THEORY AND INNOVATIONS OF PSYCHOLOGY

DOI https://doi.org/10.30525/2592-8813-2023-3-17

THE 4X4 MODEL OF ORGANIZATIONAL CULTURE: A CRITICAL ANALYSIS OF THE THEORY AND JUSTIFICATION OF AN ALTERNATIVE OPTION

Oleksandr Kutsyi,
Candidate of Psychological Sciences, Associate Professor,
Associate Professor at the Department of Practical Psychology,
Lviv State University of Internal Affairs (Lviv, Ukraine)
ORCID ID: 0000-0003-3886-3787
kutsyioleksandr@gmail.com

Abstract. Purpose: to reasonably form an interdisciplinary model of organizational culture that will take into account a number of requirements and purposefully focus on the possibility of practical use.

Methodology: the modeling method was applied to fill with the content the hypothetical graphic model of organizational culture through the analysis of the interdisciplinary interpretation of the organization and the synthesis of the systemic and logical structure.

Findings: the model is hypothetical and after appropriate empirical and static studies with the following corrections, a conclusion can be made about the possibility and expediency of its application in practice.

Originality: an interdisciplinary approach using a systematic modeling method is the latest of scientific attempts to substantiate graphically organizational culture as a scientific concept and a phenomenon important for practical application.

Key words: organizational culture, interdisciplinary systemic approach, hypothetical graphic model.

Introduction. The theory of organizations and organizational culture includes a huge amount of various concepts and other related theoretical, practical and applied means for explaining, substantiating and managing these phenomena. A number of publications can be presented in this direction. Though, according to the results of feedback from management and HRM practitioners, it seems that the theory does not help them much in such matters (InContext; HR-liga; Harvard Business Review). The activities of recognized authorities in these fields are aimed at prolonging the «usefulness» of their ideas in various ways. At the same time, these ideas are characterized by the lack of clearly critical attitude. Therefore, the question of a critical fundamental review of the existing scientific theory regarding the organization, its various aspects, with a decisive focus on the suitability of its application in practice, is rather urgent. It should be noted that organizational culture can be considered as one of the fundamental phenomena of the organization existence and the promising direction of improving its professional functioning.

Literature review. The idea of this hypothetical model has been under development for about two years. A significant number of concepts of organizational culture in the Western European and North American scientific and information spheres was analyzed by prominent scholars (Schein, Sagiv & Schwartz, Homburg & Pflesser, Allaire & Firsorio, Hatch & Cunliffe). Its representatives (Constantine, Hofstede, Cameron & Quinn, Ouchi, Handy) are very well-known in Eastern Europe, but somehow forgotten in the mentioned above spheres.

A review of the examined publications on real critical analysis (Krzyworzeka, 2012; Petriglieri, 2020) shows that there is still an authoritarian, traditional type of research that inhibits the processes of forming alternative ideas, among which something more powerful and suitable for practical application can be created. Thus, attempts of a descriptive nature to justify a rather complex phenomenon,
which is a professional organization and its culture, on the basis of a certain factor, testify to the existence of the long-lasting surface-level research. In the publications of 2021, the scholars (Isac et al., 2021) highlight the results of applying the Cameron-Qween method to research the peculiarities of organizational culture at such global giants as Microsoft and Google. The methodology was developed on the basis of two classification criteria (flexibility-stability and orientation to the internal or external environment). The obtained results can state something abstract only in a general form. At the same time, this technique is developed on the basis of an approach that describes distortions or deformations of organizational processes. This approach is clearly outdated and does not meet the needs of practice.

In the collective publication (Dauber et al., 2012) the authors reproduce another attempt to create a model of organizational culture based on the analysis and combination into a single whole according to the most optimal structure of certain components using the configurational approach. The scientists talk about the need to apply an interdisciplinary approach to the development of a theory and model of organizational culture. However, this is not observed either in the text of the article or in the picture. Ideas from management, which have only taken shape in its components such as decision-taking, strategy and procedural components of management, are clearly dominant. It should be mentioned that an attempt was made to determine the role of internal and external environment, to single out such new components as legitimization and tasks. This option is obviously not capable of sufficiently improving the situation with practice-oriented theory. The most critical problems of this model are that there is no explanation of the content of organizational culture, as well as its external and internal components.

Around that time, another article was published with the idea of proposing a variant of organizational culture (Moon et al., 2012), which is explained through the boundaries of three interpersonal motives: autonomy, competence, and cooperation. However, this attempt is even more inappropriate because of the attempt to involve one factor in the explanation of a rather voluminous phenomenon. But, researchers of motivation as a professional phenomenon Michael T. Lee, Robyn L. Raschke (2016) noted that the ideal situation is positioned in scientific publications on motivation. However, in practice, theories of motivation are imprecise, especially when it comes to specifying both causal conditions and outcomes. They tend to be even more vague when it comes to show how causal conditions relate to outcomes. Therefore, theorists develop only general lists of potential relevant causal conditions that moderate and/or mediate a broad definition of what has been found in competing theories of motivation. Such models are symmetric by design, and correlation is a measure for drawing conclusions based on general patterns of association, which is not sufficient in practice.

It is appropriate to add that management representatives try to apply a metaphorical approach to defining organizational phenomena. Thus, the article reviewing research on «teal organizations» (Wyrzykowska, 2019) indicates further efforts to conceptually explain the organization through metaphorical comparisons, in this case with colors. But this has already happened more than once, and the key problem of this approach is too much abstraction. When it is necessary to implement such concepts in practice, many implementation issues usually arise. It can be argued that within one management, numerous attempts to find the essence through intuitive-subjective choices have led to a dead end and therefore can be considered as a wrong path.

It should be noted that empirical research is dominated by the correlational strategy, which is limited in the potential depth of scientific research. Thus, recent publications are attempts to investigate purely staff involvement as a factor of organizational effectiveness (Zeidan and Itani, 2020), staff satisfaction with organizational activities (Isac et al., 2021). Several hundred correlational studies, followed by critical generalization, must be conducted in order for a real shift to occur through the substantiation of a sufficiently valid theory. Therefore, for now, questions about what an organization is in an interdisciplinary sufficiently complete and most expedient interpretation remain relevant.
So, the problem in the theory of organizational culture is that they try to investigate some part of the phenomenon with a superficial understanding of the key features of the whole - the organization as an average professional social group. Management in independent attempts to obtain a sufficient result here is doomed to failure. Presented theories in management tend to move away from explaining the content of organizational culture towards its connections with other components of the organization's functioning, and the need to investigate the structure is often not discussed. Also, there are problems with empirical data due to their excessive subjectivity, which is a key drawback of all attempts. Therefore, there is a need for real application of an interdisciplinary approach to the study of complex socio-professional phenomena, which are formed by a person and their central component are people, namely organizations and their cultures.

**Justification of the «4x4» model of organizational culture.** The interdisciplinary content of an organization as an average social professional group is the basis of the ideas of the organization interpretation from the position of isomorphism in biology (De Geus, 2004; Meyer and Davis, 2007; Konovalov, 2016), management (Adizes, 2004; Lehman, 2017), organizational theory (Morhan, 2006; Monastyrskyi, 2019) and psychology, which gave rise to the following conclusions: an organization is considered as an average social group formed as a result of the realization of the phylogenetic ability of people to unite to achieve the effect of synergy in the interest of meeting various needs in the conditions of life in a certain environment, to distribute functions in a joint activity (which is a prerequisite for the formation of a structure) and thereby realize the possibility of the physical and mental existence of each of its participants. The basis of the existence of the organization is the idea of achieving certain results of activities that are important for the environment due to sufficient competitiveness to use its resources (material and intellectual). The environment is a large social group, which along with its characteristics (economic, political, social, ethnic, religious, intellectual and educational, and others) determines the peculiarities of the formation and development of organizations. Organizations have their basic characteristics and structure, which expresses and realizes their ability to be sufficiently adaptive in their environment. The basic characteristics are certain key qualities, properties, processes, formation of the organization, which determine its adaptive potential and is derived from the idea of creation (place and functional role in the environment), the most optimal forms, ways, methods of practical implementation of the idea through the joint activities of its members.

Thus, as a result of the interdisciplinary approach to the peculiarities of organizational culture, certain sufficient ideas were formed at the level of insight (enlightenment). A structure of organizational culture was developed. It was named «4x4», which means 4 parts and 4 levels. At the same time, the analysis of the publications of Fried (2020) regarding the formation of the theory and model, as well as the concept of culture as a versatile phenomenon by Munch, R. and Neil J. Smelser (1993) contributed to the determination of the following signs and criteria for the formation of this model of organizational culture:

– something artificially created, has a certain purpose, is needed for something, is valued in this group;
– exists as a certain potential or property of the organization, does not depend on the situation;
– exists for a certain time as a formed and fixed phenomenon, which can still be inherited in full or in part;
– each element must have a place in the system, hierarchy and perform a certain function;
– connections and relationships between elements and structures must be taken into account;
– central elements are very stable properties of the organization;
– elements of the model must be specific and understandable phenomena for the possibility of using the model in practice;
– the model should not be subject to corrections or refinements due to the type and features of the environment, but should have the universality of parts and components, their interrelationships and mutual influences;

should include mechanisms that are related to the static and changing organizational culture.

The content of the model. The main components of the idea which can claim to be called a hypothetical model of organizational culture «4x4» is presented in Figure 1. At this time, and taking into account examples of the use of this form (Hatch, 1993; Hatch and Cunliff, 2006; Meyer and Davis, 2007; Moon et al., 2012), the circle seems to be the most appropriate one. Its parts are defined as material, social, spiritual and informational sectors. The main basis of this version of the model is its systemic nature, in which the structural elements are relatively separated according to certain criteria, have certain connections and subsystems or elements. Also, the model should help to enable top managers to understand in detail the most appropriate option of organizational culture in each individual case and to effectively and purposefully influence the formed organizational culture.

Sectors in the model are considered equivalent. This fact creates the possibility of their autonomous research, as well as in interaction with some or with all sectors. Thus, there are enough varia-

Figure 1. Hypothetical model of «4x4» organizational culture
tions to combine and this increases the chances to describe, explain, analyze and form a large number of phenomena that exist in various forms and manifestations of the organizational culture system.

Source: author’s own elaboration.

Regarding the material sector and the expediency of its inclusion in the model, it should be noted that the idea of considering the material component in its pure form in the structure of the organizational culture has rarely been encountered in management. Thus, Schein (2010) included architecture, physical environment, technology and products, works of art, and style embodied in clothing as cultural artifacts. His idea did not find further constructive continuation in the form of empirical research. It was possible to find a material component in the structure of the model of corporate culture in Nadeiko’s papers (Nadeiko, 2019). The author probably turned to the interpretation of the concept of «culture» in general and substantiated corporate culture as a very complex, multifaceted, dynamic phenomenon that includes material and spiritual in the behavior of the organization in relation to subjects of the external environment, as well as own employees. According to the scholar’s point of view, it is a system of material and spiritual values, manifestations that interact and are inherent in the corporation, express its individuality, perception of oneself and others in the social and material environment, manifests itself in behavior, interaction, perception of one's own and the environment. In addition to the expediency of singling out the material sector, it is worth noting that a very large number of organizations aim to produce important and to some extent necessary for the environment very diverse material products. Not all of them are important and necessary, which indicates certain shortcomings in the functioning of the organization.

Social sector is singled out separately due to the fact that an organization is a social group with a focus on a certain type of professional activity, which is decisively filled with social properties. Among recent articles, a collective publication can be singled out that characterizes the content of this sector in general terms (Steffens et al., 2021). At the same time, the theory of management and organizations has many attempts to include the phenomenon of leadership in organizational culture. And since culture is a property and characteristic of a certain human community, further ignoring the social aspect in organizational culture, at least as a hypothetical component, will continue to cause the effect of partial fragmentation and non-compliance with the principles of the system method.

Mental sector in its numerous variations, representations and names is presented in all attempts to justify organizational culture. It seems that the very large number of publications on the spiritual component of culture has diluted this concept to a very abstract and inflated meaning. However, it can still be said that spirituality in the organization has a good chance of being one of the four sectors. Surely, this is one of the most conservative sectors, which should ensure the presence of stable, sacred, special phenomena for every supporter of some organizational culture.

Informational sector is suggested as the last and fourth sectors, although there were no such clear proposals yet. Or at least such ideas could not be found in publications. However, it will probably be very difficult to do without the information sector in the organizational culture during the information age. At the same time, in some publications scientists have given quite thorough hints that the informational component is quite promising (Merlo, 2017). However, there were no ideas to bring the information to the status of a full-fledged sector. But, this is a hypothetical model in which nothing bad will happen if such an attempt is implemented in the future. Therefore, it is the information sector that is the biggest innovation in the proposed structure of organizational culture. This requires confirmation and arguments.

The second «4» in the name of the model is worth considering as it contains a characteristic of deep levels of culture. Certainly, in the Figure 1, 4 circles with thicker lines are clearly seen, which hypothetically and still abstractly indicate the idea of a center and further centrifugal layers of organizational culture. The ideas presented in the articles by Lehman (2017), Van Knippenberg (2020), Steffens et al., (2021) served as the basis for developing the next part of the model.
The mission or the idea of creating an organization is considered as the most important and central part of organizational culture. The mission (idea of creation) in the model is understood as the fact that any organization should take its place in the environment, implement a certain task, act in order to provide or deliver the necessary things, products, services, personnel, knowledge, technologies, security to the environment and much more that any small or super large community of people needs. Of course, many will consider profit as the basic idea of creating a commercial or business organization. However, an organization with such a mission will not grow to at least some kind of organizational culture. Yes, perhaps due to this fact, there is such a world statistic that 9 out of 10 newly created organizations cease to exist within 1–2 years. It is likely that a purely profit orientation and a very superficial vision of one's potential place in the environment, which lays down the idea of creation that can grow into a mission, causes such total failures of start-ups. Therefore, the mission in the organization and its culture according to this model occupies the central place. This is the first of four levels that can be considered basic.

The next layer and, accordingly, the level according to depth in the model of organizational culture is the «core». The lower part of this layer is marked with the term «uniqueness». Therefore, the embedded idea in the model indicates the possibility of acquiring a special unique (or typical) organizational culture due to the features of its core. Also, for each of the sectors, through numerous attempts and brainstorming, the phenomenon that best relates to that part of the model was determined. Thus, the concept of «function» took the core layer of the material sector, which, according to the model, reflects the content of activity in material terms with an unquestionable orientation to its result as a fairly clear function. It goes without saying that this part of the core culture must come from the mission and define the further outer layers.

According to the social sector, the content of the core defines «lead» as a phenomenon that should be oriented to social and psychological processes both within the organization and in the environment outside it. Certainly, here the key role is played by the leaders of the organization, who, due to their status and relevant authority, can not only significantly contribute to the performance of the mission and function, but are also dependent on them and other parts of the core. The latter will be explained later. This part of the core is oriented and responsible for intragroup and intergroup processes that activate motives for joining the organization.

The spiritual sector in the core is represented by the concept of «soul», which most accurately reflects the content of this component of organizational culture as a certain organizational shrine, special organizational ideas. The term «ideology» has been used in this part of the model for a long time, but it has since been replaced. And it is not a fact that the replacement of terms was completely expedient. However, this phenomenon must exist under the sufficient influence of the mission, due to which it will be filled with the meaning of existence in the organization, the meaning of the activity, and the inspiration for it. It cannot be said that soul depends on lead or function. Or one cannot assert his unquestionable dominance over them. It seems that these parts can be balanced enough to accomplish the mission, and their successful combination has the potential to significantly influence the quality of organizational culture.

It remains to consider the core of the information sector, which is characterized by the term «knowledge», an alternative to which was «experience» for a long time. Both terms denote the information accumulated within the organization, which is necessary for the high-quality and effective performance of the mission. At the same time, the meaning of this part of the model is that the lead, soul or function should request the necessary information of sufficient quality and reliability. Without this function, the sector becomes unnecessary, that determines the specifics of organizational culture in certain cases. In this case, it may indicate to the pathology of the organization. Because of the ability to analyze and produce the most successful solutions with a mission orientation, knowledge or experience is an important part of the core. And through such
an example, its purpose and connections with other parts of the nucleus and the center can be explained.

Further from the center of the model is situated the third layer of organizational culture, which is designated as «inner part». The possibility of dividing the organizational culture into «inner part» and «outside» has been indicated in several attempts with adequate arguments (Hatch and Cunliff, 2006; Dauber et al., 2010). Therefore, such ideas should not be ignored, as they are potentially useful for better justification of the model.

The «inner part» layer can also be characterized by the concept of «syncretism» as a combination or fusion, a complex manifestation or use of self-sufficient or even incompatible and incomparable phenomena, ways of thinking and views. The possibility of using «syncretism» and «entropy» in the existence and activity of organizations is sufficiently argued in publications on the biological direction of organization theory. Therefore, another potentially useful idea of the model lies in the plane of using phenomena that are widespread in many spheres of life, and it is through «syncretism» that it is possible not only to explain, but also to bring to a certain level of perfection the mechanism of combining the material, social, spiritual and informational sectors into a sufficiently integrated system. Thus, it is reasonable to assume that the inner part not only combines various phenomena and important components of the organization in its culture, but it is also a conservative, stable, traditional component of culture. This part of the culture should have everything that has been tested for benefit and safety, is important enough for the functioning of the organization through this layer of its culture.

Attention should also be paid to such an inner part element, which is the «values» layer. It is not allocated to a separate layer, but is a component close to the core. According to another, lower component, this layer is defined as «targets», since quite often in publications, these concepts in organizational culture are treated as interconnected, equivalent phenomena. Values and targets as an element of organizational culture are presented in almost all theories, concepts, and models. At the same time, values, targets were described a lot, and an excessive number of classifications according to various criteria were proposed. At this time, it is difficult to concretely and confidently offer values and/or targets for the sectors selected in the model in a few words. However, it is worth trying, as useful and successful ideas and suggestions may come later.

Thus, for the material sector, the option «results» and «activity» is possible, which only outlines the possible content of this part of the model. The main idea of this part is to specify the most valuable and targeted when performing the function corresponding to the activity for achieving the mission. For the social sector, filling through such a concept as «community», which includes many other qualities and characteristics, may be quite likely. However, this phenomenon as a concept currently has the most reason to be considered as a value and a target for the social sector. Of course, there are no limits to improvement and a more appropriate concept can be found. Such phenomena as «ideals», «beliefs» fit quite well to the mental sector. It is these concepts that are chosen to sufficiently accurately and voluminously characterize the content of this part of the model. In the information sector, it was not possible to offer something particularly original, and therefore the relevant phenomenon «information» has been used here as an important component of modern reality, which can serve as a value and a target at the same time.

Much attention should be paid to the main layer of the inner part. This functional element of the model should serve as the basis of real syncretism. In order to fill this and subsequent layers in a guaranteed and balanced way, it is extremely important to use the experience of people who are professionally engaged in this field and can fulfill the role of an expert. One experience here will not be enough. Therefore, it is possible to speak with confidence about the real and high-quality filling of further layers after an appropriate field study with the involvement of experts. And at this stage it is only appropriate to express the results of our own impressions about the possible content and
certain elements of the model under the correction of the conducted brainstorming with persons who expressed relevant opinions.

The most likely filling of the inner part by material sector can be «tools», «technology», «masters», «capital» and other phenomena important for the organization. More phenomena are proposed for the social sector: «climate», «formal and informal relations», «favorites», «expectation», «leisure». Such phenomena as «influential power» or «authority» can be placed between the material and social sectors. The spiritual sector is proposed to be filled with such concepts as «taboo», «characters», «rituals», «traditions». The zone between the social and spiritual sectors can be filled with «morality» as a related concept. Last was the information sector, which it is proposed to fill with «analytics», «information exchange», «planning», «anticipation», «solutions». In addition, the boundary between the information sector and the spiritual one is occupied by «wisdom», and the material one by «meaning of work». In this way, the idea of the internal part of the model of organizational culture was characterized.

In the further presentation of ideas, it is necessary to dwell in detail on the layer, which is proposed to be defined as «layer of organizational immunity». This part of the model has its own functional purpose. Thus, experience indicates that in some organizations there is something like immunity, which prevents the penetration of something potentially dangerous into important parts of organizations, filters attempts by external agents to influence the organization. Many organizations do not have this characteristic feature, that is why not only the result and activity suffer, but also the existence of the organization is threatened. And the peculiarity of this layer may be to have an opportunity for the organization and its culture to have purely beneficial external influences. Therefore, this layer can also be characterized as «survival with evolution to competitiveness». Immunity is a metaphorical concept. However, it is possible to apply isomorphism by analogy with the human body or other highly developed species with immunity. At the same time, this phenomenon is appropriate in order to use such a characteristic of organizational culture as a strength to fill it with content. This is the most hypothetical construct in the model, as nothing similar has been found in scientific and practical publications. Therefore, it is only possible to propose and mark the appropriate type of immunity for each sector. And then, through field research and the expert method, confirm, partially confirm or refute such a hypothesis and remove this detail from the model.

The last thing left is «outside», which also has such a key property as «entropy». It denotes instability, loss of order, imbalance in the system. In biological theories (Konovalov, 2016) regarding the content of the organization, this is one of the central concepts. Entropy is also known as the natural tendency to lose order in a system. Therefore, it is better to control such a tendency in the organization and its culture. Such part of the model is necessary in order to be able to clearly find out and understand in practice (perhaps also in theory) those agents of influence from the outside or in the external part that are useful for maintaining normal relations with the environment for obtaining necessary, new and promising resources. And also in order to find out those phenomena with which you can experiment, but very carefully filter through immunity. They can be those spheres of activity that are most in contact with the environment and allowed into the inner part of the culture only in a transformed form under the control of immunity and taking into account the mission.

Therefore, it is proposed to include such phenomena as «PR», «communication», «image», «conflicts», «recruiting», «proactivity», «interaction», «support» as hypotheses for «outside» by social sector. Between social and spiritual sectors it would be reasonable to place such notions as «mass media», «site», «booklets». Spiritual sector may include «form of clothing», «personal development», «patronage», «upbringing», «heroes and myths of the organization». This sector borders on the information sector due to the phenomenon of «organization memory», and the information sector itself is filled with such concepts as «public information», «monitoring», «quality, access and completeness of information», «bureaucracy», «labor organization», «innovation», «initiatives», «rumors». The
material sector borders on the informational phenomenon of «professional development» and the social «organizational style» and can hypothetically be filled with «means of work», «incentives work», «profit», «adaptation» or «badding», «quality tasks», «career».

Not all of the listed phenomena are indicated in the graphic model. This is due to the fact that its content in sectors and parts can be significantly adjusted in the process of sharpening the model. This may especially apply to «inner part» and «outside», which can only be hypothetically suggested now. It is planned to test the hypothesis in the future through a survey and an expert method.

Two more elements, which are the scope and direction of activity (idealistic and physical, reflection and participation), are proposed as filling in the ideas of this model. These phenomena hypothetically seem suitable and useful in order to further implement empirical research with mathematical processing of statistical data. It should be a clearly proven in reality model.

Conclusions. The proposed model of organizational culture «4x4» can currently be considered as one of the theoretical ideas. However, the difference lies in the application of an interdisciplinary approach, within which the search for scientific ideas in various sciences, their analysis and selection, and an attempt to critically involve the graphic model are carried out. The model can serve as an alternative approach so that scientific achievements in the humanitarian sphere of the organization functioning have more practical and realistic results. Currently, the model contains purely hypothetical constructs, which with a high probability may remain in it after empirical research. Especially «inner part» and «outside» require the participation of specialists in correcting their content. At the same time, it was not grounded that other parts of the model are perfect. It is the study of reality through obtaining information about the experience of practitioners and experts that can be the basis for transforming this model into a tool suitable for use. The perspectives of this model are focused precisely on the practical assessment of the existing organizational culture, understanding of the mechanisms of its functioning in each situation. Achieving this goal can significantly increase the effectiveness of managing organizational culture as a complex but important phenomenon of organizational activity.

References:


