IRSTI 06.75, 06.81 UDC 316.422

DOI 10.47649/vau.24.v75.i4.23

N. Ibadildin^{1*}, S. Igbayev¹, M. Tulemissova¹, Zh. Kenzhin²

¹Astana IT University
Astana, 020000, Republic of Kazakhstan

²Academy of Physical Education and Mass Sport
Astana, Republic of Kazakhstan

*e-mail: jaksat_22@mail.ru

DIGITAL TRANSFORMATION IN KAZAKHSTAN: CUSTOMER EXPERIENCE MANAGEMENT

Abstract

The article explores the development of digital transformation based on experience management in the Republic of Kazakhstan. Its objective is to examine the correlation between an organization' digital transformation and experience management, identify systemic issues, and confirm the role of experience management in enhancing digital transformation effectiveness. The study focuses on business entities within Kazakhstan, represented by small, medium and large enterprises in the IT sector. To facilitate digital transformation based on experience management, a clear definition of experience management and the transformation target, i.e., the organization, is essential. The study posits that effective transformation management should encompass experience management principles, covering both employee and customer experiences, since both of these factors are interrelated and can greatly affect the overall effectiveness of the company. It highlights the significance of an integrated approach to digital transformation, considering technological and organizational aspects, alongside the necessity of a coherent vision and strategy align with the mission and values of the institution. Based on the research findings, the article proposes recommendations for organizations to engage employees and customers in the digital transformation process, prioritizing their needs for successful transformation.

Key words: digital transformation, digitalization, customer experience, experience management, CEM, CX, EX.

Introduction

Digital transformation is fundamentally changing the global business landscape, presenting both opportunities and challenges for organizations seeking to remain competitive in an increasingly digital world. In Kazakhstan, this transformation is gaining significant traction, driven by the recognition that integrating advanced digital technologies is essential for improving efficiency, fostering innovation, and enhancing customer experiences. However, despite the rapid adoption of digital strategies, the effective implementation of Customer Experience Management (CEM) within this transformation remains an area requiring further exploration.

Existing research has extensively covered the impact of digital transformation on various industries globally, with a particular focus on how CEM can enhance customer satisfaction and loyalty. Thus, Sascha Kraus et al. (2021) provide a comprehensive review of the concept of digital transformation and its implications for businesses and society. They emphasize that digital transformation is not merely about technological upgrades but involves profound changes across all aspects of an organization, driven by the integration of digital technologies [1].

However, there are relatively few studies on Kazakhstan, and those that do exist often do not fully capture the unique challenges and opportunities present in this market. Moreover, previous research tends to overlook the critical interaction between customer and employee experience management in the context of digital transformation, leading to a fragmented understanding of how these elements contribute to overall organizational success.

For instance, Gulnaz Alibekova and colleagues examine the current state of digital transformation in Kazakhstan, focusing on the factors that facilitate and impede progress in this area. The authors highlight that while Kazakhstan has made significant strides in improving its ICT

infrastructure and increasing internet access—evidenced by a rise in the Internet Development Index – there are notable challenges [2].

The rapid advancement of new digital technologies and the subsequent emergence of innovative business models have significantly altered consumer expectations and behaviors, placing considerable pressure on established businesses and disrupting numerous industries [3]. Consequently, there is a pressing need to reassess traditional business approaches and adopt an experience management perspective.

There is a pressing need for research that not only addresses these gaps but also provides a comprehensive analysis of how CEM is being leveraged in Kazakhstan's digital transformation journey. This study aims to fill that void by examining the current state of digital transformation in Kazakhstan, with a particular emphasis on CEM and its role in driving effective change. By critically analyzing existing strategies, identifying systemic issues, and exploring the interconnections between customer and employee experience management, this research seeks to offer valuable insights into how Kazakhstan's businesses can optimize their digital transformation efforts. The findings will not only contribute to the academic discourse but also provide practical guidance for organizations navigating the complexities of digital transformation in a rapidly evolving market.

The underlying hypothesis of this study is to examine the mechanisms for implementing digital transformation through the management of employee and customer experience, recognizing their interconnectedness and their potential to significantly impact overall organizational performance. As companies and organizations undergo digital transformation, business processes can be automated and optimized to enhance productivity and performance [4]. Digital tools and technologies can expedite operations, reduce costs, and boost productivity.

Materials and research methods

The research study employed an integrated methodology that combined both qualitative and quantitative research approaches to provide a comprehensive analysis of digital transformation and experience management in Kazakhstan. This dual-method strategy was chosen to capture the nature of digital transformation, which is influenced by a range of contextual factors such as organizational culture, leadership styles, and social dynamics.

The object of research in this study is the digital transformation processes within companies in Kazakhstan, with a specific focus on the role of customer experience management. The primary focus is on companies operating within Kazakhstan's IT sector, a field that is both a driver and a beneficiary of digital transformation. The study aims to explore how these companies are adopting and integrating digital technologies to enhance customer experiences and optimize employee engagement, which are critical factors in achieving successful digital transformation.

Qualitative research, including a systematic review of relevant scientific literature, was utilized to uncover patterns, ideas, and hypotheses that might not be immediately apparent. A systematic review involves a structured literature review linked to a well-defined research question, using clear and methodical approaches to identify, select, and critically evaluate relevant studies previously published on the topic. This method allowed for a deeper understanding of the nuances in how digital transformation and experience management are understood and implemented within organizations.

On the other hand, quantitative research was employed to complement these insights by providing a more structured and measurable understanding of the current state of affairs. A survey was conducted involving 60 managers from companies within Kazakhstan's IT market. This survey was designed to gather reliable and direct information from representatives of the IT community, offering a clear picture of how digital transformation is currently being approached in practice. The data collected from this survey served as a foundational component of the research, enabling the identification of trends, challenges, and opportunities that are prevalent across the industry.

By integrating both qualitative and quantitative approaches, the study was able to offer a holistic perspective on the readiness of businesses in Kazakhstan to undergo digital transformation. This methodology allowed for a thorough examination of the critical roles that CEM plays in this process.

The complementary nature of the two research methods ensured that the study not only captured the broad trends but also delved into the specific factors that influence the success of digital transformation initiatives. This comprehensive approach provides valuable insights that can inform both academic understanding and practical applications within the context of Kazakhstan's evolving digital landscape.

Results and its discussion

1. Strategic fit

The study reveals a significant gap in the alignment between organizational operations and strategic objectives. For instance, a significant 68% of respondents rated this understanding as deficient. Individuals tasked with executing various functions often find themselves uninformed or uncertain about the overarching strategic objectives, which are typically disseminated down to the management level. Moreover, these objectives are often not integrated into decision-making processes and prioritization mechanisms across the entirety of value chains. Consequently, specific isolated units within the organization operate with divergent objectives and disjointed prioritization mechanisms, leading to conflicts and inefficiencies.

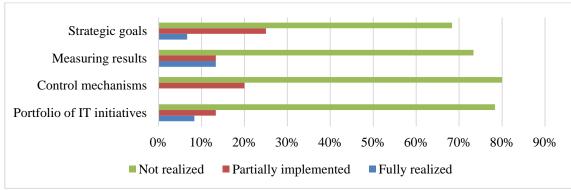


Figure 1 – Strategic fit

Note: compiled by the authors

The significantly low rating observed when evaluating the outcomes of all IT investments and initiatives in relation to strategic objectives, as evidenced by 73% of respondents scoring this aspect poorly (as depicted in Figure 1), was not entirely unexpected. Discussions surrounding value and results have been ongoing for over two decades, yet the focus remains predominantly on measuring performance metrics rather than actual outcomes. This discrepancy can, in part, be attributed to the lack of clarity and visibility regarding strategic goals.

With the escalating demand for IT across diverse business domains, conflicting goals and requirements inevitably arise, necessitating effective governance mechanisms. However, a staggering 80% of respondents indicate a lack of formalized governance mechanisms (such as COBIT, ISO38000, etc.) that facilitate decision-making and prioritization processes to manage competing business priorities and requirements. In the absence of robust governance structures, IT resources and funding often gravitate towards initiatives advocated by the most vocal stakeholders, typically favoring innovation and renewal initiatives over addressing technical debt and enhancement work [5]. This imbalance poses a significant risk to achieving the desired outcomes.

Due to the inability of organizations to effectively measure results, demonstrating the repercussions of neglecting technical debt and improvement work becomes challenging. Such endeavors often remain obscured and are typically excluded from portfolio planning and decision-making processes. The overwhelming majority, constituting 78%, rated the balance between various types of work – innovation, risk management, and improvement – as poor. This indicates that existing governance frameworks fail to ensure a balanced portfolio of IT initiatives that encompasses all these essential components.

2. Leadership

The research highlights significant challenges in leadership readiness to manage the cultural shifts necessary for successful digital and agile transformations, characterized by attributes such as collaboration, openness, security, transparency, a commitment to continuous learning and improvement, and a focus on delivering customer value [6]. However, leaders often lack the necessary readiness to navigate such cultural shifts effectively. A significant 67% of respondents acknowledge grappling with culture change, yet more than 60% rate leadership development programs focused on cultivating the requisite skills for managing cultural transitions as inadequate (refer to Figure 2).

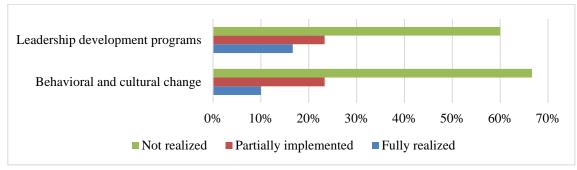


Figure 2 – Leadership

Note: compiled by the authors

Managers play a pivotal role in fostering and implementing the new organizational culture by exhibiting a dedication to behavioral change, which includes ensuring psychological safety, promoting open feedback channels, and allocating time for teams to engage in learning and improvement activities. While a majority of managers profess their commitment to this endeavor, the specific behaviors that signify this commitment often remain ambiguous. Notably, 67% received low scores regarding their level of commitment, which may be attributed to a deficiency in appropriate skills for facilitating culture and behavior change. Moreover, inadequate skills also contribute to suboptimal outcomes of training investments, as evidenced by a lack of formal methodologies for integrating new skills and behaviors into the organizational framework.

3. Culture

Merely 52% demonstrated deficiency in translating corporate values and principles into actionable behaviors, underscoring the increasing acknowledgment and emphasis on cultural transformation within agile development initiatives. Although corporate values are articulated and disseminated, they are not effectively converted into enduring and favorable behaviors. Instilling new behaviors into the organizational culture necessitates iterative practice, feedback mechanisms, and frequently, coaching interventions. A significant 65% of company managers indicated a failure to enact these behaviors. Absent such deliberate endeavors, there is a propensity to revert to previous behavioral patterns, thus impeding aspirations for cultural transformation. Subpar ratings in leadership further exacerbate this issue, eliciting apprehensions regarding the efficacy of initiatives aimed at cultural change (Figure 3).

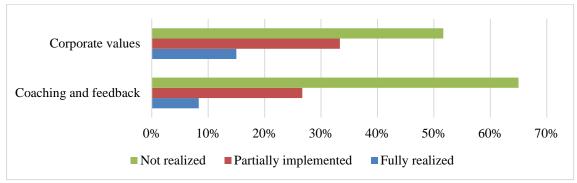


Figure 3 – Culture

Note: compiled by the authors

4. Skills

Approximately 65% lack a formal methodology to guarantee that training adheres to the following criteria:

- Alignment of training initiatives with organizational objectives.
- Provision of mechanisms facilitating the translation of acquired knowledge into actionable behaviors, encompassing practices like rehearsal, feedback mechanisms, and coaching support.

Furthermore, the assessment and evaluation of the effectiveness of training programs are inadequate, as depicted in Figure 4.

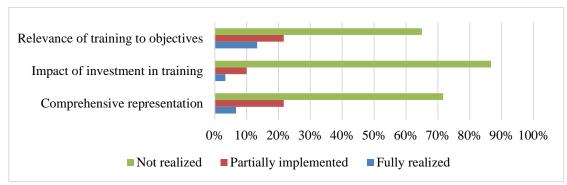


Figure 4 – Skills

Note: compiled by the authors

An overwhelming majority, comprising 87%, lack mechanisms for assessing the intended or realized impact of investments in training. These mechanisms aim to gauge the uptake of new behaviors subsequent to training sessions and how the integration of these behaviors influences business outcomes.

Collaboration and integrated capabilities play pivotal roles in achieving the objectives of agile transformation. However, a significant 72% do not exhibit comprehensive representation in training initiatives. Frequently, departments partake in separate training sessions, thereby perpetuating a divisive "us versus them" dynamic. Comprehensive representation fosters a collective comprehension and acknowledgment of integrated avenues for improvement. Achieving comprehensive representation can be facilitated through the implementation of best practice framework trainings.

5. Continuous improvement

Continuous improvement emerged as notably deficient, with 75% attributing a low proficiency to this aspect (see Figure 5). Continuous improvement efforts frequently remain confined to localized spheres, concentrating either on process refinement or departmental enhancements, lacking a comprehensive top-down and cross-functional orientation. Regrettably, continuous learning and self-improvement fail to be recognized as strategic competencies. Poor ratings in terms of strategic

alignment, including governance structures and portfolio balance, further amplify this issue. Moreover, improvement endeavors often yield precedence to innovation initiatives, aggravated by the absence of rigorous impact assessments on outcomes.

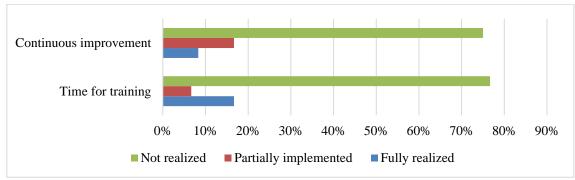


Figure 5 – Continuous improvement

Note: compiled by the authors

A substantial 77% of participants assigned a low rating to the allocation of time and monitoring of improvement requisites. Employees find themselves devoid of opportunities for ongoing learning and enhancement, while proposed improvements languish without prioritization or execution. This circumstance stems partly from deficient leadership competencies and partly from managerial inadequacies [7]. Teams find themselves ensnared in reconciling contradictory business demands, exacerbated by the absence of a coherent linkage between improvement initiatives and overarching strategic goals, which frequently remain elusive.

Conclusion

Recommendations

The analysis conducted in this study has yielded conclusions and a set of recommendations aimed at guiding organizations in effectively involving both their employees and customers in the digital transformation journey [8, 9]. These recommendations enable organizations to prioritize their needs effectively, facilitating a successful transformation endeavor. By adhering to these recommendations, organizations can ensure that the digital transformation initiatives they undertake enhance user experience, yield tangible benefits, and contribute to the achievement of their business objectives. Drawing from the research findings, the following recommendations have been formulated:

- Evaluate the Current State: Begin by thoroughly assessing the existing state of affairs.
 Clearly define the specific challenges or opportunities the organization aims to address through digital transformation. Evaluate user satisfaction levels and key performance metrics to pinpoint areas requiring the most attention.
- Establish Goals and Metrics: Define precise improvement objectives, such as enhancing response times to user inquiries or minimizing downtime. Develop key performance indicators (KPIs) to monitor progress towards achieving these objectives.
- Standardize Processes: Introduce standardized procedures for managing requests, incidents, changes, and problems. Ensure that these processes are well-documented, comprehensible, and easily accessible to all employees.
- Embrace Automation: Emphasize the implementation of automation wherever feasible and suitable. Automated processes have the potential to significantly diminish manual workload and expedite task completion.
- Invest in Employee Training and Development: Allocate resources towards enhancing employee competencies and knowledge through training and development initiatives. Strengthening employee skill sets will lead to improved service quality and contribute to more efficient operations.

- Enhance Communication: Foster effective communication channels between employees and users. Implement transparent communication protocols, offer comprehensive user documentation, and establish a feedback system to facilitate open dialogue.
- Introduce Self-Service Systems: Develop a user-friendly portal or self-service platform where users can access relevant information and resolve minor issues independently. Empowering users with self-service options can enhance satisfaction and streamline support processes.
- Solicit Ongoing Feedback: Proactively seek and evaluate feedback from users through various channels such as surveys, customer reports, social media monitoring, or direct communication with customer service representatives. Customer feedback provides valuable insights into their perceptions and preferences, guiding organizational improvements and innovation efforts.
- Prioritize Continuous Improvement: Regularly analyze results and metrics against predefined goals. Facilitate feedback sessions and dialogues with both employees and users to identify further areas for enhancement and refinement.
- Embrace Technological Advancements: Explore the integration of cutting-edge technologies such as artificial intelligence, data analytics, and machine learning to streamline processes and proactively anticipate potential issues.
- Foster Leadership and Support: Ensure unwavering support for the digital transformation initiative from top leadership within the organization. Cultivate an environment where employees feel valued and empowered to contribute to the ongoing improvement process.
- Embrace Change as a Constant: Recognize that digital transformation is an iterative and continuous journey. Maintain momentum by instilling a culture of continuous growth, regularly revisiting and updating action plans, and adapting to evolving business needs and market dynamics. Regularly conduct gap analyses to ensure alignment with organizational objectives.

The results of this study highlight several critical areas that need to be addressed to enhance the effectiveness of digital transformation initiatives in Kazakhstan's IT sector. The significant gaps in strategic fit, leadership readiness, cultural transformation, skill development, and continuous improvement suggest that many organizations are not fully equipped to navigate the complexities of digital transformation.

The findings indicate that for digital transformation to succeed, organizations must develop clearer strategic objectives and ensure that these are integrated into decision-making processes across all levels [10]. Robust governance mechanisms are essential to manage competing priorities and ensure that resources are allocated in alignment with strategic goals. Leadership development programs need to be more focused on equipping managers with the skills required to drive cultural change and foster an environment of continuous learning and improvement.

Furthermore, the study underscores the importance of aligning training programs with organizational objectives and providing the necessary support to translate new skills into actionable behaviors. Continuous improvement should be recognized as a strategic competency, with efforts expanded beyond localized initiatives to include a comprehensive, cross-functional approach.

In conclusion, the study provides valuable insights into the challenges and opportunities associated with digital transformation in Kazakhstan's IT sector. By addressing the identified gaps, organizations can better position themselves to achieve successful digital transformation outcomes, ultimately enhancing their competitiveness in an increasingly digital world.

REFERENCES

- 1 Kraus S., Jones P., Kailer N. (2021) Digital Transformation: An overview of the current state of the art of research. Sage Open. Vol. 11(3). P. 1-15. https://doi.org/10.1177/21582440211047576
- 2 Alibekova G., Medeni T. (2020) Digital Transformation Enablers and Barriers in the Economy of Kazakhstan. Journal of Asian Finance, Economics and Businessio Vol. 7(7).P. 565—575. https://doi:10.13106/jafeb.2020.vol7.no7.565
 - 3 Verhoef P.C., Broekhuizen T., Bart Y. et al. Digital transformation: A multidisciplinary reflection and research

agenda. Journal of Business Research. Vol. 122. 2021, P. 889—901, https://doi.org/10.1016/j.jbusres.2019.09.022

- 4 Gil-Gomez H., Guerola-Navarro V. (2020). Customer relationship management: digital transformation and sustainable business model innovation. Economic Research-Ekonomska Istraživanja. Vol. 33(1). P. 2733—2750. https://doi.org/10.1080/1331677X.2019.1676283
- 5 Volberda H.W., Khanagha S., Baden-Fuller Ch., Mihalache O.R., Birkinshaw J. (2021). Strategizing in a digital world: Overcoming cognitive barriers, reconfiguring routines and introducing new organizational forms. Long Range Planning. Vol. 54(5). P. 102—110. https://doi.org/10.1016/j.lrp.2021.102110
- 6 Holmlund M., Vaerenbergh, Y.V., Ciuchita, R. (2020). Customer experience management in the age of big data analytics: A strategic framework. Journal of Business Research. Vol. 116. P. 356—365. http://dx.doi.org/10.1016/j.jbusres.2020.01.022
- 7 Moganadas Rani Sh., Guan Gan Goh G. (2022). Digital Employee Experience Constructs and Measurement Framework: A Review and Synthesis. International Journal of Technology. Vol. 13(5). P. 999—1012. http://dx.doi.org/10.14716/ijtech.v13i5.5830
- 8 Einhorn M., Loffler M., de Bellis E. (2021). The Machine Age of Customer Insight. Emerald Publishing Limited.. P. 159—167.
- 9 Itam U., Ghosh N. (2020). Employee experience management: A new paradigm shift in HR thinking. International Journal of Human Capital and Information Technology Professionals (IJHCITP). Vol. 11(2). P. 39—49. http://doi.org/10.4018/IJHCITP.2020040103
- 10 Fischer M., Imgrund F., Janiesch Ch., Winkelmann A. (2020). Strategy archetypes for digital transformation: Defining meta objectives using business process management. Information and Management. Vol. 57(5). P. 103—262. https://doi.org/10.1016/j.im.2019.103262

ҚАЗАҚСТАНДАҒЫ ЦИФРЛЫҚ ТРАНСФОРМАЦИЯ: КЛИЕНТТІҢ ТӘЖІРИБЕСІН БАСҚАРУ

Андатпа

Мақала Қазақстан Республикасында тәжірибені басқаруға негізделген цифрлық трансформацияны дамытуға арналған. Бұл зерттеудің мақсаты — ұйымның цифрлық трансформациясы мен тәжірибені басқару арасындағы байланысты талдау, жүйелік мәселелерді анықтау және тәжірибені басқару тиімдірек цифрлық трансформацияға ықпал ететінін растау. Зерттеу нысаны — ақпараттық технологиялар саласындағы шағын, орта және ірі кәсіпорындар ұсынған елдің бизнес ұйымдары. Тәжірибені басқаруға негізделген цифрлық трансформацияны жүзеге асыру үшін тәжірибені басқару тұжырымдамасын және трансформация объектісі — ұйымды анықтау қажет. Тиімді трансформацияны басқару тұжырымдамасын және трансформация объектісі — ұйымды анықтау қажет. Тиімді трансформацияны басқару қызметкерлердің тәжірибесін басқару тұрғысынан да, клиенттердің тәжірибесін басқару тұрғысынан да тәжірибені басқару ретінде қарастырылуы керек, өйткені бұл екі фактор да өзара байланысты және компанияның жалпы тиімділігіне қатты әсер етуі мүмкін. Зерттеу технологиялық және ұйымдастырушылық аспектілерді ескере отырып, Цифрлық трансформацияға кешенді көзқарастың маңыздылығын көрсетеді. Ол сондай-ақ мекеменің миссиясы мен құндылықтарына сәйкес келетін нақты көзқарас пен стратегияның қажеттілігін көрсетеді. Зерттеу негізінде ұйымдар өз қызметкерлерін де, клиенттерін де цифрлық трансформация процесіне тарта алатын ұсыныстар ұсынылды, бұл олардың қажеттіліктеріне басымдық беруге және сәтті трансформацияны аяқтауға мүмкіндік береді.

Негізгі сөздер: цифрлық трансформация, цифрландыру, клиенттік тәжірибе, тәжірибені басқару, СЕМ, СХ, ЕХ.

ЦИФРОВАЯ ТРАНСФОРМАЦИЯ В КАЗАХСТАНЕ: УПРАВЛЕНИЕ КЛИЕНТСКИМ ОПЫТОМ

Аннотация

Статья посвящена развитию цифровой трансформации, основанной на управлении опытом, в Республике Казахстан. Цель настоящего исследования — проанализировать взаимосвязь между цифровой трансформацией организации и управлением опытом, выявить системные проблемы и подтвердить, что управление опытом способствует более эффективной цифровой трансформации. Объектом исследования выступают бизнес-организации страны, представленные малыми, средними и крупными предприятиями в сфере информационных технологий. Чтобы осуществить цифровую трансформацию, основанную на управлении опытом, необходимо определить концепцию управления опытом и объект трансформации — организацию. Предполагается, что управление для эффективной трансформации следует рассматривать как управление опытом как с точки зрения управления опытом сотрудников, так и с точки зрения управления опытом клиентов, поскольку оба эти фактора взаимосвязаны и могут сильно повлиять на общую эффективность компании. В исследовании подчеркивается важность комплексного подхода к цифровой трансформации, учитывающего как технологические, так и организационные аспекты. В нем также отмечается необходимость четкого видения и стратегии, которые соответствуют миссии и ценностям учреждения. На основании

проведенного исследования предложены рекомендации, с помощью которых организации смогут вовлечь как своих сотрудников, так и клиентов в процесс цифровой трансформации, что позволит им расставить приоритеты в своих потребностях и завершить успешную трансформацию.

Ключевые слова: цифровая трансформация, цифровизация, клиентский опыт, управление опытом, СЕМ, СХ, ЕХ.

REFERENCES

- 1 Kraus S., Jones P., Kailer N. (2021) Digital Transformation: An overview of the current state of the art of research. Sage Open. Vol. 11(3). P. 1-15. https://doi.org/10.1177/21582440211047576 [in English]
- 2 Alibekova G., Medeni T. (2020) Digital Transformation Enablers and Barriers in the Economy of Kazakhstan. Journal of Asian Finance, Economics and Businessio Vol. 7(7).P. 565-575. https://doi:10.13106/jafeb.2020.vol7.no7.565 [in English]
- 3 Verhoef P.C., Broekhuizen T., Bart Y. et al. Digital transformation: A multidisciplinary reflection and research agenda. Journal of Business Research. Vol. 122. 2021. P. 889-901. https://doi.org/10.1016/j.jbusres.2019.09.022 [in English]
- 4 Gil-Gomez H., Guerola-Navarro V. (2020). Customer relationship management: digital transformation and sustainable business model innovation. Economic Research-Ekonomska Istraživanja. Vol. 33(1). P. 2733—2750. https://doi.org/10.1080/1331677X.2019.1676283 [in English]
- 5 Volberda H.W., Khanagha S., Baden-Fuller Ch., Mihalache O.R., Birkinshaw J. (2021). Strategizing in a digital world: Overcoming cognitive barriers, reconfiguring routines and introducing new organizational forms. Long Range Planning. Vol. 54(5). P. 102—110. https://doi.org/10.1016/j.lrp.2021.102110 [in English]
- 6 Holmlund M., Vaerenbergh, Y.V., Ciuchita, R. (2020). Customer experience management in the age of big data analytics: A strategic framework. Journal of Business Research. Vol. 116. P. 356—365. http://dx.doi.org/10.1016/j.jbusres.2020.01.022[in English]
- 7 Moganadas Rani Sh., Guan Gan Goh G. (2022). Digital Employee Experience Constructs and Measurement Framework: A Review and Synthesis. International Journal of Technology. Vol. 13(5). P. 999—1012. http://dx.doi.org/10.14716/ijtech.v13i5.5830 [in English]
- 8 Einhorn M., Loffler M., de Bellis E. (2021). The Machine Age of Customer Insight. Emerald Publishing Limited.. P. 159—167. [in English]
- 9 Itam U., Ghosh N. (2020). Employee experience management: A new paradigm shift in HR thinking. International Journal of Human Capital and Information Technology Professionals (IJHCITP). Vol. 11(2). P. 39—49. http://doi.org/10.4018/IJHCITP.2020040103 [in English]
- 10 Fischer M., Imgrund F., Janiesch Ch., Winkelmann A. (2020). Strategy archetypes for digital transformation: Defining meta objectives using business process management. Information and Management. Vol. 57(5). P. 103—262. https://doi.org/10.1016/j.im.2019.103262[in English]

Information about authors:

Nurkhat Ibadildin – **corresponding author**, candidate of technical sciences, associate professor of the School of Creative Industry, "Astana IT University" LLP, Astana, Republic of Kazakhstan

E-mail: <u>ibadildin.nurkhat@astanait.edu.kz</u>
ORCID: <u>https://orcid.org/0000-0002-6352-8713</u>

Serik Igbayev – master of economics and business, senior lecturer at the School of Creative Industry, "Astana IT University" LLP, Astana, Republic of Kazakhstan

E-mail: s.igbayev@astanait.edu.kz

ORCID: https://orcid.org/0000-0002-7644-5597

Madina Tulemissova – master of science in IT-management, senior lecturer at the School of Creative Industry, "Astana IT University" LLP, Astana, Republic of Kazakhstan

E-mail: m.tulemissova@astanait.edu.kz

ORCID: https://orcid.org/0009-0007-0439-8932

Zhaxat Kenzhin – PhD, associate professor, Academy of Physical Education and Mass Sport, Astana, Republic of Kazakhstan

E-mail: jaksat_22@mail.ru

ORCID: https://orcid.org/0000-0001-6085-8349

Информация об авторах:

Нурхат Ибадильдин – **основной автор**, кандидат технических наук, ассоциированный профессор Школы креативной индустрии, ТОО «Astana IT University», г. Астана, Республика Казахстан

E-mail: <u>ibadildin.nurkhat@astanait.edu.kz</u> ORCID: https://orcid.org/0000-0002-6352-8713

Серик Игбаев – магистр экономики и бизнеса, сеньор-лектор Школы креативной индустрии, ТОО «Astana IT University», г. Астана, Республика Казахстан

E-mail: s.igbayev@astanait.edu.kz

ORCID: https://orcid.org/0000-0002-7644-5597

Мадина Тулемисова – магистр наук в области ІТ-менеджмента, сеньор-лектор Школы креативной индустрии, ТОО «Astana IT University», г. Астана, Республика Казахстан

E-mail: m.tulemissova@astanait.edu.kz

ORCID: https://orcid.org/0009-0007-0439-8932

Жаксат Кенжин – PhD, ассоциированный профессор, Академия физической культуры и массового спорта, г. Астана, Республика Казахстан

E-mail: jaksat_22@mail.ru

ORCID: https://orcid.org/0000-0001-6085-8349

Авторлар туралы ақпарат:

Нұрхат Ибадильдин – **негізгі автор**, техника ғылымдарының кандидаты, Креативті индустрия мектебінің қауымдастырылған профессоры, «Astana IT University» ЖШС, Астана қ., Қазақстан Республикасы

E-mail: <u>ibadildin.nurkhat@astanait.edu.kz</u>

ORCID: https://orcid.org/0000-0002-6352-8713

Серік Игбаев – экономика және бизнес магистрі, Креативті индустрия мектебінің сеньор-лекторы, «Astana IT University» ЖШС, Астана қ., Қазақстан Республикасы

E-mail: s.igbayev@astanait.edu.kz

ORCID: https://orcid.org/0000-0002-7644-5597

Мәдина Тулемисова – ІТ-менеджмент саласындағы ғылым магистрі, Креативті индустрия мектебінің сеньор-лекторы, «Astana IT University» ЖШС, Астана қ., Қазақстан Республикасы

E-mail: m.tulemissova@astanait.edu.kz

ORCID: https://orcid.org/0009-0007-0439-8932

Жақсат Кенжин – PhD, қауымдастырылған профессоры, Дене шынықтыру және бұқаралық спорт академиясы, Астана қ., Қазақстан Республикасы

E-mail: jaksat 22@mail.ru

ORCID:https://orcid.org/0000-0001-6085-8349