THE IMPACT OF COVID-19 ON ORGANIZATION: A CASE STUDY FROM THE IT AREA ON CHANGING CULTURE PERCEPTIONS IN ORGANIZATION

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ABSTRACT

Article provides in-depth research on perceptions of organizational culture in the context of COVID-19 pandemic from IT area. Empirical research presents a preliminary study with qualitative approach within which the OCAI questionnaire was distributed. MAXQDA software explores the statistical relationship between the variables of interest. The reliability and validity test was performed using the Cronbach's Alpha. The index is statistically significant compared to normal reliability standards in both periods. The survey revealed a difference in culture types between the observed periods. Dominant culture during COVID-19 is the Hierarchy culture type and before the outbreak of COVID-19 was Clan culture type. Both cultures are focused internally, emphasizing integration, cooperation, and efficiency. The shift between different types of culture responds to the changing environment conditioned by the 'survival' of organizations. Transition causes the focus on structure, and top-down management and decision are made up high and passed down to managers and employees.

Keywords: organizational culture; COVID-19; pandemic; correlation analysis; MAXQDA

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INTRODUCTION

The dynamic changes caused by the worldwide pandemic spread have led to unprecedented changes in the economic and social area. Government restrictions have affected many aspects of life and have had an enormous impact on processes in organizations. Leaders in organizations had to face existential threats that became a daily standard. Organizations were

forced to transform their business strategy and the concept of long-term planning was fundamentally influenced. The lockdown imposed a rapid adjustment to the new situation and changed the nature of the work. Organizations have abandoned the dogma of reduction home-based working, and employees were just forced to remote work, and offices became virtual. More frequent calls and difficult working conditions with family members at

home led to the loss of the imaginary boundary between work and personal life. Reducing social personal interactions and reducing physical availability have been replaced by virtual digital tools. The employees lost their daily habits such as rituals of commuting and grabbing a cup of tea or coffee before sitting at their desk. COVID-19 fundamentally affected the daily working and influenced all aspects organizational culture. Organizational culture is considered as a way of behaviour within the organization and contributes to the performance, engagement, innovation, and competitiveness of organizations. Its elements, organizational values, assumptions, beliefs, expectations, artefacts, attitudes, and norms are important aspects for rapid adjustment and acceptance of new challenges. The organizational culture is essential for the successful implementation of changes and should be flexible and adaptable to the upcoming internal and external influences. Organizational culture is defined as 'a shared pattern of basic assumptions that group members have acquired over time as they learn to successfully cope with internal and external organizationally relevant problems' (Schein, 1990) and is formed for a long period and slowly adapts to collective norms of behaviour that individuals exhibit within the organization. To understand to what extent organizational culture has been affected by homework, research on cultural specifics has been provided through an ongoing change, the COVID-19 pandemic.

Rapid changes in working conditions due to the current situation can lead to substitution of faceto-face interaction by distance interaction. The pandemic situation will lead to a change in aspects of organizational culture to correspond to the new environmental situation. The nature of the work performance will be transformed into new approaches to work, and organizations will undergo more visible changes to be able to face potential threats in the future. Uncertainties about the future situation after the pandemic require a specific organizational culture able to adapt to new environmental realities, and managers should adjust working conditions for the predominant work from home. Cultural incongruence between individual organizational culture leads to different values and beliefs, and this disruption can cause a decline in productivity.

How did COVID-19 normalise working conditions? Will remote work substitute on-site work? Will the hybrid way of remote working have an impact on employee communication, collaboration, and participation? The pandemic situation has provided researchers with an opportunity to evaluate the new situation, which is reflected in a significant change in working conditions and brings great challenges to managers.

The contribution is organized as follows. The first part is the Introduction. Another part is the theoretical background that presents the literature review that focuses on the terminology of organizational culture and outlines the description of the pandemic situation. The emphasis was placed on the quality of the articles. The third part deals with the results of research and discussion based on the output of the research in particular area. This is followed by the conclusion, limitations, and suggestions for further research.

THEORETICAL BACKGROUND

Organizational Culture

Elliott **Jaques** (1957),an American psychoanalyst, mentioned culture in the context of organization already in the early fifties of the 20th century in his book. The author researched organizational culture in an industrial environment and published the findings in a 1957 in study on the industrial community during the period 1948 - 1950. The author revealed that in every factory there is a traditional way of thinking and performing activities, which is more or less shared among its members and which new members learn to be integrated into the operation of the organization. This work became the theoretical basis for subsequent authors in this field of research. The term organizational culture in the context of management has been used more widely since the late 1970s in English speaking countries. In his article, Pondy (1979) deals with the intersection of cultural theory and organizational theory. Turner (1986) drew on Otto's (1984) terminology, and his idea in the study is that mechanical manipulation of organizational symbols, myths, and habits can increase productivity, and it is in management's interest to promote the idea that organizational culture is the collective consciousness of organization.

Organizational culture is a social system in an organization that has been formed for many years, and its value is constantly changing due to a number of variables and socio-psychological factors. It is based on shared attitudes, ideas. customs, and written and unwritten rules that have come into force over time (Parson, 1971). Organizational culture includes rituals and customs that have evolved during the development of society. It is also about the environment and procedures that are formed within the mutual interaction in the form of cooperation between managers and employees of organizations (Lukášová, Nový, 2004). They participate the formation in organizational culture by their behaviour, values, and expressions towards the environment. The company philosophy is important, as well as the reputation that the organization continuously builds during its operation on the market. Culture is very sensitive to changes and is a key element of any organization. It plays a key role in building relationships in an organization. culture is an Organizational intangible component that fundamentally influences the approach to change (Quinn and Rohrbaugh, 1983). Many studies have shown that organizational culture is a unifying force in an organization, that there is a universal homogeneous culture, and that the researcher's job is to examine it. Kilmann (1982) defines culture and points to the internalization of norms, social integration, and stability, which are firmly attached to culture. He described culture as the "collective will of members," defining it in more detail as the environment and practices within the framework of mutual interaction in the form of cooperation between managers and employees of organizations. In organizations with social classes, disputes may arise if management tends toward one social class. Standards and values have great potential for creating conflicts in organizations with the purpose of creating social cohesion (Meek, 1988).

The following table lists the definitions of the organizational culture of 15 authors from the European and American continent based on their frequency of occurrence in the literature using the Primo interface. The definitions are arranged chronologically according to the date of their publication, starting in 1990 and ending in 2020. For the purpose of this research, is the most relevant the definition of the world-renowned author Schein (1992) considering his expertise

and research in the field of culture in the context of organization.

Organizational culture is widely conceptualised idea, and there are several differences in approaches to understanding individual definitions. The authors use different methodological approaches, as organizational culture is a very complex and complicated concept. Despite significant differences in definitions, common characteristics can be seen. In the beginnings of research on organizational culture, experts deal mainly with the elements they consider the basic assumptions (Schein, 2010; Lukášová and Nový, 2004; Cejthamr and Dědina, 2010), standards of behaviour (Lukášová and Nový, 2004; Schein, 2010; O E Reilly, 1989), values (Hofstede, 2010; Kotter and Heskett, 1992; Hall, 1995) and artifacts (Bedrnová et al., 2002; Lukášová and Nový, 2004; Armstrong, 2007; Hofstede, 2010). Other factors influencing organizational cultures, especially perception, feeling, and thinking, were gradually added to these elements (Riaz et al., 2011). There are several similarities between the mentioned definitions.

By researching relevant literature, both domestic and foreign, organizational culture can be understood as a set of values, assumptions, beliefs, expectations, artefacts, attitudes, and norms that are characteristic of a particular community and which are shared and accepted by new members within the socialization process.

Schein (1992) points to the confusion in the definitions of a culture in different distinguishing the levels in which is organizational culture manifested. As Figure 2 shows, Schein's model distinguishes three levels of organizational culture or layer based on their manifestations to the environment. The outer layer is represented by artefacts that are the most visible but difficult to define. Symbols, rituals, working equipment, mission, and vision of the organization are elements of artefacts. The next layer is formed by the values of employee behaviour, which are reflected in the behaviour of individuals and, therefore, are observable and partially visible. Organizational standards are based on values and are reflected in artefacts. The core of organizational culture are the basic assumptions that are deeply rooted in individuals' subconscious and thus remain hidden from the outside environment.

Table 1: Definitions of Organizational culture

Author	Definitions					
Denison, 1990	"The core values, opinions, and beliefs that exist in the organization, the patterns of behavior that result from these shared meanings, and the symbols that express the connection between the beliefs, values, and behavior of the members of the organization"					
Gordon et al., 1991	"An organization-specific system of widely shared assumptions and values that underlie typical patterns of behavior"					
Schein, 1992	"A pattern of shared basic beliefs that the group has adopted in addressing issues of external adaptation and internal integration that have proven to be valid and passed on to new members of the organization as a way of perceiving, thinking and feeling that is right in relation to those issues "					
Drennan, 1992	"How things are done in our country" "what is typical for the organization, its habits, prevailing attitudes, created patterns of accepted and unaccepted behavior"					
Williams et al., 1993	"Generally shared and relatively stable attitudes, values, and beliefs that exist in the organization, where culture determines the decision-making and problem-solving processes in the organization, influences goals, tools, and ways of acting, is a source of motivation and demotivation, satisfaction and dissatisfaction"					
O'Reilly and Chatman, 1996	"A set of norms and values that are widely shared and strongly held throughout the organization"					
Deal and Kennedy, 2000	"The way things are done"					
Schrodt, 2002	"Organizational culture influences the way people and groups communicate with each other, with clients and with stakeholders. It can also affect how many employees identify with the organization."					
Needle, 2004	"Collective values, beliefs, and practices of employees, history, size of the organization, strategy, management style, national cultures and other factors"					
Katanga, 2013 (cited in Watkins, 2013, p. 2)	"Culture is the way an organization does things"					
Perrin, 2013 (cited in Anand et al., 2017)	"Organizational culture is the sum of values and rituals that serve as a" glue "for the integration of members of the organization"					
Adler, 2013 (cited in Watkins, 2013, p. 2)	"Organizational culture is civilization in the workplace"					
Watkins, 2013	"Culture is the organization's immune system"					
Morcos, 2018	"Organization culture is the characteristic and the tangible personality originated inside every organization"					

Source: author's work (2021).

The organizational culture is formed over time, based on previous experience, and is practiced every day. The organizational culture adapts to

the external environment, and new employees adapt to it and absorb it.

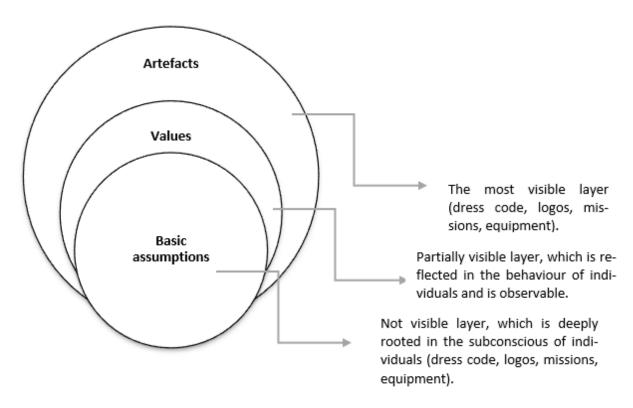


Figure 1: The three levels of organizational culture.

Source: Schein (1992).

COVID-19

In 2020, massive disruption of the COVID-19 pandemic influenced all aspects of life globally. The worldwide pandemic spread rapidly and caused significant changes across all industries. This completely new situation turned life upside down to all people changing their habits. The infectious nature of the virus forced the government to declare a lockdown and organizations had to change in response to the uncertain situation and consider the adaptation to the way of working. The employees had to displace the physical activity to remote work. In fact, organizations transformed their business to a more digital path, and leaders adopted digital tools to provide effective collaboration. Video conferencing has begun to be useful in supporting teamwork under pandemic-related pressure (Celik et al., 2021). All strategic decisions have been modified in response to a rapidly changing external environment. Leaders made adjustments in organizational structures. Although some organizations recorded an increase in productivity as a consequence of remote work, most of them faced a decline in business. In the beginning, the employees

welcomed the new working conditions, but from a long-term point of view, it can bring consequences in the form of social isolation and the loss of group cohesion (Brown et al., 2021). Organizations exposed to stress and faced with extraordinary economic stress endeavoured to define new business models to ensure survival.

Fundamental decisions that have been made as a result of the dramatic situation will impact the organizational culture, which will slowly develop and shape the current situation. In their research, Brown et al. (2021) revealed the meaning of culture in an organisation and concluded that it boosts performance and individual well-being. Adaptive organizational culture allows one to quickly adapt to an external environment that encourages change in the organization. Similarly, a positive environment supports resistance to stress, and the workforce responds effectively to the new condition without losing productivity. Adaptation is a phenomenon that occurs all the time, and human beings, animals, and nature adapt to it. Employees who were hired during the pandemic did not have the opportunity to adapt and assimilate to the organization due to remote

work. Hence, it is important to convey organizational culture through virtual working using appropriate tools adequately and let employees adapt properly. Remote work provides a new and dynamic change with significant overlap in the future. The pandemic has divided employees into three categories: those who prefer distance work, those who prefer return to work, and those who prefer a hybrid of the previous ones. The transition of employees to distance working allows leaders to use the workspace for different purposes. Furthermore, hiring employees beyond the capacity of existing premises is one of the benefits of the pandemic. People who prefer to work in an office have to tackle a new way of collaboration with those who prefer remote work. This subculture will face seclusion and will not be privy to organizational affairs. The role of the organization will lead to the creation of a cohesive environment where all subcultures will be involved, and employees will follow the mission of organization.

According to the McKinsey survey (2020), respondents indicated a related imperative for success during COVID-19, a culture that encourages experimentation and acts instantly.

Since 2020, the outbreak of pandemic, we can encounter literature dealing with the term Covid-19. In 2021 there is an enormous increase in the literature dealing with COVID-19 in different areas. Based on the search through the Primo database in November 2021, we found 2.159 articles dealing with concepts of organizational culture and COVID-19.

METHODOLOGY

Within the research methodology, empirical research presents a preliminary study with a qualitative approach in the form of questionnaire survey method within which was distributed the Organizational Culture Assessment Instrument (OCAI) questionnaire was distributed determine the influence of COVID-19 on organizational culture and reveal differences in the content of organizational culture influenced by pandemic. The original version compares the current and preferred culture and indicates factors that can be starting points for a change. The questionnaire was developed by authors Cameron and Quinn (2011) and deals with Competing Values Framework (CVF), which identifies the organizational effectiveness

criteria and is used in organizations over decades. Organization can be focused on internal or external environment. Internal orientation is focused on inward development, collaboration, integration of activities, and coordination. The external orientation focuses on the market, competitors, and customers to diversify products. CVF consists of four competing value sets that correspond to four types of organizational culture. Another dimension of the focus of the organization is stability or flexibility. Stabil-oriented organizations emphasize clear structure, planning, and budgets. Flexibleoriented organizations adapt quickly to changing environment. Authors determined as a most effective organization focusing on all four value sets. In each sector, the different types of culture outweigh each other. Each organization has a unique type of culture presented in the specific behaviour and action of employees. Cameron and Quinn (2011) identified four types of culture:

- Clan The working environment is friendly, and the employees feel like a family. Leaders are in the position of mentors. Loyalty and tradition are valuable behaviour. In an organization excel teamwork, participation, and consensus.
- Adhocracy Leaders are in the position of innovators, risk takers. In the organization, employees share commitment to experimentation and innovation.
- Market Leaders are in the position of hard drivers, producers, and rivals, and they have high expectations. Organization emphasis on achieving goals, long-term focus on competitor activities, and market dominance.
- Hierarchy Workplace is formalized and highly structured. Formal rules keep the organization together. Leaders strive to achieve reliable deliveries, low-cost production, and continuous planning (Cameron and Quinn, 2011).

Second, the concentration indicator, also defined as the Herfindahl-Hirschmann Index (Product HHI), is a measure to capture the degree of product concentration. The value usually lies between 0 and 1 and shows the product concentration of exports at the product level and is calculated by using Equation 1 as below:

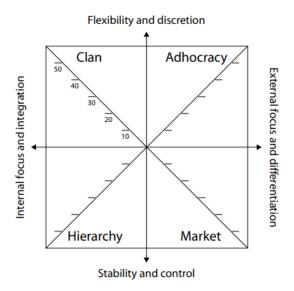


Figure 1: Competing Values Framework (CVF) Source: Cameron & Quinn (2011).

The organizational culture type is determined by assigning points to particular categories of cultural dimensions by respondents and is awarded with the highest score in the questionnaire (OCAI, 2021). The questionnaire is divided into six dimensions of culture, and each dimension has four options of answers, which total count 24 items:

- 1. Dominant Characteristics
- 2. Organizational leadership
- 3. Management of employees
- 4. Organizational glue
- 5. Strategic emphases
- 6. Criteria of success (Cameron & Quinn, 2011).

Each dimension consists of four statements, and the respondents evaluate it. While in the original version, respondents distribute 100 points over four statements between each aspect, this questionnaire was modified by developing a Likert-type scale 1 or 5 following labels "1 = highly disagree, 2 = disagree, 3 = neutral, 4 = agree and 5 = highly agree" which is considered symmetric and equidistant scale (Hair et al., 2013). This approach is preferable in the case of comparison two periods, one examined the culture type during COVID-19 and the other examined the culture type before COVID-19. The questionnaire is divided into two sections. In the first section, the respondents fill

in the information about age, gender, and length of activity in the organization. The second section was designed in such way that respondents evaluated each dimension. Respondents rated each statement on a 5-point Likert scale that best reflects their perception of current content of organizational culture and content before the COVID-19 pandemic. Fellows and Liu (2013) stated that using a Likert scale of 1 to 5 is adequate and suitable for culture studies. The questionnaire was accompanied by a cover letter that briefly introduces the purpose of the questionnaire. Using a Likert scale, there is a pitfall in the scale calibration compared to the original evaluation. The research explores the statistical relationship between the data of the variables of interest using the MAXQDA software. Statistical methods were used for the analysis of the data. Descriptive statistics describes characteristics of a sample including mean score ranking, standard deviations, minimum, and maximum. Pearson's correlation measures the strength of dependence between two variables. Factor analysis determines the variance of variables using a smaller range of latent variables. Cronbach's alpha was used as an index of reliability and to measure internal consistency. The index is the most relevant to the multiple Likert questions scale (Van Huy et al., 2020). Comparison of culture profiles provides a view of organizational characteristics and diagnoses the differences between culture types before and during the pandemic. The OCAI instrument helps leaders to steer cultural changes or strive for a change, especially if cultural values are different within the organization.

Research sample

Primary data were obtained through the online OCAI questionnaire using a Likert scale. The survey was distributed to employees of an organization dealing with sales and implements the enterprise resource planning system and operationg in the Czech Republic. A total of eight questionnaires were returned, giving a response rate of 33 %. Data were collected in November 2021. Table 2 presents the profile of the research sample. The diversity of the sample is wide and different job positions: channel contains development COO, manager, manager, consultant, senior developer, team leader, and accountant. From the results, 75 % of the

respondents are male and 25 % are female. The sample comprises 50 % of respondents within the age of 31 – 40 years, 37,5 % within the age of 41 – 50 years and 12,5 % within the years 51 – 60 years. As mentioned above, all respondents are from one organization to ensure a high data validity rate. While 25 % of the respondents have

5 – 10 years of work experience, 37,5 % have 11 – 15 years of work experience. Approximately 12,5 % of the respondents have less than 5 years of work experience, another 12,5 % of the respondents have 16 - 20 years, and more than 21 years of work experience. Information is summarized in the table below.

Table 2: Profile of respondents

Contents	Freq.	Percent	Contents	Freq.	Percent	ercent Contents		Percent
Age			Gender		Work			
					Experience			
31 - 40	4	50 %	Male	6	75 %	< 5 years	1	12.5 %
years								
41 - 50	3	37.5 %	Female	2	25 %	5 – 10 years	2	25 %
years								
51 - 60	1	12.5 %				11 – 15 years	3	37.5 %
years								
						16 – 20 years	1	12.5 %
						< 21 years	1	12.5 %
Total	8	100 %		8	100 %	Total	8	100 %

Source: author's finding.

RESEARCH RESULTS AND DISCUSSION

Responses have been consolidated in tables and graph; results indicate the dominant culture that endures before and during the pandemic situation. The OCAI questionnaire provides a quantitative, visual, and validated profile of culture before and during the pandemic based on six dimensions. The survey was distributed between employees in the analysed unit. Respondents were asked to compare culture after and before the pandemic. This comparison allows us to determine the key cultural changes caused by the pandemic situation. Obtained data allows us to identify the differences in one analysed unit and confirm that this method is a reliable and useful method to figure out that the unprecedented situation, in this case the disruption of the COVID-19 pandemic, influences the culture in the organization. The size of the sample is the limitation of the research; however, this study conducts a preliminary study with a qualitative approach, which will be extended to a suitable sample size with a quantitative approach in the future.

For the verification of the results of this study, it is appropriate to repeat the study in a long-term perspective to confirm that the outbreak of the pandemic has a significant impact on the relationship in the organization.

Examining the results of the survey and studying all 6 dimensions, organizational culture is congruent, based on the same value sets and is similar. Therefore, the congruent culture is aligned with aspects such as strategy, leadership, reward system, and employee management (OCAI, 2021).

In Table 3 are shown the means, standard deviations, minimum, and maximum for each culture type after COVID-19 and culture before COVID-19. As can be seen in Table 3, respondents favoured Clan culture before COVID-19 (Mean = 3.82) followed by Hierarchy culture type (Mean = 3.5). The highest mean of culture after COVID-19 is the Hierarchy culture (Mean = 3.67) followed by the Clan culture (Mean = 3.4). Accordingly, although respondents indicate in all culture types, we can conclude that employees are associated mostly with Hierarchy current culture type. This culture is more coordinated than the clan culture, and formal rules and policies keep the organization together. Low values of standard deviations indicate that the data tend to be close to the mean. The process of replacing the organizational culture determined primarily by changing the nature of the work. Clan culture is oriented on inward matters especially interpersonal relationships, communication, and collaboration. The

pandemic has caused the culture during COVID-19 to be more horizontal structured. The emphasis on rules and more structural workplace prevails over the well-being of employees. Culture during the pandemic brings coordination and clarity of roles. This model presents the planning and clear determination of tasks leading to achieve setting goals. The hierarchy culture may cause the rigidity of

employees due to the limits of spontaneous creativity and innovative spirit. This key determinant leads to decrease of competitiveness that influences the level of productivity. The pandemic may leave lasting economic implications of the recession and delays convergence of the emerging market (OCAI, 2021).

Table 3: Descriptive statistics of culture types

Variable & Culture types			Mean		Std. Dev		Minimum		Maximum	
	D	В	D	В	D	В	D	В	D	В
Clan	27	31	3.4	3.82	1.01	0.95	2	2	5	5
Adhocracy	24	23	3.04	2.9	0.89	0.88	1	1	5	5
Market	24	24	3.02	3.05	0.92	0.86	1	1	5	5
Hierarchy	29	28	3.67	3.5	0.99	1.0	2	2	5	5

^{*} *D – during COVID-19*:

Source: author's finding.

Based on the correlations presented in Table 4, there is a strong positive correlation between the Clan culture type and the Adhocracy culture type (0.66) during COVID-19. This means that both variables move in the same direction. In addition. correlation between current Clan culture type and Market is -0.03 is low, between Clan culture type and Hierarchy culture type is -0.23, which signifies mid value of negative correlation. There was an expectation that there would be a strong correlation between Clan and Hierarchy culture type, which was not confirmed. These findings generate a hypothesis requiring further acceptance or rejection. There may or may not be a causative connection between the two correlated variables. Moreover, if there is a connection, it may be indirect.

The correlation between Adhocracy culture type and Market culture type is 0.18, which means low-mid binding. Based on the results in the table below, there is no statistically

detectable linear dependence between current Market and Clan culture type.

Positive correlations prevail over negative correlations in culture types before COVID-19. The correlations between the culture types before COVID-19 are also significant, but not too much, as the culture types after COVID-19. There is a negative mid-strong correlation between Market culture type and Hierarchy culture types before the outbreak of COVID-19.

Nelson and Gopalan (2003) noticed that another important feature of OCAI besides the determination of organizational culture type depending on alignments with the bisecting continua is the specification of the opposing clusters of values between culture factors diagonally opposite and other organizational variables (i.e., Clan and Market cultures, Hierarchy and Adhocracy cultures). This is confirmed in our research.

Table 4: Reliability of Construct

Variable	Cronbach's Alpha		
	Current culture	Culture before COVID-19	
The Organizational Culture Assessment Instrument	Alpha = 0.83	Alpha = 0.912	
(OCAI, 48 items)	N = 8	N = 8	

Source: author's finding.

^{**} B - before COVID-19

Figure 2 shows the culture type of the organization. The blue data present the prevailing culture type during COVID-19, which is the Hierarchy culture (29), followed by the Clan culture (27). In most aspects, the orange data present the prevailing culture before COVID-19, which was the Clan (31), followed by the Hierarchy (28). The shift from one culture type to another is a result of a changing environment that can be a way of organization survival (Schein, 2010). The significant discrepancy between culture types is recognized in clan culture comparison in two periods (difference between Clan culture type is 4 points; difference between Hierarchy culture type is 1

point in the observed periods). The questionnaire revealed that internal focus and integration prevail above external focus in organization in observed periods. Clan culture is characterized by a pleasant working environment, and leaders are in the position of mentors. There is an emphasis on flexibility and discretion. Cohesion, teamwork. and consensus are behaviours rather than control and formal rules. The hierarchy culture type puts emphasis on stability and control and focuses on internal matters such as structure, procedures, efficiency, and predictability (OCAI, 2021). The current culture type is a more formalized and structured work environment.

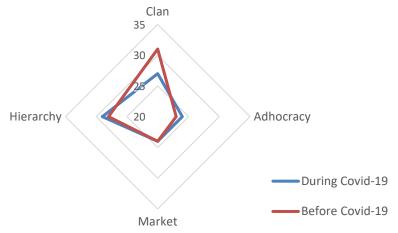


Figure 2: Culture type of organization Source: author's finding.

CONCLUSION

In pursuance of the purpose of the study, we assessed the impact of COVID-19 on the culture in the organization through the key cultural changes caused by the pandemic situation.

We focussed on the survey in an organization where we distributed the organizational culture assessment instrument (OCAI) questionnaire to obtain valid data and analyse it. To reflect the influence of the COVID-19 pandemic on organizational culture, we compare two periods. One examined the current state of organizational culture type, and the second focused on the state before COVID-19. Empirical findings have examined four types of culture in the organization in observed periods and indicated high reliability using the Cronbach's alpha index ranging from 0.83 (the value for current culture) to 0.912 (the value for culture before the

pandemic). The results indicated as a dominant culture type during COVID-19 the Hierarchy, closely followed by Clan culture. Concerning the dominant culture type before COVID-19, the results of the survey revealed the Clan culture type, followed by Hierarchy culture type. Both types of culture in observed periods are focused on internal matters, which is typical for familiar organizations with a friendly workforce and high emphasis on collaboration and integration. The culture type during COVID-19 is represented by a more formalized and structured work environment. The shift from one culture type to another implies a transformation of the values and beliefs of the employees.

The impact of the COVID-19 pandemic gives compelling evidence of its influence on the organizational environment. It is appropriate to repeat the research in a long-term perspective to reveal the prevailing culture in organization in

the response to the changing environment, in this case, the global disruption of COVID-19. Furthermore, there was an expectation that there will be a strong correlation between Clan and Hierarchy which was not confirmed. These findings generate a hypothesis, which can be confirmed or rejected in further research. The limitation of the study is the size of the sample; however, this study conducts a preliminary study with a qualitative approach, which will be extended to an appropriate sample size in the quantitative approach in the future.

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REFERENCES

- Anand, V.V., Vijayabanu, C., Sivasbramanian, J., Thiagarajan, T., Velavan, M., Dharshini, V., Praba, J.S. (2017). A study on organizational culture with special reference to Cavinkare. International Journal of Applied Business and Economic Research. 15, 407-415.
- Brown, N. D., Chen, Y., Harrington, H., Vicinanza, P., Chatman, J. A., Goldberg, A., & Srivastava, S. (n.d.). How have organizational cultures shifted during the COVID-19 pandemic. California Management Review. Retrieved February 15, 2022, https://cmr.berkeley.edu/2021/07/how-have-organizational-cultures-shifted/
- Cameron, K.; Quinn, R. (2006). Diagnozing and Changing Organizational Culture. San Francisco: Jossey-Bass.
- Çelik, M., Yılmaz, Y., Karagöz, A., Kahyaoğlu, M., Özgün Çakmak, E., Küp, A., Çelik, F. B., Karaduman, A., Külahçıoğlu, S., İzci, S., Geçmen, Ç., & Çalışkan, M. (2021). Anxiety disorder associated with the COVID-19 pandemic causes deterioration of blood pressure control in primary hypertensive patients. Medeniyet Medical Journal. https://doi.org/10.5222/mmj.2021.08364
- Deal, T.E., Kennedy, A.A. (2000). Corporate Cultures: The Rites and Rituals of Corporate Life.

- Dennison, D. R. (1990). Corporate culture and organizational effectiveness. New York, NY.
- Drennan, D. (1992). Transforming company culture. London: McGrawHill.
- Fellows, R., & Liu, A. (2013). Use and misuse of the concept of culture. Construction Management and Economics, 31(5), p. 401.
- Gordon, G. G. (1991). Industry determinants of organizational culture. The Academy of Management Review, 16(2), 396. https://doi.org/10.2307/258868
- Hair, J. F., M., H. G. T., Ringle, C. M., Sarstedt, M. (2022). A Primer on Partial Least Squares Structural Equation Modeling (Pls-Sem). SAGE Publications, Inc.
- Jaques, E. (1957). The changing culture of a factory. Tavistock Publications.
- Kanter, R.M. (2010). Five tips for leading campaigns for change. Harvard Business Review. (2014, July 23). Retrieved March 6, 2022, https://hbr.org/2010/05/five-tips-for-leading-campaign.html
- Kilmann, R. H. (1982). Getting control of the corporate culture. Managing (USA), p. 12.
- LaBerge, L., O'Toole, C., Schneider, J., Smaje, K. (2021). How COVID-19 has pushed companies over the technology tipping point--and transformed business forever. McKinsey & Company. Retrieved February 15, 2022,
 - https://www.mckinsey.com/business-functions/strategy-and-corporate-finance/our-insights/how-covid-19-has-pushed-companies-over-the-technology-tipping-point-and-transformed-business-forever
- Lukášová, R., Nový, I. (2004). Organizační kultura: od sdílených hodnot a cílů k vyšší výkonnosti podniku. Grada Publishing a. s.
- Meek, V. L. (1988). Organizational culture: Origins and weaknesses. Organization Studies, 9(4), 453–473.
 - https://doi.org/10.1177/017084068800900401
- Morcos, M. (2018). Organisational culture: Definitions and Trends. Research Gate.
- Needle, D. (2004). Business in context: An introduction to business and its environment. South-Western/Cengage Learning EMEA.
- Nelson, R. E., Gopalan, S. (2003). Do organizational cultures replicate national

- cultures? isomorphism, rejection and reciprocal opposition in the corporate values of three countries. Organization Studies, 24(7), 1115–1151.
- https://doi.org/10.1177/01708406030247006
- O'Reilly, C. A., & Chatman, J. A. (1996). Culture as social control: Corporations, cults, and commitment. In B. M. Staw & L. L. Cummings (Eds.), Research in organizational behavior: An annual series of analytical essays and critical reviews, Vol. 18, pp. 157–200). Elsevier Science/JAI Press.
- OECD. (2020). The impact of the COVID-19 pandemic on jobs and incomes in ... (n.d.). Retrieved March 6, 2022, https://www.ilo.org/wcmsp5/groups/public/---dgreports/---cabinet/documents/publication/wcms_756331.pdf
- Parsons, T. (1971). The system of modern societies (p. 12). Englewood Cliffs, NJ: Prentice-Hall.Pondy, L. R., & Mitroff, I. I. (1979). Beyond open system models of organization. Research in organizational behavior, 1(1), 3-39. [cit. 2021-02-14].
- Quinn, R. E., Rohrbaugh, J. (1983). A Spatial Model of Effectiveness Criteria: Towards a Competing Values Approach to Organizational Analysis. Management Science, 29(3), 363–377. http://www.jstor.org/stable/2631061
- Riaz, T., Akram, M. U., Ijaz, H. (2011). Impact of transformational leadership style on affective employees' commitment: An empirical study of banking sector in Islamabad (Pakistan). The Journal of Commerce, 3(1), 43.
- Schein, E. (1992). Organizational Culture and Leadership, 2th ed.; Jossey-Bass: San Francisco, CA, USA.
- Schein, E. (2010). Organizational Culture and Leadership, 4th ed.; Jossey-Bass: San Francisco, CA, USA.
- Schrodt, P. (2002). The relationship between organizational identification and organizational culture: Employee perceptions of culture and identification in a retail sales organization. Communication Studies, 53(2), 189–202.
 - https://doi.org/10.1080/10510970209388584
- Turner, B. A. (1986). Sociological aspects of organizational symbolism. Organization studies, 7(2), 101-115.

- Van Huy, N., Thu, N. T., Anh, N. L., Au, N. T., Phuong, N. T., Cham, N. T., Minh, P. D. (2020). The validation of Organisational Culture Assessment Instrument in healthcare setting: Results from a cross-sectional study in Vietnam. BMC Public Health, 20(1). https://doi.org/10.1186/s12889-020-8372-y
- Watkins, M. (2013). What is organizational culture? And why should we care? Harvard Business Review. Retrieved from https://hbr.org/2013/05/whatisorganizational-culture/
- Harvard Business Review. Retrieved from https://hbr.org/2013/05/what-isorganizational-culture
- Williams, A., Dobson, P., Walters, M. (1993). Changing culture: New organizational approaches. Institute of Personnel Management.

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