Digital Transformation and Organizational Culture: A Study of How Culture Impacts Digital Adoption

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Abstract - As today's information society develops, corporate processes are being digitally transformed through extensive use of digital technology, creating new demands on company staff, such as a higher degree of digital skills and knowledge. Organisational culture shifts cause the need for information and communication technology (ICT) specialists to develop, which in turn causes the educational system to modernise. In light of the rapid evolution of data social orders, recent studies on computerised change indicate that in addition to a growing demand for computerised skills in the labour market, a number of initiatives to alter the hierarchical culture of work are also required to be developed and put into action. In order for any business entity to benefit from digital transformation, it must modernise its organisational culture and implement digital technologies and communications. This will allow it to take advantage of new opportunities and build an ecosystem with its contact audiences. The article's goals are to create a methodology for identifying the main obstacles to organisational culture development under the current circumstances and to evaluate, using India as a case study, how digital transformation affects organisational culture (including operational and communication components in addition to organisational culture) and changes the information economy.

Keywords: Digital Transformation, Digital Marketing, Business Management

I. INTRODUCTION

The world was impacted by an unprecedented crisis in 2020. 331 million individuals worldwide were afflicted with the new Coronavirus Disease (Covid-19) (Tavoletti et al., 2022). The coronavirus pandemic has been classified by the World Health Organisation (WHO) due to its rapid global spread and higher death rate when compared to other recognised illnesses such as the flu. Lockdowns and social segregation were thereafter enforced globally by governments as precautionary measures against the infection's spread. From

then on, the global pandemic epidemic has had varying effects on the earth. Politically, the international government is compelled to act swiftly and proactively in order to effectively contain the outbreaks. Large global financial markets, such as the US and China, are suffering from high market volatility and poor market performance, which is having a cascading effect on other countries. Global trade is not functioning as efficiently when borders are closed by regulations such as the Movement Control Order (MCO) or the ban on crossing them between states or countries that pose a severe danger to national security (Zhang & Chen, 2024). During this time, non-essential enterprises are compelled to cease operations, including retail stores, travel agencies, construction companies, real estate companies, and automobile dealerships. As a result, businesses are finding it difficult to reduce operations and lay off staff in order to mitigate the effects of COVID-19. Some even go so far as to close their doors because they feel paralysed by the state of the global economy. According to the World Bank (2020), the global gross domestic product fell to -3.4 percent in 2020 (2019: 2.6%), marking the worst decline since the Second World War. The ongoing coronavirus pandemic is altering consumer behaviour despite the global economic downturn. Automation, contactless technology, and the adoption of new ideas all saw a surge in demand as a result. In addition, the crisis caused business practices to change and people to adjust to a new standard of living (Díaz-Garcia et al., 2023). To survive the crisis and abide by the constraints placed on them, businesses must implement IR 4.0 through quicker technology breakthroughs in robots, machine learning (ML), artificial intelligence (AI), the Internet of Things (IoT), e-commerce, and other disciplines. Furthermore, they will genuinely like to continue playing a significant role in the rapidly expanding computerised market by incorporating

cutting-edge innovation into their regular work. The Netflix vs. Blockbuster story is one of the most well-known examples. At this time, switching to computerisation is not an option—it is an absolute must for all organisations. According to data from (Zhang & Chen 2024), worldwide web-based retail revenue increased several times from its pre-

Coronavirus level in Walk 2020, demonstrating a notable escalation in the digital commercial centre. After the outbreak, this tendency is probably going to persist as people become used to the new normal, which is a sign of the growth of the digital economy shown in Fig.1 (Sharma & Maurya, 2024).
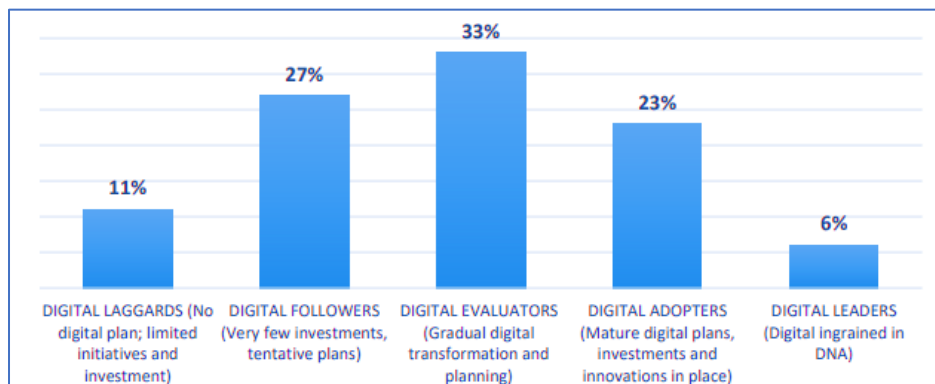

Fig. 1 India Digital Transformation Index

The purpose of this study is to develop a method to identify important barriers to communication in the effective development of organizational culture under current conditions and to assess how digital transformation affects organizational culture.

In this case, the introduction is examined in section 1 of the article. Section 2 describes the review of the work further Section 2 and 3 explains the goal of the work digital technologies, and Section 4 concludes the project.

II. Literature Review

A successful digital transformation path must include digital culture. Although the phrase "digital culture" has many definitions, it is most often used to describe a setting where people use technology to engage. Digital transformation is accelerated by the positive virtuous cycle that is created by cultivating digital culture (Brunetti et al., 2020). An advanced culture must align its values, attitudes, and behavioural patterns with the goals of the computerised change plan in order to flourish. It is common to confuse digital culture with digital attitude. Although there are some parallels between the two ideas, their scales and scopes are very different. While digital culture is a construct of people as a whole, the digital mindset is a construct at the individual level. In computerised culture, the emphasis is on the workforce's adaptability to new problems, their skill at leveraging innovation, and their ability to treat partners with long-term respect (Körner et al., 2015). The most popular approach of influencing the minds, hearts, and abilities of the workforce is called "computerised culture change," and it entails. "Computerised culture change," the most popular approach to influencing the hearts, minds, and talents of the workforce, entails a thorough reevaluation and updating of an association's personality in order to carry out an efficient computerised change endeavour (Brunetti et al., 2020). For an organisation to build a digital culture, digital culture

transformation is essential. It promotes being flexible, prioritising the user experience, utilising data to inform decisions, being fully digital, and iteratively tries to get better. The field of hierarchical behaviour matching to organisation execution emerged in the 1930s. The first systematic attempt to understand workplace culture was done during the Hawthorne investigations at the Western Electric Company (Gilch & Sieweke, 2021). According to the study, people adjust their behaviour when they become aware that they are being watched at work. The 'Hawthorne Effect' is a phenomenon that advances qualitative research on organisational culture understanding quite a bit (Sujatha, 2024). However, the study's conclusions have been critiqued for being overly simplistic and devoid of scientific objectivity.

The study of organisational culture has been more and more popular since the early 1980s. As a result of increased rivalry in the global market and the Japanese's success in a number of industries at the time, there was a boom in interest in organisational culture. Researchers and professionals were interested in finding out if the higher business performance of Japanese companies was attributed to their corporate principles, attitudes, and behaviours. Since then, there has been a growing recognition of the significance of organisational culture as a factor that influences long-term effectiveness and performance. The phrase "digital transformation" has been synonymous with the IR 4.0 in recent decades. The advent of "digital culture" in the 1990s and early 2000s was associated with the labels "technoculture" and "cyberculture" in several studies (Martínez-Morán et al., 2021). Despite this, the lack of consistency in the previous evaluation attempts suggests that their institutional context is still relatively unknown. Nonetheless, a number of studies have examined the idea of "digital culture" in relation to how people utilise technology. Computerised change is the process of fully digitising a person and integrating them into a computerised

environment. It has a big impact on people's daily lives and daily functioning (Montero Guerra & Danvila-Del Valle, 2024). In addition to mechanical reception, the transformation entails a cultural shift aimed at improving the experience of partners, employees, providers, clients, and partners. As per (Fernandez-Vidal et al., 2022), there exists a correlation between the emergence of a digital culture and the establishment of a positive and moral cycle. This is a loop whereby digital culture promotes digital technologies and digital technologies in turn promote digital culture. For the business culture to transform, advanced culture change is essential. It is the process of transforming every employee of the company—their hearts, minds, and abilities. The philosophy of an association should be completely reevaluated and updated in order to undergo a broad metamorphosis (Guerra et al., 2023) and emerge as a more improved version of itself than it is at the moment. Culture change's ultimate goal is to reshape the association's personality for a stronger presentation.

III. RESEARCH FRAMEWORK

A conceptual framework is a structure that outlines how the research problem will be investigated and is created based on the researcher's understanding. It linked pertinent theories, empirical findings, and ideas by implementing a well-coordinated approach to the review's problem. A conceptual framework can be given by an image or story. It is logically arranged to demonstrate and elucidate the relationships between the numerous review components (Alder & Dinnen, 2022). One advantage of using a conceptual framework is that it helps the researcher formulate and clarify their point of view on the subject under study. A reasonable structure works with the scientist's capacity to all the more definitely and deliberately characterize the ideas with regards to the SME's computerized culture. Besides, (Warner & Wäger, 2019) recommended that the making of a hypothesis that would help specialists in the field is worked with by the utilization of a calculated system (Veerappan, 2024). It features this exploration in a more insightful way and builds the importance and generalisability of examination discoveries. Laying out a strong system for the exploration is fundamental, especially in fields where there aren't an adequate number of laid out thoughts (like computerized culture). A reasonable structure offers clearness in surveying and confirming the relationship or meaning of the factors according to a measurable viewpoint (Vasilev et al., 2020). In essence, the McKinsey 7-S framework uses interactions between the seven major components to show how effective an organisation is. As a result, it is typically used as an organisational tool to evaluate the current and potential success of a business (Naijiao & Fei, 2024). This paradigm for organisational effectiveness makes seven internal assumptions that, in order for an organisation to be successful, it must align and enhance. It represents each of the variables. Furthermore, the framework emphasises the networking of these components, suggesting that in order to preserve an effective balance, modifications to one component must have a cascading effect on other elements. The conceptual foundation for this study's application of the McKinsey 7-S framework to improve digital culture is shown in Fig. 2. (Ajayi-Nifise et al., 2024).
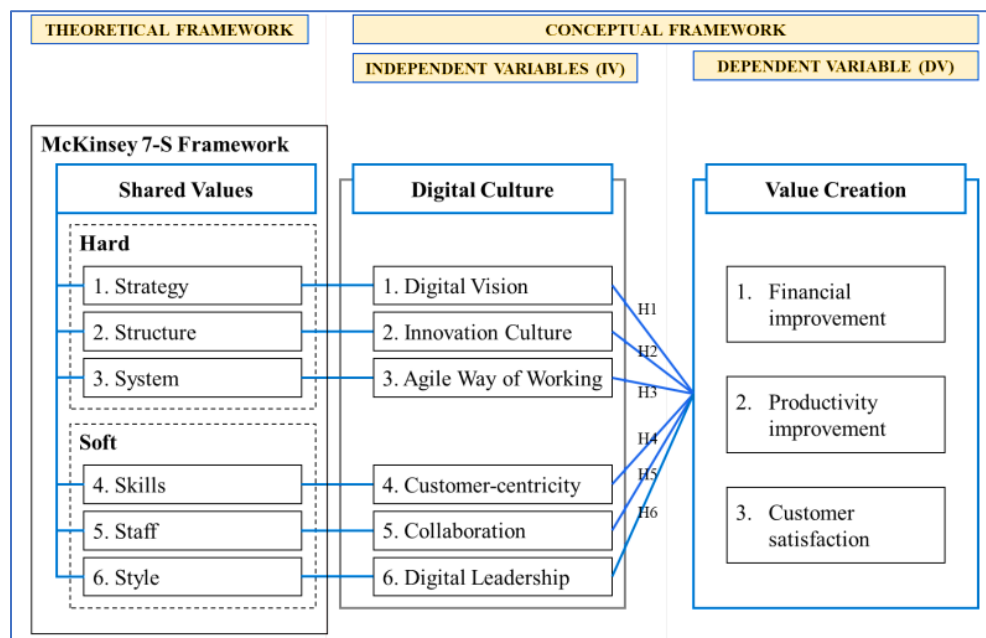

Fig. 2 Appropriate Frameworks for Enhancing the Advanced Culture with McKinsey 7-S

The presentation of SME organizations, or all the more explicitly the three computerized change esteem age areas, are the super reliant factors for this reasonable system. To research the connection between the components of computerized culture and the SME's business execution, especially as far as accomplishing a triple success, the accompanying speculation (H) will be utilized in this review:

- Digital transformation is connected to with Digital Adoption
- Organizational Digital transformation is connected to Digital Adoption

This study's main goal is to investigate the foundational elements of sophisticated culture. This will lead to the development of a conceptual framework based on the newly observed phenomena of small firms going digital. This study aims to accomplish two goals. The exploratory phase of the study will initially concentrate on examining the components of digital culture. When there is little theory to describe a phenomenon and the variables are not well defined, exploratory research is appropriate (Mihalcea, 2017), which in this case relates to the digital culture and how to change it.
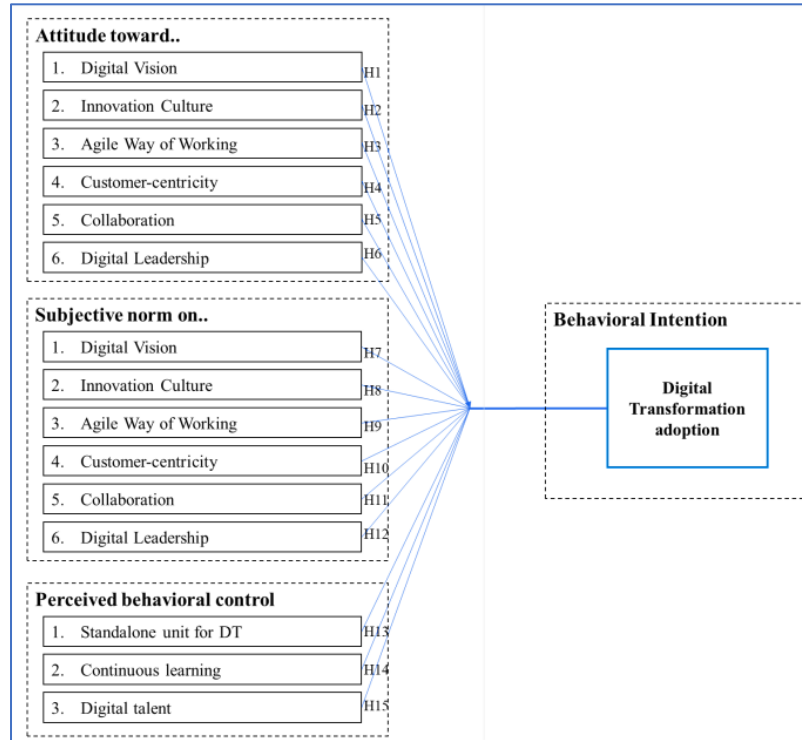

Fig. 3 Applied System for Computerized Culture Change Execution

Fig. 3 shows the purpose of this research is to better understand digital culture and develop a workable framework for modifying it in a way that will promote adoption of digital transformation. This directly leads to the application of the pragmatist research philosophy to the study of human cognition, which is inextricably related to behaviour. Individuals make decisions based on the potential consequences of those decisions, and those consequences can be utilised to forecast the results of like decisions made in the future. Thus, developing a computerised culture change system with a neutral perspective will increase the likelihood that organisations will implement advanced change. (Mazurchenko & Maršíková, 2019). This study's main goal is to investigate the foundational elements of sophisticated culture. This will lead to the development of a conceptual framework based on the newly observed phenomena of small firms going digital. Two goals are intended to be accomplished by this investigation. Initially, the review's exploratory phase will concentrate on examining the components of computerised culture. When there is minimal theory to explain a phenomenon and the variables are not well defined, exploratory research might be helpful. The next section of this concentrate will provide explanations. The main goal is to look into the relationships that exist between the components of advanced culture and how SME business execution is affected by them. Additionally, to research the ways in which SMEs' adoption of digital transformation is influenced by elements of digital culture. Questionnaires are a common tool used in explanatory research to gather information, analyse trends, and clarify correlations between variables (Trushkina et al., 2020). The information gathered from the exploratory analysis will be applied in this review to identify the salient characteristics of the computerised culture trademark in the advanced transformation of SMEs. Explanatory research will then be used to develop and test theories.

The purpose of this study is to explore the components of digital culture and the relationships between these components and the digital transformation adoption of SMEs and business performance. The idea will be subjected to a subjective investigation using an exploratory consecutive technique. Following this, an explicit setting hypothesis will be developed and measured. The first part of the review will be a subjective analysis of SMEs' computerised cultures. In order to gather crucial information, the President will oversee a loosely structured interview with a SME that has developed a computerised culture. To properly explore, understand, and capture the essence of organisational culture, research on organisational culture must employ a mixed-method

approach that incorporates both qualitative and quantitative data (Tolstykh et al., 2019).

IV. EXPERIMENTAL ANALYSIS

A total of 384 businesses were selected using a straightforward random process. The sample of individuals was sourced from a number of online databases. The majority of the participating organisations call Delhi home. Microenterprises and entrepreneurs from small and medium-sized businesses were included in the quantitative analysis. They shared their unique viewpoints as company executives and tidbits of information from their hierarchical computerised culture environment as visionaries in the business world shown in Table I.

TABLE I RESPONSE RATE TO THE SURVEY

	questions	Proportion
Returned	314	80%
Not Returned	70	20%
Total	384	100%

The stability and consistency of the results produced by the research tools and techniques are the main concerns of reliability. The internal consistency and data reliability of this research are tested using Cronbach's alpha calculation method (Zhang, 2024). As a general rule, a dependability level of 0.6 to 0.7 on the Cronbach's Alpha index is considered adequate, and 0.8 or more is considered extremely good. Nevertheless, (Klein, 2020) states that a Cronbach's Alpha index greater than 0.95 is not always a good thing because it could be a sign of duplication.

TABLE II RELIABILITY ANALYSIS

Models	Cronbach's Alpha	Numbers	Remarks
recognising the digital culture	0.916	3	Good
Putting digital culture into practice	0.922	6	Good
The generation of value through digital transformation	0.924	11	Good
All things considered	0.900	20	Good

Table II shows Cronbach's Alpha is 0.900 overall, which is regarded as respectable. The previous study's acceptable range of 0.6 to 0.7 is exceeded by the Cronbach Alpha,

showing the dependability and usefulness of the data for variable analysis.
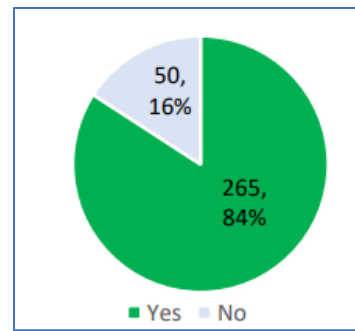

Fig. 4 The Percentage of Indian SMEs that have Adopted Digital Transformation

In Fig. 4 it appears that the majority of small and medium-sized businesses in India will continue to accept cutting-edge changes in their operations between 2018 and 2024.
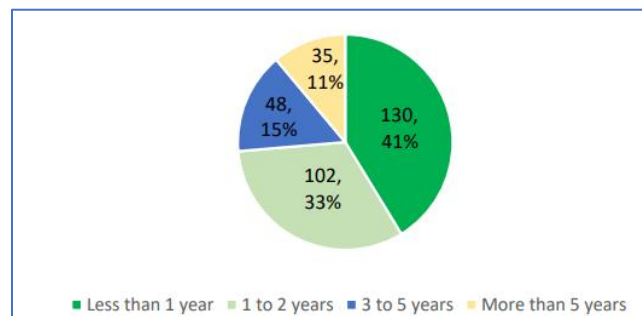

Fig. 5 The Length of Time that Indian SMEs have Adopted Digital Transformation

About thirty-three percent of them adopted computerised modification within a short period of time. Only 48 respondents, or roughly 11% of the total, indicated they had been employing computerised innovation for three to five years out of the comparatively large number of responses shows in Fig. 5. It is believed that the majority of Indian SMEs are still discovering the advantages and necessity of implementing computerised transformation because it is still a novel concept to them. Most of them are probably waiting to put it into practice independently to see how others are going about things (Schneider & Kokshagina, 2021).
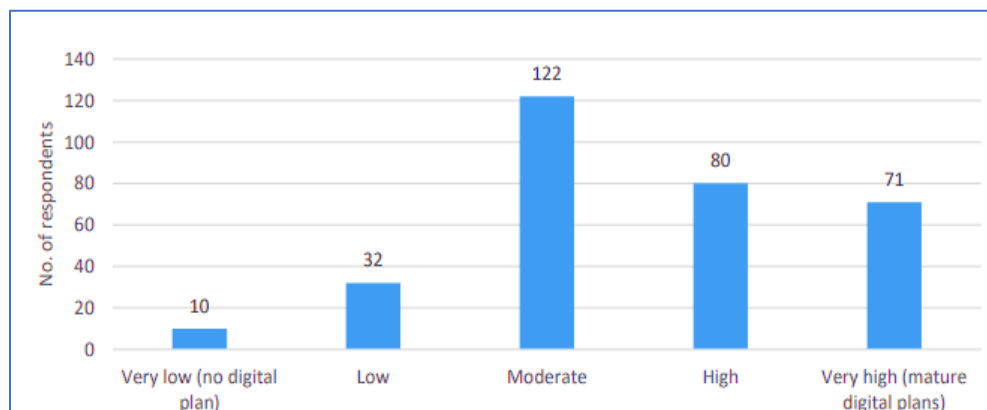

Fig. 6 Adoption of Digital Transformation by Indian SMEs: Level of Adoption

Fig. 6 shows the adoption rate of digital transformation by Indian SMEs is represented by the level of adoption. The information gives an unmistakable perspective on the speed of reception by SMEs. Thus, this information will be utilized as the essential ward variable to approve the speculation in this examination.
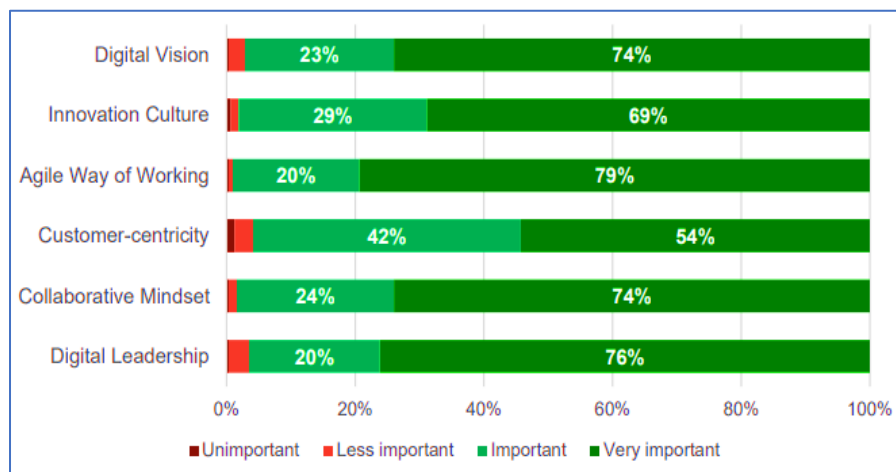

Fig. 7 Aspects of Digital Culture That Are Important for SMEs

The results of the qualitative study of digital culture components and their importance for SMEs were verified through the use of the survey. Based on the investigation, most SMEs concurred that the traits of digital culture they found are significant to them, especially when they are going through a digital transformation. 98% of the members believe that the advanced culture components of computerised vision, development culture, nimble approach to working, client centricity, joint effort, and sophisticated administration are critical to small and medium-sized enterprises (SMEs). Furthermore, almost all of the small and medium-sized businesses (SMEs) concurred that it is critical to embrace an agile working style during the digital transformation—or, maybe more properly, to be willing to fail. The results demonstrate that the quantitative study supports the qualitative findings about digital culture and determines that they are applicable to the sample of SMEs. Even though the components originated from subjective research conducted through interviews with a single association, it is evident from the quantitative analysis conducted through overviews that the components are also real and pertinent. As a result, these components of digital culture will serve as the primary variables for additional testing to see how they relate to value generation as shown in Fig. 7.

V. CONCLUSION

The suggested work makes evident how important digital culture is for creating competitive advantage, guaranteeing sustainable performance through digital transformation, and accelerating the uptake of digital technologies. The essential components of digital culture are covered in a number of research studies, however the idea is not comprehensively understood. Therefore, by defining and characterising the digital culture, this research aims to create a cohesive grasp of the idea. To attain remarkable outcomes, a thorough and methodical approach that covers the "what" as well as the "how" is required. Because of this, the research uses an exploratory sequential mixed technique to confirm that certain features of digital culture are relevant. This study's initial phase involves qualitative research. Understanding "what" the components of digital culture are is the main goal. The subjective analysis revealed that the interviewee's point of view and the aspects of computerised culture discussed in the writing survey were almost exact replicas. Even though the member doesn't use the same phrase found in the written document during the meeting, the significance and context of the discussion are still related.

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