.38	0.44	0.61	0.50
N	341	341	341	341

NB: *** = significant at 99% confidence level, ** = significant at 95% confidence level; figures in parenthesis () are standard errors.

Discussion

This study investigated the organizational drivers of metaverse adoption for remote work under a case study of the FMCG industry. Firstly, the study focused on exploring the factors that drive the organization's intention to adopt metaverse in remote work in the FMCG sector. The research found that out of the six factors considered, five (leadership support, facilitating condition, organization culture, social influence, and performance expectancy) positively and significantly influenced metaverse adoption for remote work in the FMCG industry. However, effort expectancy was found to have an insignificant and negative impact.

Various discussions with reference to literature were therefore developed. First, social influence had the most substantial influence effect on the intention to adopt metaverse technologies for remote work within the FMCG industry. The results show that if aspects of social influence improved by one unit, the intention to adopt metaverse would improve by 0.3939 units. This implies that perceptions of social peers play a crucial role in adopting new technologies. Social aspects shape the organizational strategies and decision-making processes regarding technology adoption (Graf-Vlachy et al., 2018). For instance, actions taken by industry leaders and direct competitors in the FMCG sector, such as adopting metaverse for remote work, make other businesses feel compelled to follow. The findings align with that of AlSaleh and Thakur (2019), who indicated that the influence of external stakeholders, such as customers, suppliers, and regulatory bodies, also play a significant role in shaping organizational behavior through their expectations and demands.

The second variable in influence was organizational culture. The results implied that innovative, risk-tolerant organizational culture facilitates the adoption of groundbreaking technologies like the metaverse. These findings are supported by Abd Rahman et al. (2013), who indicated that firms with cultures that value innovation and flexibility are more likely to adopt new technologies to enhance their operations and performance. This research suggests that a culture (shared beliefs, values and practices) may hinder or encourage technology adoption. For instance, an innovative, risk-tolerant, collaborative and communicative environment and ongoing learning and development, both at the individual and organizational levels, are aspects that would encourage the adoption of a metaverse in remote work (Heinze and Heinze, 2020).

The expected performance, implying the perceived benefits after adopting metaverse technology, such as improved collaboration and productivity, are critical determinants of its adoption. The individuals' perceived utility and effectiveness in integrating the metaverse into their work practices are essential considerations towards its adoption. Sair and Danish (2018) made similar observations that performance aspects that influence the adoption of technology include employee engagement, increased productivity, efficient utilization of resources, and potential growth and profitability.

Leadership is a driver of innovation. Leaders who clearly articulate the vision of the business and champion innovative technology could inspire the adoption of a metaverse in remote working in their businesses. In similar findings, Novitasari et al.(2024) suggested that leadership is important towards technology adoption, as they chip in in terms of resource allocation and necessary investments such as infrastructure and training programs. They also facilitate strategic alignment, such as strategically positioning the metaverse as a tool to enhance competitiveness, foster collaboration, and drive business growth. This research further postulates that facilitating conditions such as the availability of robust network infrastructure, compatible hardware and software, secure data storage solutions, and overall technical and organizational infrastructure is necessary to support metaverse adoption in remote work. Widodo et al. (2022) support our observations by highlighting that an organizational support system designed to facilitate technology integration could assist staff in navigating virtual environments and foster their technology adoption.

In addition, this research found organizational culture to significantly influence effort expectancy, performance expectancy, social influence and facilitating conditions. It implies that organizational culture shapes the organizational environment, including the availability of resources and support systems necessary for technology adoption. In the same breath, the research postulates that organizations with a strong culture of collaboration, knowledge sharing, and employee empowerment are more likely to foster an environment where social influence positively impacts technology adoption decisions. It is also postulated that firms with a culture that values learning, experimentation, and continuous improvement are more likely to foster a mindset conducive to embracing new technologies (de Carmo Caccia-Bava et al., 2006; Pypłacz, 2022). Additionally, a business that pays attention to aspects of efficiency, effectiveness, and excellence is more likely to foster an environment where employees perceive the metaverse as a valuable tool for enhancing productivity, collaboration, and performance.

Theoretical and managerial implications

From the results, several theoretical and managerial recommendations were developed. Considering theoretical implications, this study recommends the inclusion of organizational culture into the aspects of technology adoption models. Including organizational culture in models such as the TAM or UTAUT model could expound the perceptions of technology usefulness, ease of use, and social influence. Another aspect is the need to understand the role of leadership support in technology adoption. In this case, research is needed to explore the specific behaviors and actions of leaders that influence technology adoption decisions within organizations. This would entail various and different leadership styles and approaches that support the stakeholder's willingness to adopt technology.

The first organizational recommendation was the importance of cultivating a supportive organizational culture, which would encourage technological innovation – specifically the metaverse technology in remote work in the FMCG sector. This

culture should foster innovation, collaboration, and flexibility within the organization. This culture should also encourage open communication, experimentation, and knowledge sharing. The second recommendation is that leadership and vision support should be provided to foster the adoption of metaverse technology for remote working in the FMCG sector. This should entail that top-level management actively supports and champions metaverse adoption initiatives. As well as communicate a clear vision of how the metaverse can transform remote work practices and drive organizational success. Adopting and successfully integrating any technology in the business undertaking requires significant investment in technological infrastructure and support systems. Therefore, this research recommends that firms operating in the FMCG sector invest in robust network infrastructure, compatible hardware, and software necessary for metaverse adoption. They should also consider providing training and support programs to upskill employees in navigating virtual environments and utilizing metaverse technologies effectively.

Conclusion

This study aimed to investigate the organizational drivers of metaverse adoption for remote work within the fast-moving consumer goods (FMCG) industry. Several findings were obtained by adopting the quantitative survey of executives and middle managers from the representative FMCG firms. The key constructs utilized included leadership support, performance expectancy, effort expectancy, organizational culture, social influence, and facilitating conditions. This sheds crucial light on the necessary factors that drive the intention to adopt metaverse technology in remote work. Social influence emerged as the most influential driver, which indicated the importance of industry trends, competitor actions, and peer perceptions in driving organizational decisions regarding metaverse adoption. Organizational culture was found to play a critical role in shaping metaverse adoption intentions through innovative and risk-tolerant culture. Performance expectancy was a significant driver, which showed the importance of exploring the perceived benefits, such as improved collaboration, productivity, and employee engagement. Other significant drivers factors included leadership support and facilitating conditions, highlighting the importance of organizational leadership support and the availability of necessary technological resources and infrastructure. The research further found that organizational culture is critical in shaping various aspects of metaverse adoption in remote work through its significant influence on facilitating conditions, social influence, effort expectancy, and performance expectancy.

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NAJNOWSZE TRENDY I CZYNNIKI ORGANIZACYJNE WPŁYWAJĄCE NA WDRAŻANIE METAVERSE DO PRACY ZDALNEJ: ILOŚCIOWE WNIOSKI Z BRANŻY FMCG

Streszczenie: Przyjęcie i wykorzystanie technologii metaverse do pracy zdalnej staje się coraz ważniejszym punktem zainteresowania organizacji w różnych branżach, w tym w sektorze dóbr szybko zbywalnych (FMCG). Celem niniejszych dociekań jest zbadanie czynników organizacyjnych wpływających na zamiar wykorzystania metaverse do pracy zdalnej w branży FMCG. Wykorzystując rozszerzony model TAM, badanie analizowało wpływ różnych konstrukcji na zamiary organizacyjne dotyczące wdrożenia, w tym wsparcie liderów, oczekiwaną wydajność, oczekiwany wysiłek, kulturę organizacyjną, wpływ społeczny oraz warunki sprzyjające. Dane pierwotne zostały zebrane od 341 respondentów, w tym dyrektorów i menedżerów średniego szczebla z reprezentatywnych międzynarodowych firm FMCG. Badania zostały przeprowadzone przy użyciu analizy korelacji i analiz regresji wielokrotnej. Wyniki ujawniły, że wpływ społeczny, kultura organizacyjna, oczekiwana wydajność, wsparcie liderów i warunki sprzyjające znacząco wpływają na zamiar wdrożenia metaverse do pracy zdalnej. Wyniki ujawniły, że wpływ społeczny, kultura organizacyjna, oczekiwania dotyczące wydajności, wsparcie ze strony kierownictwa oraz warunki ułatwiające znacząco wpłynęły na chęć wdrożenia metaverse do pracy zdalnej. Badanie podkreśliło znaczenie kultywowania wspierającej kultury korporacyjnej. Zarząd najwyższego szczebla powinien aktywnie wspierać i promować inicjatywy wdrażania metaverse. Dodatkowo, firmy działające w sektorze FMCG powinny inwestować w solidną infrastrukturę sieciową, kompatybilny sprzęt i oprogramowanie niezbędne do wdrożenia metaverse.

Słowa kluczowe: zarządzanie metaverse, zarządzanie łańcuchem dostaw metaverse, wdrażanie metaverse, FMCG, praca zdalna