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DIGITAL CULTURE IN ORGANIZATIONAL DEVELOPMENT: PSYCHOLOGICAL ASPECTS OF ADAPTATION AND MANAGERIAL TRANSFORMATIONS

Abstract. *The article explores the role of digital culture as a key factor in the transformation of management models, internal communication, and organizational development in the context of digitalization. Digital culture is defined as a set of values, norms, tools, and behavioral patterns formed as a result of implementing digital technologies, which shape the nature of interaction within the organizational environment. Special attention is paid to the socio-psychological aspects of employee adaptation to changes caused by digital transformation. The paper analyzes digital tools that support adaptation processes, including online surveys, internal communication platforms, distance learning, digital onboarding, virtual mentoring, and gamification. Key HR KPIs and socio-psychological indicators are identified to comprehensively assess the effectiveness of digital culture. The relevance of using a mixed-method approach—combining quantitative and qualitative methods – is substantiated to study digital culture. It is shown that effective digital culture cannot be built without considering subjective factors such as values, attitudes toward change, emotional support, trust, and engagement. The concept of a hybrid organizational culture is proposed, emphasizing the synergy between digital technologies and human-centric values to ensure flexibility, innovation, and psychological resilience among employees. The article highlights the need to rethink approaches to human resource management in the digital era and to form ethical, human-centered foundations for digital transformation.*
Keywords: *digital culture, organizational change, management psychology, digital transformation, employee adaptation, emotional resilience, internal communication, digital leadership, resistance to change, coaching in digital environments.*

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ЦИФРОВА КУЛЬТУРА В ОРГАНІЗАЦІЙНОМУ РОЗВИТКУ: ПСИХОЛОГІЧНІ АСПЕКТИ АДАПТАЦІЇ ТА УПРАВЛІНСЬКІ ТРАНСФОРМАЦІЇ

Анотація. *У статті досліджується роль цифрової культури як ключового чинника трансформації управлінських моделей, внутрішньої комунікації та організаційного розвитку в умовах цифровізації. Розкрито поняття цифрової культури як сукупності цінностей, норм, інструментів та поведінкових моделей, які формуються внаслідок впровадження цифрових технологій і визначають характер взаємодії в організаційному середовищі. Особливу увагу приділено соціально-психологічним аспектам адаптації персоналу до змін, спричинених цифровою трансформацією. Проаналізовано цифрові інструменти, що підтримують адаптаційні процеси, зокрема онлайн-опитування, платформи для внутрішньої комунікації, дистанційне навчання, digital onboarding, віртуальне менторство та гейміфікацію. Визначено ключові HR-KPI та соціально-психологічні індикатори, які дозволяють комплексно оцінити ефективність цифрової культури. Обґрунтовано доцільність застосування змішаного (mixed-method) підходу до дослідження цифрової культури, що поєднує кількісні та якісні методи. Показано, що формування ефективної цифрової культури неможливе без врахування суб'єктивних чинників: цінностей, ставлення до змін, емоційної підтримки, довіри та залученості. Запропоновано концепцію гібридної організаційної культури як синергії цифрових технологій та людяності, що забезпечує гнучкість, інноваційність та психологічну стійкість працівників. Стаття актуалізує необхідність переосмислення підходів до управління персоналом у цифрову епоху та формування етичних і людиноцентричних засад цифрових трансформацій.*

Ключові слова: *цифрова культура, організаційні зміни, психологія управління, цифрова трансформація, адаптація персоналу, емоційна стійкість, внутрішні комунікації, цифрове лідерство, опір змінам, коучинг у цифровому середовищі.*

Problem Statement. In the context of rapid digital transformation of organizations, the issue of developing an effective digital culture is becoming increasingly relevant. The implementation of digital technologies affects not only technical processes but also deep aspects of organizational interaction, human resource management, and corporate culture. However, management practices tend to focus excessively on the technological side of change, often neglecting the impact of the digital environment on employees' psychological adaptation, levels of trust, engagement, and motivation [1, 3]. This can lead to increased anxiety, digital

burnout, resistance to change, and reduced efficiency. There is a need for a comprehensive, interdisciplinary approach to studying digital culture that considers both measurable indicators and subjective factors such as values, expectations, and emotions. Equally relevant is the issue of forming a hybrid organizational culture that combines digital efficiency with humanity and ethical interaction.

Analysis of recent research and publications. The topic of digital culture has been actively explored by both international and Ukrainian scholars. Notable contributions include the work of G. Westerman, A. Kane, and T. Davenport, who view digital culture as a key enabler of successful organizational transformation [2, 3, 4]. In the Ukrainian academic space, this topic is less extensively covered, although certain works focus on change management (O. Donii, L. Tarasiuk, N. Lukianenko, D. Kasmin, Yu. Kotel'nykova, O. Gumennyi) [5-9]. At the same time, the psychological dimension of organizational change – such as psychological resilience, emotional readiness for innovation, and leadership's role – is addressed in the works of A. Maslow, K. Lewin, and J. Kotter. However, comprehensive research at the intersection of digital culture and psychological adaptation to change remains underdeveloped.

Purpose of the article. The purpose of this article is to analyze the influence of digital culture on employees' psychological readiness for organizational change and to identify tools for building resilience in the digital environment. To achieve this goal, the following objectives are set: to analyze the key stages of digital culture formation in organizations; to identify the psychological aspects of employee adaptation in a digital environment; to evaluate the effectiveness of digital tools supporting adaptation; to propose a mixed-method approach to studying digital culture; and to justify the concept of a hybrid organizational culture as a promising direction for development.

Presentation of the Main Research Material. The term "digital culture" is considered a multifaceted concept encompassing the transformations in society brought about by the integration of digital technologies into all areas of life. In the realm of human resource management and organizational development, digital

culture is defined as a set of principles, values, and methods employed to facilitate effective interaction among leadership, managers, and employees through information and communication technologies [6]. Key components of digital culture frequently highlighted in contemporary scientific literature include digital literacy, adaptability, innovativeness, and openness to change. Collectively, these elements form the value-based and behavioral foundation of digital culture, enabling individuals and organizations to interact effectively amid constant technological changes.

Today, every organization undergoes several stages in forming a digital culture, grounded in modern research on digital transformation, shifts in corporate culture, and innovation management (see Fig. 1).
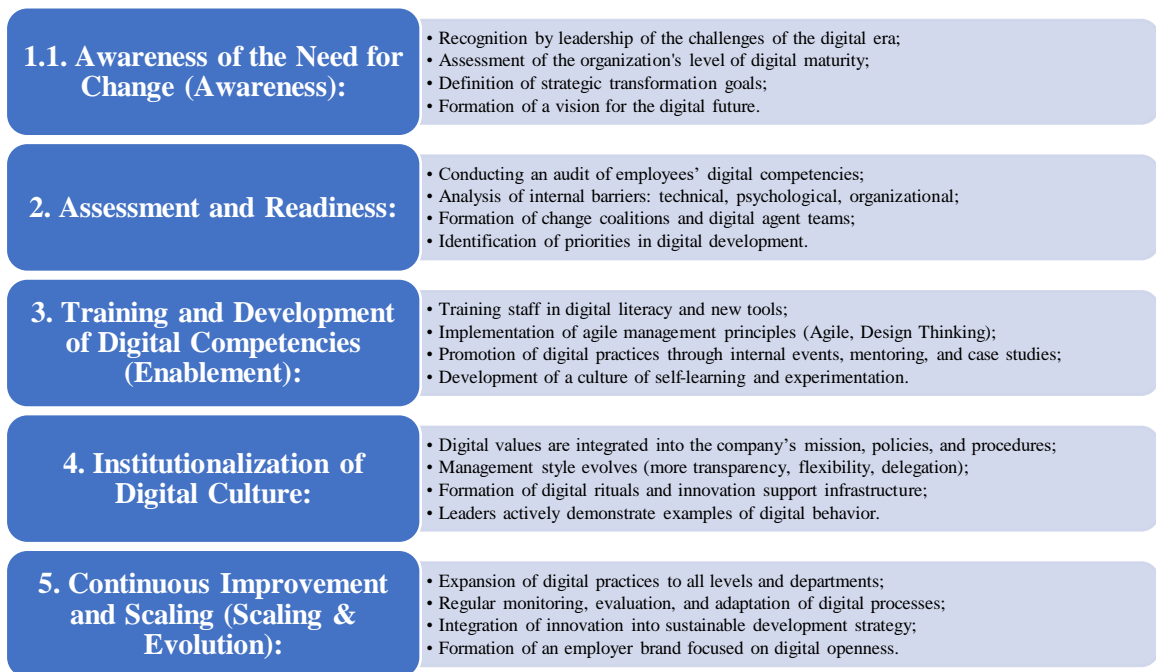
1.1. Awareness of the Need for Change (Awareness):	• Recognition by leadership of the challenges of the digital era; • Assessment of the organization's level of digital maturity; • Definition of strategic transformation goals; • Formation of a vision for the digital future.
2. Assessment and Readiness:	• Conducting an audit of employees' digital competencies; • Analysis of internal barriers: technical, psychological, organizational; • Formation of change coalitions and digital agent teams; • Identification of priorities in digital development.
3. Training and Development of Digital Competencies (Enablement):	• Training staff in digital literacy and new tools; • Implementation of agile management principles (Agile, Design Thinking); • Promotion of digital practices through internal events, mentoring, and case studies; • Development of a culture of self-learning and experimentation.
4. Institutionalization of Digital Culture:	• Digital values are integrated into the company's mission, policies, and procedures; • Management style evolves (more transparency, flexibility, delegation); • Formation of digital rituals and innovation support infrastructure; • Leaders actively demonstrate examples of digital behavior.
5. Continuous Improvement and Scaling (Scaling & Evolution):	• Expansion of digital practices to all levels and departments; • Regular monitoring, evaluation, and adaptation of digital processes; • Integration of innovation into sustainable development strategy; • Formation of an employer brand focused on digital openness.

Figure 1 – Stages of Forming Digital Culture in Organizations
Source: Generalized by the authors based on [4,5]

These stages are not linear – they may overlap or recur cyclically under conditions of rapid change. Digital culture is formed not only through tools but, above all, through values, behavioral models, and leadership.

Digital culture is not only a consequence of digitalization but also acts as a catalyst for deep changes in organizational management models. In today's digital economy, traditional hierarchical structures and command-and-control management styles are losing effectiveness, giving way to flexible, decentralized, and

collaborative approaches.

Currently, we are witnessing a shift in the management paradigm, decentralization of decision-making, new principles of control and feedback, a focus on innovation and experimentation, and a rethinking of the leader's role as a mentor, strategist, and bearer of values.

Overall, digital culture not only supports technological changes within organizations but also defines a new logic of management: open, flexible, and inclusive. In the organizational environment, digital technologies transform methods of interaction, management, and internal communication. Their influence extends beyond operational aspects to include value orientations and employee behavioral models, collectively reshaping corporate culture.

This transformation fosters democratization, increases the intensity of communication, ensures transparency of information flows, and introduces new formats of interaction (asynchronous communication, hybrid meetings, digital briefings), interactivity, and a blurring of work-life boundaries.

All of this creates an entirely new environment for employee interaction, forming a dynamic internal organizational ecosystem that affects not only communication effectiveness but also deeper layers of corporate culture: values, expectations, and social roles.

Traditionally, scholars define employee adaptation as a process aimed at the gradual integration of an individual into the enterprise system, along with the acceptance and assimilation of the organization's corporate culture, values, and behavioral norms. In a simplified form, this process includes three stages: initial acquaintance with the company and team, development of job-related skills, and integration into the work collective.

In today's digital environment, this process requires not only mastering new technological tools but also rethinking communication methods, time management practices, and approaches to teamwork and collaboration [8].

For employees who have relied for years on familiar interaction models, such changes can become a source of psychological stress, internal resistance, and a sense

of losing control over the work process. This is why examining psychological adaptation in the context of organizational transformation has become an essential component of successfully implementing digital technologies.

The proposed conceptual framework illustrates the stages of digital transformation's impact on employee psychology, adaptation mechanisms, and the integration of the individual into the new digital culture (see Fig. 2).
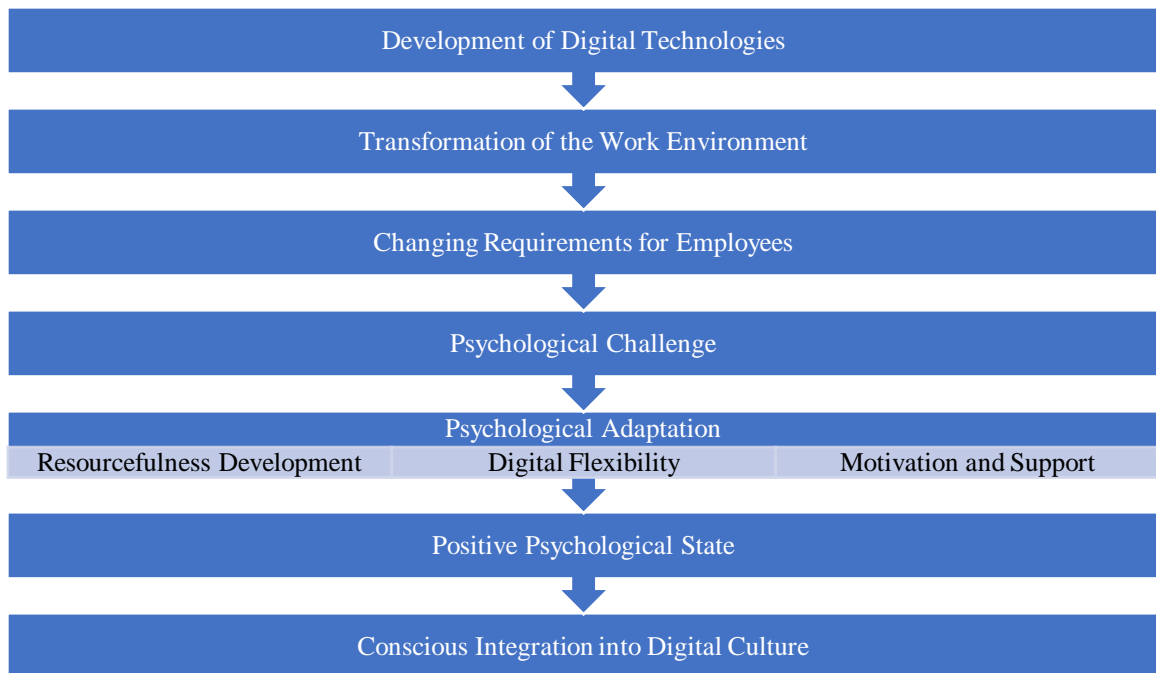
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┌─────────────────────────────────────────────────────────┐
│           Development of Digital Technologies             │
└─────────────────────────────────────────────────────────┘
                            ↓
┌─────────────────────────────────────────────────────────┐
│          Transformation of the Work Environment           │
└─────────────────────────────────────────────────────────┘
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┌─────────────────────────────────────────────────────────┐
│          Changing Requirements for Employees              │
└─────────────────────────────────────────────────────────┘
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┌─────────────────────────────────────────────────────────┐
│                 Psychological Challenge                   │
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│                Psychological Adaptation                   │
│ Resourcefulness Development │ Digital Flexibility │ Motivation and Support │
└─────────────────────────────────────────────────────────┘
                            ↓
┌─────────────────────────────────────────────────────────┐
│               Positive Psychological State                │
└─────────────────────────────────────────────────────────┘
                            ↓
┌─────────────────────────────────────────────────────────┐
│           Conscious Integration into Digital Culture       │
└─────────────────────────────────────────────────────────┘
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Figure 2 – The Interrelation Between Digital Technologies and Employees'
Psychological Adaptation
Source: Developed by the authors.

As we can see, digital development and its application for transforming the work environment create a foundation for building a positive psychological state within the team and fostering conscious integration into the digital culture. Digital tools supporting psychological adaptation also play a significant role, among which the following should be highlighted:

– Internal communication platforms (e.g., Slack, MS Teams) – strengthen transparency and teamwork;

– Online surveys and sentiment analytics – allow quick response to psychological risks;

– E-learning systems – help build confidence in new roles;

– Digital onboarding and gamification – lower barriers to entering the new environment;

– Virtual mentoring programs – support emotional well-being and experience sharing.

Key HR KPIs used to assess the quality of employee adaptation and the state of organizational culture during digital transformations include:

– Turnover Rate – employee attrition levels;

– Speed to Productivity – rate of adaptation to new roles;

– Onboarding Satisfaction Score – employee satisfaction with the onboarding process;

– Internal Communication Index – effectiveness of internal communication.

These four KPIs provide a comprehensive picture of the effectiveness of adaptation processes and digital culture. Regular monitoring helps to identify weak points in interaction, and adjust approaches to training, communication, and staff support.

Socio-psychological indicators of the adaptation climate and digital culture include:

– Workplace Anxiety Index – levels of anxiety/stress;

– Trust Index – levels of trust in leadership;

– Team Cohesion Index – levelsof team interaction.

These indicators are not automatically recorded in systems, but their regular evaluation improves management decisions, reduces the risk of destructive behavior, and ensures a healthy atmosphere during adaptation or changes.

In the context of studying digital culture in organizations, we recommend greater focus on the mixed-method research approach – a methodological strategy combining both quantitative and qualitative methods for a comprehensive understanding of the phenomenon.

This is because digital culture encompasses both objectively measurable behavioral patterns (communication frequency, platform participation, digital

activity) and subjective categories – values, attitudes toward change, and internal acceptance of digital norms. A typical research structure is shown in Table 1.

Table 1 – Typical Structure of a Mixed-Method Study of Digital Culture in Organizations

№	Stage of Research	Quantitative Methods	Qualitative Methods	Purpose of the Stage
1	2	3	4	5
1.	Diagnosis	Online surveys, HR KPIs (Turnover Rate, Onboarding Satisfaction Score), digital activity analysis	In-depth interviews with employees, focus groups, observations	Identifying the level of digital culture maturity, risk areas, and key barriers
2.	Measuring Impact	Changes in KPI indicators, analytics from tools (MS Teams, Slack, e-learning usage)	Employee feedback on implemented changes, case studies, narrative analysis	Assessing the effectiveness of digital culture development initiatives
3.	Interpretation	Correlation analysis between digital activity and engagement/productivity	Thematic analysis of employee statements, summary of mentoring experiences	Aligning quantitative and qualitative data to form conclusions
4.	Generalization	Trend visualization, summary reports	Formulation of digital culture models, recommendations based on cases	Developing strategic recommendations for strengthening digital culture in the organization

Source: Generalized by the authors based on [4-7]

This approach provides both depth (through interviews) and scale (through surveys), allowing for hypothesis verification: explaining why certain digital practices are ineffective, clarifying the context of their impact – for different roles, generations, and departments - and improving the quality of managerial decisions through objective and empathetic data.

The mixed-method research approach enables not only an assessment of formal indicators of digital culture effectiveness but also an understanding of the motivations, concerns, and cultural shifts taking place within the organization. This is especially important during periods of change when quantitative metrics alone cannot explain the deeper causes of resistance or engagement.

Timely evaluation and understanding of the real situation can help predict and

prevent potential negative risks related to digital culture. One of the most immediate negative effects is information overload, which reduces concentration, makes prioritization difficult, and increases stress and digital burnout.

Another issue is digital isolation – the lack of support, the loss of a sense of "being part of the team," and decreased initiative. Misinterpretation of message tone, misunderstandings due to the lack of nonverbal cues, and the emergence of a "silent culture" (where problems are not voiced in chats) also have social and psychological consequences.

Increased digital visibility (via trackers, CRM systems, chat activity) can trigger micromanagement, a sense of constant surveillance, loss of autonomy, and decreased motivation. Meanwhile, a focus on digital presence may lead to pseudo-engagement, prioritizing speed over quality and encouraging "activity for the sake of activity."

Clearly, digital culture is not a neutral environment – it transforms behavior, emotions, and social connections within organizations. Thus, the implementation of digital practices should be accompanied by the development of emotional intelligence and soft skills, the formation of digital ethics, and the creation of balances between autonomy, control, and live interaction.

In response to the challenges of digital transformation and the changing paradigms of work, a hybrid approach to organizational culture is emerging in modern management. A hybrid organizational culture is a system of values, norms, and practices built on digital platforms, analytics, automation, and remote collaboration, while preserving humanity, emotional intelligence, leadership, ethical principles, and employee support.

This forward-looking approach acknowledges that an effective organization is not only a technological system but also a deeply social structure. It requires the simultaneous creation of a "digital core" (platforms, metrics, automation) and a "human contour" (mentorship, support, feedback culture).

This includes the implementation of "human-centered transformation" policies – where any digital change is tested not only for functionality but also for its

emotional impact on employees – and blended onboarding formats, combining digital courses with live meetings and coaching.

The hybrid organizational culture should not be seen as a compromise, but as a synergy of humans and technology. This is the foundation for flexible, resilient, and long-term successful companies in the digital age. It enables the integration of speed and empathy, automation and motivation, scalability and humanity.

Let us consider how the classical model of adult learning and adaptation can be adapted to the proposed blended onboarding format using the example of the Andragogic model of adult learning, based on the work of Malcolm Knowles (see table 2)

Table 2 – Comparison of the classical model and the hybrid approach to adult learning

Principles of Andragogy (M. Knowles)	Adapting to a Digital and Hybrid Organizational Culture
Need to know	Employees need to understand how digital tools and cultures impact their role and development
Experience	Taking into account previous experience with technologies; mentoring, peer-learning through platforms
Self-concept	Supporting self-learning through digital platforms, LMS systems, blended onboarding
Readiness to learn	Increasing motivation through personalized content, interactive interfaces
Problem-centered learning	Using simulations, cases, digital scenarios, adaptive learning
Internal motivation	Development through emotional engagement, feedback, coaching, relevance of learning in the context of work

Source: Generalized by the author based on [9]

Therefore, the transformation of classical models of adaptation to digital challenges requires educational processes not only to organize access to information, but also to create an atmosphere of emotional safety through interaction in digital communities, support from leaders and tutors, as well as flexible adjustment of the learning environment to individual needs and the level of digital maturity.

Digital and hybrid organizational cultures must become the new architectural foundation for organizational development. New technological and social vectors should shape the future of management, teamwork, learning, and leadership.

Among the key trends to embrace are: the intellectualization of the digital

environment, personalized learning and development, virtual teams as the norm, and the growing role of digital facilitation.

The future of digital culture lies in combining flexibility, automation, humanity, and personalization. Organizations that already integrate intelligent systems, support individual employee development paths, and build effective collaboration in decentralized teams will gain a sustainable competitive advantage in the new digital reality.

Despite the growing number of empirical and theoretical studies, future research on digital culture must further address the ethical aspects, including the development of ethical frameworks for digital interaction, the impact of digital behavior on employee dignity, autonomy, and digital rights, the influence of generational differences within teams, and cross-cultural perceptions of digital culture.

Further research into digital culture must consider not only technical or functional aspects but also the value-based, cultural, and generational contexts that determine its depth, sustainability, and acceptance. Only a multidisciplinary approach will help build a more holistic, adaptive, and ethical model of the digital organizational environment.

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