ORGANIZATIONAL CULTURE AND DIGITAL TRANSFORMATION OF MSMES: BIBLIOMETRIC AND SYSTEMATIC LITERATURE ANALYSIS

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Abstract: Digital transformation and organizational culture have an interesting relationship to research. The growing adaptation of technology depends on how good the culture in an organization is. Likewise, MSME players also need digital transformation in developing their business. Various studies have been conducted in understanding the relationship between organizational culture and digital transformation but have experienced inconsistencies. This article discusses how previous research explains the relationship. Systematic literature review and bibliometric analysis have been used in this study to explore how far researchers get results from the relationship between culture and digital transformation.

Keywords: organizational culture, digital transformation, MSMEs

INTRODUCTION

The number one barrier to digital transformation is culture (Tuukkanen et al., 2021). Digitalization requires the need for adequate culture for the successful implementation of digital transformation (Hartl & Hess, 2017). The factor that best supports the development of digital technology is culture, and cultural differences in each country are different (Fanea-Ivanovici & Pana, 2020). That is the reason for the differences in the development of the use of digital technology in various countries. Some studies also consider culture as a corporate intangible asset that allows companies to deal with future uncertainties (Guiso et al., 2015; Pacelli, 2019). Culture is related to innovation, sustainability, reproducibility, participatory and efficiency (Fanea-Ivanovici & Pana, 2020). A good technological culture will also reduce costs, time, and distance. This includes the reason for the uneven distribution of technology in a country due to a lack of digital culture (Fanea-Ivanovici & Pana, 2020). Burchardt & Maisch (2019), A culture of agility and accountability is needed in the context of digitalization. A culture that is reflected in agility and accountability makes a company more organized, flexible and adaptable. In addition, an adaptive and participative culture is essential for the development of a sustainable corporate
strategy (Burchardt & Maisch, 2019). Fenech et al. (2019) said that to be able to improve in the digital transformation strategy is to pay attention to corporate culture. The importance of knowing one's own culture is to assess how culture can contribute to the rejection or acceptance of technology. If the corporate culture principally rejects digital values, then the adoption of digital technology will be very difficult. Several studies explain how culture has an influence on digital transformation (Bakhov et al., 2020; Porcu et al., 2020; Vogelsang et al., 2019).

This research intends to explain how previous studies explain the relationship between organizational culture and digital transformation in MSMEs. Thus, it can help further research in taking interesting and up-to-date topics.

**METHOD**

This study follows the PRISMA (Preferred Reporting Items for Systematic Review and Meta Analysis) analysis method. The beginning of data exploration was carried out using the publish or perish application based on google scholar. The keywords used were "organization culture, digital transformation, SME" with search results of 710 articles. The time span of the article search is 2018-2024. Then adjusted to the keywords, it became 89 articles. Articles that can be accessed are 34.

**Bibliometric Analysis**

Being able to explore and analyze large numbers is one of the advantages of bibliometric analysis using images that make it easy to analyze various articles (Donthu et al., 2021). The following are the steps in analyzing bibliometrics.

![Bibliometric Analysis](Figure 1. Bibliometric Analysis)

**Data Collection**

Data collection is done by using the publish or perish application to explore various articles for analysis. Then the data will be saved in RIS format. The data is then updated using Mendeley and then analyzed using the VOS Viewer application. The keywords used are organization culture, digital transformation, SME with a time frame of 2018-2024 so that 34 articles can be accessed.
VOS Viewer Analysis

VOS Viewer can be used in several types of analysis, namely co-citation, co-occurrence, co-authorship, and bibliographic coupling. The approach taken is to look at co-authorship and co-occurrence analysis so that it allows researchers to analyze the author network and the variables studied by previous researchers.

RESULTS AND DISCUSSION

Result

The research used a database from google scholar. 89 articles published in the 2018-2024 timeframe using a threshold of 1 in co-authorship and co-occurrence.

1. Co-authorship

![Figure 2. connected co-authorship](image-url)
The results of data processing on VOSViewer can be seen in Figure 2 and Figure 3. Figure 2 shows the results that there are 2 clusters in the co-authorship relationship. The first cluster contains 25 authors, and the second author is 7 authors. The first cluster is filled by oddo, hakala, Chesbrough, brem, glones, ritala, almpanapoulou, norskov, nylund, dabrowska, mention, radziwon, marulla, mortasa, cucino. The second cluster consists of di minin, del sarto, Marinelli, spigarelli, Lepore, gregori and crupi. The first cluster is interconnected and directly connected to di minin, as well as the second clusture are all interconnected and directly connected to di minin. Meanwhile, in Figure 3, namely the unconnected co-authorship, it can be seen that there are 610 authors who research organizational culture, digital transformation, and MSMEs.

2. Co-occurrence
The results of the VOSViewer analysis in Figure 4 show that there are 14 clusters associated with the keywords. The 14 clusters are marked with different colors. From the figure it is also known that there are 84 items found. Cluster 1 has 11 items that are colored red. Cluster 2 has 11 items that are colored green. Cluster 3 has 10 items that are colored blue. Cluster 4 has 7 items that are colored yellow. Cluster 5 has 7 items that are purple. Cluster 6 has items that are light blue. Cluster 7 has 6 items that are orange. Cluster 8 has 6 items that are brown. Cluster 9 has 5 items that are light purple. Cluster 10 has 5 items that are light brown. Cluster 11 has 4 items that are light green. Cluster 12 has 4 items that are gray. Cluster 13 has 1 item that is light green. Cluster 14 has 1 item that is light purple. Clusters are intended to make it easier for researchers to classify the topics discussed in each study. In addition, it can provide a broad picture of how the relationship between variables from various topics.

Various variable sizes indicate how often the related variable is researched or how much research is done. The larger the circle, the more research related to the variable. The largest circle is digital transformation. Then some topics that are often used are Digital technology, digital strategy, SMEs, and covid-19. Based on the variables studied, digital transformation has the most research compared to other variables, then SME and organizational culture are still quite rare to study. By knowing the various measures, it can be a reference for future researchers in taking the desired topic. It is better for future researchers to take variables that still have small circles and can be used as research gaps because they have limited discussion. Research novelty can also be shown by the following figure 5:
Research novelty is important to know to get good research. From Figure 5 above, the yellow mark is the most recent variable. While the darker indicates that the variable has been researched for a long time. Some variables such as digital transition, SME, organization structure are still hot to discuss. While on the contrary, variables such as maturity model, business model, and leadership have long been done. Regarding digital transformation, it is still good enough to be researched, while SME and culture are still hot to be researched.

Discussion

An easier decision-making process is an advantage of MSME culture. Culture, which is very important in implementing corporate strategies, has a drawback, namely the absence of proper management in some companies (Indiyati et al., 2021; Trushkina et al., 2020). The lack of application of culture in the digital context occurs for several reasons, first due to a lack of understanding of the essence of digital, secondly the lack of skills and motivation of employees to participate in creating corporate culture (Trushkina et al., 2020). Companies tend to ignore cultural aspects even though culture is a determinant of successful digitalization. Hie (2019) said that culture has a positive relationship with digitalization, meaning that the faster the company's culture adapts, the faster the company can win a competitive advantage. Cultural differences in each country result in different technological development processes (Fanea-Ivanovici & Pana, 2020).

According to Fanea-Ivanovici & Pana (2020), the use of emerging cultural technologies in China has improved welfare. Meanwhile, in Singapore, the spread of historical and cultural knowledge through innovation is part of the transition to a developed country so that cultural differences in each country result in different technological development processes. Tuukkanne & Rusu (2021) explain that MSMEs are basically more flexible, faster, and less restricted than large companies. However, their size causes some obstacles in applying digitalization opportunities and limited resources. The low implementation of digitalization is due to companies focusing too much on technology procurement and digitalization but not paying attention to organizational culture, human resources, and leadership potential (Trushkina et al, 2020).

Digital transformation requires companies to have a good and dynamic culture (Hartl & Hess, 2017), according to which organizational culture can be an obstacle in the development of digital transformation. The context of digitalization requires a culture of agility and openness (Burchardta & Maisch, 2019). An open and participatory culture is important for the development of sustainable MSME digital strategies in times of constant change. Culture is very important for an organization because culture is the values that apply every day in an organization and become implicit guidelines in every organizational activity, so it can be said that culture is the number one obstacle in digital transformation. Other research explains that organizational culture
transformation has a positive and significant influence on digital maturity in banking in Indonesia (Hie, 2019). To get adequate digital transformation, it is necessary to call for cultural change and emphasize the need for an adequate digital culture (Hartl & Hess, 2017). In addition (Fenech et al., 2019) several factors can improve an organization's ability to implement digital transformation strategies, one of which is corporate culture.

CONCLUSIONS AND RECOMMENDATIONS
The topic of digital transformation is a hot issue to discuss. In the research, it is known that research related to the relationship between organizational culture and digital transformation is still rare to be researched, even fewer are still discussing MSMEs. The role of organizational culture greatly affects the development of the digital transformation process. Various studies explain how culture can hinder digital transformation. MSMEs themselves have difficulty in dealing with technological developments due to lack of resources. This research can provide suggestions for further research to be able to develop variables related to culture and digitalization and to look more at MSMEs in responding to the development of digital technology.

REFERENCE


