

# Heterogeneous Organizational Culture of Generations: Digital Support Solutions

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**Abstract**—The paper examines the problems that arise in heterogeneous organizational cultures. Their causes associated with value differentiation of generations are identified. It shows that the formation of different subcultures in the same organizational culture according to the generational principle, can lead to productive and destructive consequences for the organization. We propose to use digital diagnostic tools as preventive measures aimed at reducing the risks of destruction. Their use will provide the basis for the subsequent development and implementation of age-diverse staff training strategies.

**Keywords**—generational values, subculture, socio-psychological diagnosis, learning strategies

## I. INTRODUCTION

Organizational culture, understood as a set of the most important provisions used by members of the organization and expressed in the values and norms declared by the organization that give people guidelines for their behavior and actions [1], embodies the mechanism of self-organization. Not experiencing any managerial influences, it is still formed in the organization, independently and chaotically. The task of the manager is to use this important internal resource to achieve organizational goals and objectives, for which it is important to study in theory and apply in practice the tools for the formation and development of organizational culture. One of the significant internal factors influencing the formation of the culture of an organization is the presence of significant differences between members of the organization, their social roles, gender or age characteristics, i.e. heterogeneity. Leadership or leadership [2] is considered as the main source of organizational culture. The characteristics of leaders, such as gender, age, work experience and educational level, reflect the cognitive base and values of managers, which ultimately influence the strategy and tactics of the company's development [3]. It is obvious that the influence of both formal and informal leaders, based on the transmission of their values and norms of behavior to the immediate environment, extends to the sphere of organizational culture, as a manifestation of the company's internal environment.

## II. VALUE DIFFERENTIATION OF GENERATIONS

Heterogeneity of organizational culture is determined, among other things, by value priorities of different generations of employees.

Generation is defined as "an objectively formed concrete-historical totality of people close in age and formed in the same historical period, characterized by specific demographic features" [4].

The generation is characterized by typical anthropogenetic, social-psychological, ideological-moral and ethno-cultural characteristics, similar spiritual values, social experience and way of life.

In the opinion of some researchers differences in values between representatives of different generations are caused by difference of conditions in which in different times their formation occurred, and they believe that these changes are limited only to developed countries [5].

S.H. Schwartz, on the other hand, argues that there may be some fairly universal patterns of change in values as individuals grow and age. For example, an increase in the values of safety, conformity and tradition. According to Schwartz, at the integral level values are united in two axes of value: 1) openness to change - preservation; 2) care for people and nature - self-affirmation [6].

Analysis of the correlation between age and value axes confirmed that in most countries of the world as they age, respondents are more inclined to adhere to the values of conservatism and care for people and nature, and less inclined to openness to change and self-affirmation. At the same time, it was found that in the poorest countries the differences in values between older and younger people are less pronounced compared to more developed countries [7].

Postnikova's research on the basis of Schwartz's methodology allowed to single out value priorities of different generations:

- 1 generation (older than 61 years): universalism (understanding, tolerance, protection of well-being of people and nature); traditions; safety
- 2nd generation (46-60 years old): universalism; benevolence; conformity; safety
- 3rd generation (31-45 years old): achievement, independence
- 4 generation (16-30 years old): independence, stimulation (fullness of sensations of life, striving for novelty and changes), hedonism, achievement [8]

In contrast to youth, which prefers values, expressing interests of an individual, older generations are oriented to values, connected with interests of the group.

In theory of generations N. Howe and V. Strauss a generation is regarded as a group of people born in certain period that were influenced by the same events, education features and have similar values [9]. According to this theory the main values of older working generation employees - generation of boomers (born in 1944-63) are work, optimism, interest in personal growth and reward, collectivism and team spirit.

Generation X (1964-1984) is characterized by readiness for changes; ability to choose; individualism; awareness; technical literacy; desire for lifelong learning; pragmatism; self-reliance.

Values of generation Y (1985-2002) are readiness for changes, optimism, communality, desire for fast compensation, self-confidence, diversity, orientation to achievements, desire to work with flexible schedule.

Important for generation Z (2003-2023) are real-time feedback, work/life balance, alignment of organizational culture with their values, willingness to work in organizations with advanced digital technology, and informal communication style.

J. Twenge identified statistically significant differences between generations:

- Work takes up more space in the lives of older employees than younger ones
- Older employees (from 45 years old) are characterized by higher work ethics and focus on work
- Young employees value their free time more
- Young employees view the workplace as an expression of their own individuality [11].

It should be noted that most of the studies devoted to generational values use cross-sectional analysis, i.e. analysis of indicators referring to the same time. In this case, the notions of "age" and "generation" are substituted, because a person who is a conservative at 60 could be a liberal in middle age and a rebel in his or her youth. In contrast, longitudinal studies reveal the values of the same group throughout life. All of them basically confirm that work takes a more important place in life with age.

### III. MANAGEMENT OF SUBCULTURES BASED ON HETEROGENEITY

Heterogeneous organizational culture leads to the formation of subcultures. For the first time, M. Dalton was one of the first to speak about this concept in the 50s of the last century [4]. It is now generally accepted that within the organizational culture there can be many local cultures, reflecting the differentiation of personnel by management levels, divisions, age, gender, nationality and other characteristics, which are called subcultures. Subcultures can be both productive and destructive. The latter is most often formed in the organization due to insufficient attention of managers to personnel and the lack of programs for the development of organizational culture [12].

In this regard, it is possible to identify a number of signs of age discrimination in the organization:

- Employees judge others in terms of age
- Teams made up of representatives of different generations tend to finish working together as soon as possible

- Younger and older employees compete for recognition and resources
- Employees complain about members of other generations
- Companies tend to hire members of certain generations
- Employees reject ideas offered by members of other generations
- Managers believe that special training is needed to manage employees of other generations
- Managers believe that young or older employees are incapable of solving certain tasks
- Members of certain generations are bypassed in promotions
- Older employees readily retire
- Young employees seem disengaged and uninterested in their work.

Destructive subcultures, sometimes referred to as deviant, carry significant risks of an economic, social, and organizational nature. In this case, managerial actions are limited to administrative measures (transfer, dismissal, rarely co-optation). Professional (functional) subcultures, which are formed as a result of the cohesion of groups of employees united by common interests, tasks and knowledge, have a positive impact on the heterogeneous culture of the organization. Functional subcultures that overcome generational contradictions are capable of complementing, developing and transforming the heterogeneous culture of an organization in the direction of enriching it with relevant values, norms and rules, and enhancing a positive impact on personnel.

One of the effective human resource technologies for overcoming generational contradictions is mentoring. The effectiveness of mentoring can be explained by its individual character, because this form of training is targeted and close to the real conditions. Mentor can quickly react to mistakes made by his/her protégé, disassemble them in details and point out the correct course of work.

Mentoring contributes to the development of organizational commitment, the transfer of organizational values from generation to generation, increasing job satisfaction and job performance/

However, mentoring is not always effective due to the lack of necessary skills of the mentor, self-centered or exploitative behavior of the protégé, the possibility of developing dysfunctional relationship between the protégé and mentor, which can negatively affect job satisfaction and contribute to staff turnover [13].

Mentoring has a high potential for the realization of generative motives, which become more prominent with age. The concept of generativity was introduced by E. Erikson and means interest in the next generation, its upbringing in various spheres of life. Generativity is connected with age and refers to the second half of working life (40-65 years). Providing older employees with mentoring opportunities allows the realization of generative motives and contributes to retention of age-related personnel in the organization, bringing additional meaning to the work of age-related employees.

Mentoring also promotes collaboration between younger and older employees. Employees covered by mentoring system more positively evaluate the joint work with age-appropriate staff [14].

Traditional mentoring involves the support of a younger employee by an older employee. However, a young employee with more experience in a certain area can also act as a mentor for an older employee with less experience in that area. This is about reverse or reverse mentoring.

Reverse mentoring was originally used to transfer digital competencies from younger generations to older workers. Later, it was discovered that it can also help eliminate negative stereotypes across generations.

Young mentors perceive the opportunity to mentor older colleagues as a sign of recognition from the organization, which leads to an increase in their loyalty. Older protégés, in turn, perceive digital learning opportunities, which they often lack, as an expression of organizational support.

In this regard, the formation of a system in which it is possible to effectively use the potential of employees of different age groups is an important task currently facing company management and personnel management.

The presence of local subcultures that do not carry destructive threats does not yet guarantee the further development of organizational culture, but it is a prerequisite for the fact that the organization is able to develop on the basis of finding optimal solutions in any situations with a compromise of interests and taking into account different positions.

#### IV. DIGITAL SOLUTIONS FOR SUBCULTURAL DIAGNOSTICS

If we assume that subcultures formed according to the knee-length principle can carry the risks of destruction, then the question arises how it is possible to prevent this. We are primarily interested in preventive measures, which include the socio-psychological diagnostics of an organization, or rather its small groups / subcultures. In the case when we approach the solution of this problem from the standpoint of digital technologies, the HR manager has the following diagnostic tools in his arsenal (Table 1).

Table 1. Digital tools for socio-psychological diagnostics of the development of small groups / subcultures

Type	Name	Multiple characteristic
Online testing (use of mobile devices and / or local computers) [15]	Diagnostics of the developmental level of a small group	The technique makes it possible, by summarizing the answers of all members of the group, to determine the level of its development, as well as to compare different groups with each other.
	Determination of the group cohesion index (according to Sishor)	Group cohesion - a parameter showing the degree of integration of a group, its cohesion into a single whole
	Determination of the psychological climate of the group	The psychological climate reflects the relationships that have developed in the team, the nature of business cooperation, the attitude towards significant phenomena of life; is

		formed due to the "psychological atmosphere - a group emotional state, which, however, takes place in relatively short periods of time and which, in turn, is created by the situational emotional states of the collective.
Methodology for assessing the psychological atmosphere in the team (according to A.F. Fidler)		It is based on the method of semantic differential, the method allows for anonymous examination, and is combined with sociometry, which increases its reliability.
Diagnostics of the psychological climate in a small production group (according to V.V.Shpalinsky and E.G. Shelest)		The technique allows you to make a general assessment of the climate in the team, to identify negative factors that interfere with work, and their causes.
Assessment of aggressiveness in relationships (according to A. Assinger)		The technique allows you to determine whether the employee is correct enough in relation to others and whether it is easy for others to communicate with him. For greater objectivity, peer review is recommended.
Determination of the value-orientational unity of the group (according to V.S. Ivashkin and V.V. Onufrieva)		The methodology is aimed at identifying value-orientational unity based on group community when choosing the most value-significant qualities from the stimulus list.

#### V. STAFF TRAINING STRATEGIES

A heterogeneous culture in the generational aspect implies the need for joint activities in one collective of representatives of different generations, whose traditional values, norms and rules of behavior are different. In addition to this, there are also differences in the levels of digital competence among the representatives of different generations. Based on the DigComp international competence framework, developed by experts in the European Union, NAFI specialists have developed a methodology for testing digital competences of representatives of different generations [16]. According to the

NAFI methodology, digital literacy is revealed through a set of real requirements to the knowledge and skills of applicants, described in the job vacancies placed in the labor market. The measurement methodology was based on the assessment of five indicators (Table 2).

Table 2. Indicators for measuring digital competence

Indicators	Content of the assessed indicator
1. Information literacy	Skills in searching for information on the Internet, competencies in working with different types of data, and assessing the validity of online messages
2. Communicative literacy	Ability to use various types of online services and electronic devices, compliance with norms of communication on the network
3. Digital content creation	Competencies in creating and editing digital content, skills in working with copyrights online
4. Digital security	Ability to assess the risks of social engineering and online fraud when working in the digital space, knowledge of security measures of personal data security. Understanding the negative impact that digital devices have on the environment, physical and mental health.
5. Problem-solving skills in the digital environment	Skills in the use of mobile applications and computer programs to perform daily tasks, continually expanding digital knowledge. Ability to solve hardware and software problems.

The results of the study, which covered 1,300 people from 70 regions of Russia, showed that the differentiation of digital literacy levels between generations is great, but the gaps in digital knowledge and skills are the same for all generations. The distribution of digital competencies among Generation Z, X and Y is comparable: 60% and 64% have digital skills at the "basic" level, and 36% and 30% at the "advanced" level, respectively. The distribution of digital competencies is significantly different for baby boomers: at the 'basic' level: 78% use them, at the 'advanced' level only 12%.

When the results were detailed, Generation Z was found to have a weakness in the "digital security" indicator, "communication literacy". The baby boomers are struggling with the digital content creation indicator. At the same time, there are also common problems inherent in representatives of several generations, for example, representatives of generation Z and baby boomers have low scores in the indicators "information literacy", "digital security", "problem-solving skills in the digital environment".

We can conclude that there are no serious gaps in digital competences between the different generations, and that a person's desire for self-development plays a bigger role than age. The results of socio-psychological diagnostics of the development of small groups / subcultures of the organization can serve as the basis for the subsequent development and implementation of a set of measures aimed at integrating personnel. The integration of the subcultures formed according to the generational principle, in our opinion, is possible through training. Based on the theory of the anthropologist and ethnographer M. Mead, who put forward the thesis that with a different ratio of cultural traditions and innovations, the interaction between generations of people living in society [17] develops in different ways, we can assert that the teaching function of a heterogeneous organizational culture can be implemented in three strategies that can be organically combined: 1. post-figurative strategy, when representatives of the older generation pass on their social and professional experience to young colleagues; 2. configurative strategy, when representatives of the same generation learn from each other 3. prefigurative strategy, when

representatives of the younger generation independently master new patterns of economic and organizational behavior and transfer new experience to the older generation.

In the implementation of projects related to digital technologies, employers mainly focus on young and ambitious employees, who often lack life experience, the ability to build relationships with clients, and industry knowledge. The competences and potential of the older generation are the most important resources for the company's sustainable development in the digital world.

An age-balanced team should be formed taking into account the competence approach. Managers should not look at an employee's age, but at his competences and understand which of them are necessary to solve a particular problem. Personnel services are faced with the tasks of managing teams of different ages, including: planning for the replacement of qualified employees and training successors; creating an organizational culture, which promotes transfer of knowledge from generation to generation.

Creating an organizational culture that values multigenerational employees occurs through diversity management training, among other things. Diversity management aims to recognize the value of heterogeneity in the organization, providing equal opportunities to all employees regardless of race, nationality, gender, religion and age in order to ensure a democratic work environment, maximizing the potential of each employee and the organization as a whole.

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