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### Anel Murzagulova

PhD candidate, Department of Pedagogy, Kazakh National Academy of Choreography (Astana, Kazakhstan)

ORCID ID: 0000-0001-7664-6260

email: anel.murzagulovna@gmail.com

#### ARTICLE

# FROM EMERGENCY DIGITALISATION TO AI-ORIENTED PERSPECTIVES OF KAZAKHSTAN'S NATIONAL THEATRE: A CASE STUDY OF THE ASTANA BALLET THEATRE

*The author has reviewed and approved the final manuscript and affirms that there is no conflict of interest.*

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**KEYWORDS**

Emergency digitalisation, national culture, Kazakhstan's national theatre, Astana Ballet Theatre, digital transformation, digital scenography, hybrid theatrical forms, Higgsfield AI.

**ABSTRACT.** This article examines the impact of emergency digitalisation on contemporary Kazakhstani theatre in context of national culture, focusing on the transformation of artistic practices and audience engagement during the COVID-19 pandemic and its aftermath. Particular attention is given to changes in the representation of national theatre art and to shifts in audience participation within the context of digital media reality.

The research problem is defined as the need to identify how digital tools reshape theatrical production, communication, and cultural accessibility within Kazakhstan's national culture. The study aims to determine the mechanisms through which digitalisation influences the evolution of national theatre, and to conceptualise the role of the Astana Ballet Theatre as a leading national institutional model shaping contemporary artistic and media practices.

The methodological framework combines comparative cultural analysis, media studies, and performance research. The empirical base includes digital archives, social media analytics, official documentation of the Astana Ballet Theatre, as well as national digital initiatives such as the 'Digital Kazakhstan' programme and the 'Digital Bridge' platform.

The applied approach makes it possible to follow gradual changes in institutional strategy, audience perception, and the artistic language of national theatre. The results demonstrate a coherent digital transformation of Kazakhstani theatre, manifested through livestreamed performances, educational online projects, hybrid scenic forms, and the development of the 'Theatre 360 Degrees' streaming platform. Special attention is given to new forms of digital scenography and media integration, including advanced video technologies and emerging AI tools as part of post-pandemic digital trajectories, such as Higgsfield AI.

The article concludes that digitalisation constitutes a long-term structural shift in the evolution of Kazakhstan's national theatre, with practical implications for cultural policy, institutional planning, and the formation of hybrid theatrical forms in the twenty-first century.

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### Анель Мурзагуловна Мурзагулова

Қазақ ұлттық хореография академиясының педагогика кафедрасының докторанты (Астана, Қазақстан)

ORCID ID: 0000-0001-7664-6260

email: anel.murzagulovna@gmail.com

#### МАҚАЛА

# ҚАЗАҚСТАН ТЕАТРЫНЫҢ ЖЕДЕЛ ЦИФРЛАНУДАН ЖАСАНДЫ ИНТЕЛЛЕКТКЕ БАҒДАРЛАНҒАН ПЕРСПЕКТИВАЛАРҒА ӨТУІ: «АСТАНА БАЛЕТ» ТЕАТРЫНЫҢ КЕЙСІ

*Автор прочитал и одобрил окончательный вариант рукописи и заявляет об отсутствии конфликта интересов.*

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**Дәйексөз үшін**

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**Тірек сөздер**

Цифрландыру, ұлттық мәдениет, Қазақстан театры, «Астана Балет» театры, цифрлық трансформациялау, цифрлық сценография, гибриді театр нысандары, Higgsfield AI.

**Аңдатпа.** Мақалада COVID-19 пандемиясы кезеңінде және пандемиядан кейінгі кезеңде ұлттық мәдениет пен көркемдік тәжірибелерді трансформациялау контекстінде заманауи қазақстандық театрға шұғыл цифрландырудың әсері қарастырылады. Ұлттық театр өнерін көрсету нысандарының өзгеруіне, сондай-ақ цифрлық медиарализм жағдайында аудиторияның тартылуына ерекше назар аударылады.

Зерттеу мәселесі Қазақстанның ұлттық мәдени кеңістігінде цифрлық құралдардың театрлық өндірісті, коммуникацияны және мәдени қолжетімділікті қалай өзгертетінін анықтау қажеттілігімен айқындалады. Зерттеудің мақсаты – цифрландырудың ұлттық театрдың дамуына әсер ету құралдарын анықтау және «Астана Балет» театрын заманауи көркемдік және медиалық тәжірибелерді қалыптастыратын жетекші ұлттық институционалдық модель ретінде талдау.

Зерттеудің әдіснамалық негізі салыстырмалы мәдениеттанулық талдауды, медиастадияларды және перформативтік зерттеулерді біріктіреді. Эмпирикалық базаға цифрлық архивтер, әлеуметтік платформалардың медиа статистикасы, «Астана Балет» театрының ресми құжаттамасы, сондай-ақ «Цифрлық Қазақстан» мемлекеттік бағдарламасы мен AI Digital Bridge платформасы кіреді.

Қолданылған тәсіл ұлттық театрдың институционалдық стратегиясындағы, аудиториялық қабылдаудағы және көркемдік тілдегі дәйекті өзгерістерді анықтауға мүмкіндік береді. Зерттеу нәтижелері қазақстандық театрдың тұтас цифрлық өзгеруін көрсетеді, ол спектакльдердің тікелей трансляцияларынан, білім беру бағытындағы онлайн-жобалардан, гибриді сахналық формалардан және Theatre 360 Degrees стримингтік платформасының құрылуынан көрініс табады. Сонымен қатар, постпандемиялық цифрлық бағдарлардың бір бөлігі ретінде озық бейне технологиялар мен дамып келе жатқан жасанды интеллект құралдарды, соның ішінде Higgsfield AI-ді қолдануға негізделген цифрлық сценографияның жаңа формаларына ерекше назар аударылады.

Қорытынды бөлімде цифрландыру Қазақстанның ұлттық театрының дамуындағы ұзақ мерзімді құрылымдық өзгеріс екені атап өтіледі, ол мәдени саясатқа, институционалдық жоспарлауға және XXI ғасырдың гибриді театрлық формаларының қалыптасуына ықпал етеді.

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### Анель Мурзагуловна Мурзагулова

Докторант кафедры педагогики Казахской национальной академии хореографии (Астана, Казахстан)

ORCID ID: 0000-0001-7664-6260

email: anel.murzagulovna@gmail.com

#### СТАТЬЯ

# ОТ ЭКСТРЕННОЙ ЦИФРОВИЗАЦИИ К ИИ-ОРИЕНТИРОВАННЫМ ПЕРСПЕКТИВАМ КАЗАХСТАНСКОГО ТЕАТРА: КЕЙС «АСТАНА БАЛЕТ»

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**Ключевые слова**

Экстренная цифровизация, национальная культура, казахстанский национальный театр, театр «Астана Балет», цифровая трансформация, цифровая сценография, гибридные театральные формы, Higgsfield AI.

**Аннотация.** В статье рассматривается влияние экстренной цифровизации на современный казахстанский театр в контексте трансформации национальной культуры и художественных практик в период пандемии COVID-19 и в постпандемийный период. Особое внимание уделяется изменениям форм репрезентации национального театрального искусства, а также вовлечённости аудитории в условиях цифровой медиареальности.

Исследовательская проблема определяется необходимостью выявить, каким образом цифровые инструменты трансформируют театральное производство, коммуникацию и культурную доступность в рамках национального культурного пространства Казахстана. Цель исследования заключается в определении механизмов воздействия цифровизации на развитие национального театра и в концептуализации роли театра «Астана Балет» как ведущей национальной институциональной модели, формирующей современные художественные и медиальные практики.

Методологическая основа исследования объединяет сравнительный культурологический анализ, медиастадии и перформативные исследования. Эмпирическую базу составляют цифровые архивы, медиастатистика социальных платформ, официальная документация театра «Астана Балет», а также национальные цифровые инициативы, такие как программа «Цифровой Казахстан» и платформа Digital Bridge.

Применённый подход позволяет проследить последовательные изменения в институциональной стратегии, зрительском восприятии и художественном языке национального театра. Результаты исследования демонстрируют целостную цифровую трансформацию казахстанского театра, проявляющуюся в прямых трансляциях спектаклей, образовательных онлайн-проектах, гибридных сценических формах и создании стриминговой платформы Theatre 360 Degrees. Особое внимание уделяется новым формам цифровой сценографии и медиальной интеграции, включая передовые видеотехнологии и формирующиеся ИИ-инструменты как часть постпандемийных цифровых траекторий, в том числе Higgsfield AI.

В заключение подчёркивается, что цифровизация представляет собой долгосрочный структурный сдвиг в развитии национального театра Казахстана, оказывая влияние на культурную политику, институциональное планирование и формирование гибридных театральных форм XXI века.

## Introduction

In today's world, where a majority of the audience relies on digital devices and consumes cultural content through open-access platforms, engaging audiences with traditional theatre has become increasingly challenging. The outbreak of SARS-CoV-2 in 2019 and the subsequent global lockdowns triggered an abrupt transition to online modes of interaction. Work, education and social communication shifted to digital environments, transforming daily routines and altering expectations surrounding cultural participation. (Selen et al.) The performing arts, which have historically relied on physical presence and shared temporality, were among the sectors most affected by this shift.

Prior to the pandemic, Kazakhstan had already adopted a national strategy for technological modernisation. In 2017, during a national forum on digitalisation, the Minister of Education and Science A. K. Aimagambetov presented the 'Digital Kazakhstan' programme, which centred on the development of digital tools, the automation of management processes, and the training of IT specialists (Abdrakhmanova and Alipkaliyeva). Although initially created for educational and administrative purposes, these initiatives indirectly shaped the digital environment in which cultural institutions, such as theatres, were later to operate.

During the lockdown period, global theatres opened unprecedented online access to their repertoires, featuring *Giselle* by Akram Khan, 'Gaga technique' classes from the Batsheva Dance Company, and Martha Graham's foundational vocabulary taught by the principal artists of her troupe. Major opera houses and ballet companies, including the Bolshoi Theatre, Metropolitan Opera, Royal Swedish Opera, Les Ballets de Monte-Carlo, and the Paris Opera, made productions available online, offering Kazakhstani audience a unique opportunity to explore diverse aesthetic approaches and the distinctive features of global practices (Aslanova). This increased international exposure also reshaped audience expectations regarding accessibility, communicative formats and the role of digital mediation in cultural consumption.

As widespread vaccination efforts facilitated a return to public life and the resumption of in-person gatherings, including theatre visits. However, theatre attendance remains noticeably low. The decline is not merely a lingering effect of the lockdown period but also a result of increasing digital dependence and habitual consumption, which have significantly altered how individuals engage with content and experience art (King et al.; Dixit et al.).

This article examines how the emergency conditions of the COVID-19 pandemic triggered the rapid digitalisation of theatre sector. Rather than addressing psychological effects in a literal sense, the study considers how altered modes of cultural participation (Amar et al.) and mediated perception shaped institutional responses. Building on this analysis, the article also outlines emerging trajectories of digital development, including the growing role of AI-based tools in Kazakhstani theatre sector.

Furthermore, the study investigates the impact of digitalisation on contemporary Kazakhstani theatre within this broader theoretical and technological context. While global developments offer valuable points of comparison, Kazakhstan presents a distinct case due to its geographic scale, uneven cultural infrastructure and rapid state-driven digital modernisation. The Astana Ballet Theatre, established in 2012,

serves as the principal case study, demonstrating how a cultural institution can strategically integrate digital tools not only as a temporary response to crisis but as part of the transformation of Kazakhstan's national theatre under conditions of emergency digitalisation. Through an analysis of its digital initiatives during and after the pandemic, the research examines how technologies influence aesthetic practices, audience engagement, and the evolving role of theatre in a media-saturated society.

The analysis examines post-pandemic transformations in audience participation and theatrical reception. These changes reflect shifts in behavioural patterns and visual engagement amid excessive digital consumption (Amar et al.; Szostak et al.; Leguina et al.). These perspectives are complemented by studies on digital and hybrid theatre forms, media perception, and the integration of virtual environments into performance practices (Walton; Khvostova; MacKinnon).

Together, these studies provide a framework for understanding emergency digitalisation in theatre not only as a technical response to crisis, but as a catalyst for long-term transformations, including the emergence of AI-based tools within contemporary theatrical practice.

In this context, the article addresses the following questions:

- How did the emergency case of COVID-19 and forced digitalisation of art institutions reshape modes of theatrical production and audience engagement in the Astana Ballet Theatre?
- How do emerging AI-based tools indicate a transition from emergency digitalisation toward longer-term digital trajectories in contemporary Kazakhstani theatre?

## Methodology

This study employs comparative and interdisciplinary analysis to examine how digitalisation influences contemporary theatre, with particular attention to audience practices and institutional strategies in Kazakhstan. The methodological approach includes theatre and cultural studies, media theory, allowing for a systematic examination of transformations occurring at the intersection of art and technology.

These artistic and technological transformations are considered in relation to the accelerated development of social media and digital media technologies, which continue to shape new modes of production and reception in contemporary performance.

Particular emphasis is placed on the Astana Ballet Theatre. Its digital initiatives during the pandemic illustrate emerging models of hybrid performance, remote audience communication, and multimedia integration.

Moreover, the study analyses digital content produced by theatres, including livestreamed performances, educational programming, virtual festivals, and online interviews, which serve as primary materials for understanding new forms of interaction between artists and audiences. Data obtained through a targeted audience questionnaire are used as supplementary material to identify patterns of cultural participation and reception within the Kazakhstani context.

By comparing practice emerging from Kazakhstani and international cases, the study seeks to identify both shared tendencies and distinctive local developments. This methodological combination facilitates the detection of recurring patterns in digital theatre practices and provides insight into how Kazakhstan’s performing arts sector navigates global technological change while responding to local cultural needs.

**Discussion and results**

The transformation of audience behaviour in the post-pandemic period has become a central theme in contemporary performance studies, as theatres increasingly confront new perceptual habits shaped by constant interaction with digital media. A scholarly discourse has examined how digital environments alter cognitive rhythms and behavioural patterns.

Existing research in this field confirm that the form of cultural participation (physical) has a measurable impact on contemporary modes of theatrical reception. Large-scale empirical research conducted during the COVID-19 pandemic demonstrates a pronounced decline in social participation and collective cultural activities under conditions of home confinement (Ammar et al.). These findings show the sharp decrease in attendance at live cultural events, including theatre, observed during and after the pandemic period.

At the same time, studies of digital consumption indicate a parallel of engagement with screen-based artistic formats. Quantitative research on visual arts participation conducted across 22 countries (N = 87) revealed that the online mode of participation significantly affects the perceived quality of aesthetic experience, with digital formats becoming a dominant point of access during the pandemic (Szostak et al. 47).

To identify recurring post-pandemic patterns, this study presents findings from an author-conducted audience questionnaire administered in 21 April 2021. 70 visitors were asked about their tendency to go to Astana Ballet Theatre before and after the pandemic (N = 70). Results showed a dramatic decline of visiting the theatre after the lockdown.

**Table 1.** Frequency of On-Site Theatre Attendance at the Astana Ballet Theatre before the COVID-19 Pandemic

Frequency	N	%
Once a week	12	17.1
Once a month	30	42.9
Once a year	28	40.0
<b>Total</b>	<b>70</b>	<b>100</b>

Source: An author-conducted audience questionnaire. Author’s Survey, 21 April 2021, N = 70.

As shown in [Table 1](#), prior to the pandemic the majority of respondents attended performances at the Astana Ballet Theatre on a monthly or annual basis, while weekly attendance constituted a smaller segment of audience participation.

**Table 2.** Attendance at the Astana Ballet Theatre after the Reopening

Attendance after reopening	N	%
NO	41	58.6
YES	29	41.4
<b>Total</b>	<b>70</b>	<b>100</b>

Source: An author-conducted audience questionnaire. Author's Survey, 21 April 2021, N = 70.

The survey reveals patterns consistent with trends identified in recent international research on cultural participation during and after the COVID-19 pandemic (Table 2).

**Table 3.** Frequency of On-Site Visits to the Astana Ballet Theatre after the Reopening

Frequency	N	%
Once a week	4	13.8
Once a month	19	65.5
Once a year	6	20.7
<b>Total</b>	<b>29</b>	<b>100</b>

Source: An author-conducted audience questionnaire. Returned Audiences Only, 21 April 2021, N = 29.

As shown in Table 3, among respondents who returned to on-site attendance after the reopening, monthly visits became the dominant pattern, whereas weekly attendance remained limited. This shift suggests a transition toward more selective forms of cultural participation.

Similar to previously discussed studies, these results indicate a decline in regular on-site attendance and a reconfiguration of audience engagement with theatre.

The purpose of the questionnaire was not to identify the motivations behind audience reluctance to return to the theatre, but rather to trace the pandemic's influence on modes of theatrical perception and patterns of cultural participation. In this regard, the survey functions as a qualitative indicator of broader transformations in audience behaviour, complementing the analysis of emergency digitalisation and institutional responses within the Kazakhstani theatrical context.

It has become essential to reignite audiences' desire for live theatre after two years of isolation, to sustain the attention of spectators accustomed to digital overstimulation, and to craft an atmosphere in which they feel comfortable stepping away from their online personas. Importantly, recent cultural research suggests that the quality of digital cultural experiences has a lasting influence on future patterns of cultural participation and audience behaviour (Leguina et al. 111).

Adam Hayes, in the article 'Attention and Digital Media Consumption', highlights compulsive patterns of notification monitoring and rapid attentional switching. These tendencies directly influence audience engagement in theatre, which traditionally relies on immersion, continuity, and shared presence. The implications of these behavioural shifts align with theoretical discussions in digital performance studies.

These dynamics are particularly relevant in Kazakhstan, where fast digital modernisation influenced cultural consumption patterns, especially among younger audiences. To open better local digital perspectives, this study draws on the work of Irina Lunga and Meruert Zhanguzhinova 'Review of the Implementation of Digital Educational Technologies in Cultural Institutions of Kazakhstan'. As scholars note in their research on the digital transformation of cultural communication, Kazakhstani spectators increasingly encounter artistic content through mediated environments such as livestreams, short-form videos, and online archives, establishing perceptual frameworks that differ significantly from traditional theatre-going practices (Lunga and Zhanguzhinova 99).

Understanding digital spectatorship as a product of evolving cognitive, technological, and cultural conditions is therefore essential. Rather than viewing these tendencies as obstacles, this study treats them as factors that inform new artistic and communicative strategies within the theatrical sector.

The period of isolation emphasized the significance of art in daily lives, as it became a crucial tool that helped many people endure the unexpected lockdown. In the current post-pandemic time, global theatres, museums and galleries have started to popularise art through digital platforms. It is crucial to emphasize that under these new conditions, the relevance and necessity of art as an important social phenomenon has become even more evident. Consequently, this study aims to examine and justify the role and importance of art within the framework of contemporary society and in the context of the current spiritual and emotional state of Kazakhstani people.

The global theatre community, along with all those involved in the arts, has adapted effectively to current realities, actively pursuing its core mission: to educate and popularise all forms of art. For example, many museums launched remote tours. Ballet lovers were granted a unique opportunity to simultaneously watch *Swan Lake* by Pyotr Tchaikovsky in Yury Grigorovich's choreography at the Bolshoi Theatre, and Patrice Bart's version at the Berlin Opera. Another significant digital broadcast was Sergei Prokofiev's ballet *Romeo and Juliet* (choreographed by Mats Ek), offered by the Royal Swedish Opera. The famous Les Ballets de Monte-Carlo presented Pyotr Tchaikovsky's *Sleeping Beauty*, edited by Jean-Christophe Maillot. The Mariinsky Theatre provided access to Rodion Shchedrin's *Anna Karenina* by choreographer Alexey Ratmansky, performed by Ulyana Lopatkina. Furthermore, for seven days, the Nederlands Dans Theater (NDT) celebrated its 60th anniversary by providing access to unique productions of world-renowned choreographers who collaborated with the troupe at different times. Viewers worldwide were able to experience works such as Hans van Manen's *Short Cut*, Crystal Pite's *The Statement*, Marco Goecke's *Midnight Raga*, Edward Klug's *Mutual Comfort*, and Sol Leon and Paul Lightfoot's *Stop Motion*, among others.

It should be noted that the introduction of the viewer to dance art and the increase in interest toward both the theatre and the troupe's repertoire were supported by limited viewing periods. Each of these works was available to the public for no more than one week. In an environment saturated with digital content, theatre managements specially developed time-restricted access in order to actively motivate global audiences to watch these unique productions under temporary conditions. Such access to content

and information was made possible only through the advancement of new technologies and digitalisation. This shift represents a significant benefit for the arts, fostering a more dynamic relationship between the institution and its virtual audience.

Theatre basically is a synthesis of diverse art forms. At the end of the twentieth and the beginning of the twenty-first centuries, theatre began a new chapter in its history, as theatre directors started to integrate advanced technologies in live performances. That's how a 'visual theatre' was born, a genre where media and digital technologies are employed to fundamentally enhance audience perception. While there are the controversial debates about the positive and negative sides of visual theatre, it is obvious that to maintain cultural relevance, theatrical practices must evolve to meet the demands of a digitised world. As Robert Ellis Walton argues, contemporary virtual and extended reality technologies no longer function merely as supplementary elements but actively come to matter within artistic practice, reshaping how presence, space, and embodiment are experienced in performance (799).

Today, digital technology has become the language of theatre. As a result, directors no longer need large sets and heavy props, because technology has developed to a point where experienced programmers can add visual effects instead. This shift has popularised the concepts of intermediality and hybrid performance, where physical and virtual components coexist within each other. As Taisia Khvostova observes, contemporary digital theatre emerges at the intersection of stage practice, screen media, and networked communication, forming a distinct mode of performance shaped by internet culture and mediated perception (71). Within this framework, digital technologies – including VR-based (virtual reality) environments – do not replace traditional theatre. On the contrary, they transform the ways performance is structured, expanding the spatial and temporal boundaries of performance.

It could be argued that theatre has become a universal language through the application of digital effects. This shift is further articulated in studies of online mediated theatre. Sam MacKinnon emphasizes that digital theatre platforms introduce new configurations of space, time, and reactivity, enabling performances to operate simultaneously across online and offline environments (111). Such hybrid structures foreground intermedial dynamics, where 'liveness' is negotiated through interaction between performers, audiences, and technological systems. Together, these perspectives underscore how contemporary theatre adapts to digital mediated conditions by integrating virtual and physical aspects into consistent performative experiences. The pandemic changed everything and forced a migration of culture to online spaces in attempt to offer the viewers what they had previously received offline (Aslanova).

As mentioned above, theatres globally have undergone a process of digitalisation, integrating practices such as VR, hybrid and pure digital performances. In Russia, for example, this trend has formed as early as 2005 with the launch of the 'Theatrical Russia' project. This initiative was designed to showcase the best performances from across the country and to build a national video archive of Russian theatre productions. This also gave audiences the chance to see performances honoured by the Golden Mask, the prestigious Russian National Theatre Award.

Among Kazakhstani theatres, the Astana Ballet Theatre stands out as the unquestioned leader and primary trendsetter in the field of digitalisation. It is, therefore, the central focus of this study. The analysis is supported by statistical data collected from the theatre's official Instagram and YouTube platforms, which, during the pandemic, became the principal channels of communication between the institution and its audiences. Following President Kassym-Jomart Tokayev's directive of 13 March 2020 to suspend all public events, theatres in the capital entered a period of mandatory lockdown.

The Astana Ballet Theatre was among the first cultural institutions in the capital to rapidly adapt to these unprecedented circumstances. The speed and scale of its transition indicate that the Theatre had already formed internal capacities that enabled it to respond strategically rather than reactively. During the pandemic and the nationwide lockdown, three metropolitan theatres demonstrated particularly high levels of digital engagement, maintaining a degree of creative activity comparable to that of their in-person performance seasons.

For instance, the State Theatre Astana Musical, operating under the concert organisation Kazakhconcert, released more than fifty livestreams featuring its performers and published recorded excerpts from both international and Kazakhstani musicals. These included arias such as 'Daughter of Mine' from *Romeo and Juliet* (Gérard Presgurvic) and 'Belle' from *Notre Dame de Paris* (Riccardo Cocciante). After the lockdown, the theatre continued to expand its digital initiatives and launched the podcast series 'Ne ángime?', designed as a platform for dialogue with public, where spectators shared their impressions of returning to live performances. These examples demonstrate that Kazakhstani theatres did not limit themselves to passive survival strategies but actively experimented with new formats of communication and audience engagement.

Despite the proactive digital engagement of these institutions, the most flexible and forward-thinking theatre in adapting to the new digital era was the Astana Ballet Theatre. Established in 2012 in the heart of Kazakhstan's capital, the leading national ballet institution of Kazakhstan occupies a distinct position in the cultural landscape of the nation. Its contemporary repertoire, unmatched by other theatres, showcases a creative potential through new choreographic voices, innovative productions, and performances that invite modern audiences to reflect on fundamental questions of human existence, interpersonal interaction, and the intrinsic connection between individuals, society, and the natural world.

The pandemic served as a critical test of institutional resilience, and in this context, the initiatives of the Astana Ballet Theatre can be viewed as a model of purposeful digital transformation rather than a temporary crisis response. The scope and intensity of its work were considerable, yet several components merit close attention in this article. The first of these is the Theatre's educational activities.

According to data from 2020, by the end of the Theatre's seventh season – the shortest in the history of the company due to the introduction of strict quarantine measures – the institution, with the support of the Ministry of Culture and Sports, has launched six unique online projects.

As reported in the Theatre's official summary of the seventh season, the overall audience reach of its online programmes amounted to 346,800 viewers. In addition, the theatre published 225 posts on Instagram, which accumulated more than 99,855 likes, according to the content analytics service SpeedSpy (*Astana Ballet Theatre*). These indicators clearly demonstrate not only the Theatre's exceptional adaptability but also the rapid formation of a stable digital audience. This marks a significant shift in the cultural consumption patterns within Kazakhstan.

A closer chronological analysis of these online initiatives shows that the first project introduced during lockdown was the interview series 'Theatre Online', launched as early as 4 April 2020. This project with renowned artists of the global ballet community achieved a total reach of 163,000 viewers.

The Astana Ballet Theatre organized live broadcasts featuring its leading dancers. Dilara Shomayeva – a PhD student at the Kazakh National Academy of Choreography (for that moment) and a leading soloist of the Theatre – hosted engaging online conversations with prima ballerinas, members of the corps de ballet, and internationally renowned performers. As a result, the Kazakh public and ballet enthusiasts were able to learn more about prominent figures in the ballet community: Aliya Tanykpayeva, Étoile of the Hungarian National Ballet; Aidos Zakan, Tänzer of the Dortmund Theatre in Germany; and Iana Salenko, Principal Dancer of the Berlin State Ballet. All of these artists are alumni of the Alexander Seleznyov Almaty Choreographic School and continue to represent the Kazakh ballet tradition with pride on the global stage.

The Astana Ballet Theatre, along with leading ballet institutions worldwide, provided free access to a selection of its repertoire. Recognising the vital role of culture in sustaining public morale, the Theatre began broadcasting recordings from the Eurasian Dance Festival as early as 17 April 2020. By providing open access to festival materials, the Theatre positioned itself as a cultural mediator during a period of restricted mobility, maintaining continuity in artistic exchange.

On 20 April, the Theatre streamed an online gala featuring ballet artists from Russia, Portugal, the Netherlands, Germany, and Kazakhstan. This was followed on 22 April by a broadcast *Escencia Flamenca* by the Spanish trio Castro Romero, and on 24 April by a performance from the National Ballet of China. To commemorate the 75th anniversary of Victory Day, the Theatre streamed two emblematic works: *Heritage of the Great Steppe* by various Kazakhstani choreographers (7 May), and Mukaram Avakhri's *Zhussan* (9 May), the first one-act ballet in the history of Kazakhstani choreography.

By 19 May 2020, as part of the author's project 'On Stage \ Online', Shomayeva released a series of broadcasts and interviews with choreographers, artists, and production departments. This project expanded the audience's understanding of theatrical labour and reinforced the social function of the Theatre during isolation.

The Astana Ballet Theatre emerged as the only institution in the country that not only adapted global digital practices but successfully contextualised them within local artistic traditions, managing to retain and expand audience interest after the pandemic. Although only two episodes of 'On Stage \ Online' were released before epidemiological restrictions intervened, the project generated 98,000 views.

These programmes enriched local audiences and sparked international interest through high-quality visual production and thoughtful content. Together, these initiatives demonstrate a coherent institutional vision: digitalisation was not merely an auxiliary tool but a strategic extension of the Theatre's artistic mission.

In celebration of Constitution Day, on 27 and 30 August 2020, the Theatre relocated its stage outdoors, followed by a series of online presentations filmed within the Botanical Garden. These hybrid outdoor-digital performances serve as a significant example of how the institution began to rethink spatial boundaries and reimagine the relationship between the performer, the environment, and the viewer.

The Theatre's director at that time Alexandr Sovostyanov noted, that adapting performances for the digital format represents 'a completely new stage', highlighting the Theatre's potential to integrate new technologies into contemporary performing arts (*Astana Ballet Theatre*).

Before the pandemic, the Theatre already placed emphasis on video design, and after lockdown, this expanded into professional dance films and commercial projects. A definitive example is *Dance of Nature*, a new artistic format for Kazakhstan (premiere: 11 December 2021). This project synthesises folklore, choreography, cinema, and national landscapes. As Avakhri stated, the project demonstrates not only the creative but also the digital potential of the theatre.

Another key innovation was the 'Theatre 360 Degrees' platform, launched on 28 December 2020. Functioning similarly to Netflix streaming service, it enabled global dissemination of Kazakh ballet and represented a conceptual shift: performances were created specifically for the camera rather than being merely recorded. This marks a decisive movement toward digital-born theatrical forms in Kazakhstan.

As part of this initiative, the media team filmed two productions: *Cinderella* by Georgy Kovtun and *The Legend of Turanga* by Anvara Sadykova. Although the full launch of the platform was limited in the post-pandemic period, the project reflects an important developmental trajectory.

A notable example of digital scenographic synthesis is Avakhri's ballet, *Sultan Baybars*. With video design by Leonid Basin, the production employed digital projection, spatial mapping, and immersive media environments. This case demonstrates how digital scenography is beginning to reshape the visual and narrative structure of Kazakhstani ballet.

Finally, a critical role was played by the implementation of the 'Ashyq' platform, developed by the 'Digital Innovation and Transformation' company in 2021. The system was designed to reduce the risk of COVID-19 transmission and to support infection-control measures at public venues. The Astana Ballet Theatre became a digital pioneer to initiate a technologically supported, safe return to live performances after the lockdown.

Taken collectively, these developments indicate that Kazakhstan's digitalisation of Theatre was not an improvised reaction to the crisis, but a structured process shaped by institutional strategy, technological opportunity, and cultural ambition. As a key national institution, the Theatre demonstrates how digital tools can become integrated into artistic language, audience communication, and national cultural policy, forming a distinctive model within the broader landscape of global digital theatre.

Regarding the outcomes of digitalisation, the first year of implementing the 'Digital Kazakhstan' state programme in 2018 saw a significant investment growth within information and communications sector, showing a raise of 40.3 percent in one year, reaching 92.5 billion tenge. According to International Data Corporation, direct investment in digital transformation between 2020 and 2023 will amount to 7.4 trillion dollars. Also, by 2023, the share of spending on digitalization is expected to rise to 50 percent of all Information and Communication Technologies investments, compared to the current 36 percent (*Kazakhstanskaya Pravda*).

Furthermore, since 2018 there have been several national initiatives aimed to strengthen the digital potential of Kazakhstan. One of the most influential platforms is the 'Digital Bridge' technological forum, which has become a catalyst for large scale digital innovation in Central Asia. Over the years, the forum has gathered more than 127,000 participants, 1,500 speakers, 600 start-ups, and over 500,000 investors from more than 100 countries. The 2025 edition of the forum marked a new developmental milestone: by presidential decree, the forum was transformed into 'AI Digital Bridge', coinciding with the establishment of the Ministry of Artificial Intelligence and Digital Development on 18 September 2025 (*The Astana Times*).

These developments indicate that Kazakhstan is actively forming an institutional environment capable of supporting rapid technological progress, which, in turn, shapes the broader cultural and creative industries.

It is believed, that these rapid changes within the digital sphere will have a positive influence on theatrical art. Kazakhstan has already demonstrated significant progress in digital video production through the integration of artificial intelligence (AI). In October 2023, a new video-creation platform, Higgsfield AI, was launched in the country. By December 2025, Higgsfield AI became the first Kazakhstani 'unicorn' startup, valued at over \$1 billion. This achievement carries not only symbolic meaning but also substantial practical significance. The emergence of such a technological entity – a privately held startup reaching such financial milestone – directs heightened global investor attention toward Central Asia, creating structural incentives for developing national IT infrastructure and expanding the technological ecosystem.

Higgsfield AI allows users worldwide to produce cinematic, high-quality video content using AI, eliminating the need for traditional filming or post-production. In the near term, the company intends to shift its strategy from mass-market users to corporate clients: studios, agencies, and brands that require assured quality, operational stability, and scalable output. While the full effect of such tools on theatre is yet to unfold, the combination of a high-potential digital startup and a technologically progressive institutions like the Astana Ballet Theatre suggests fertile grounds to anticipate new possibilities for live performance.

In theory, generative platforms such as Higgsfield AI enable the creation of dynamic digital scenography, animated projections, and cinematic visual environments that expand the expressive choreography of directors and designers while reducing the material and financial demands of traditional set construction. However, AI operates simultaneously as a creative tool and a disruptive force, pushing theatre toward

mixed-reality forms while provoking ongoing debates regarding authorship, liveness, and the preservation of theatre's embodied human core.

Eventually, the digitalisation of theatre brings both positive and negative aspects. Nevertheless, theatre has once again proven itself to be an engaging, present, and relevant part of human existence. Theatre reflects the contemporary world. Just as it can reconstruct distant historical epochs, it can also tell the stories that are most relevant to modern society. Theatre interacts with its audience through the language of visual imagery, and at the same time remains poetic – expressing metaphors, symbols, signs, and allusions far more vividly than fixed or literal meanings. Visual theatre provides a special, semiotically rich form of communication with the audience, similar to cinema, often using quotations, references, and commentary that connect to other art forms.

The most important factor in every sphere of life is progress, which simply means being open to reality and change. Theatre, perhaps more than any other art form, excels in this regard. This capacity for adaptation ensures that this art form remains not only a reflection of contemporary society but also a vital force in its future development. It is, therefore, evident that the balance between digitalisation and traditional theatrical practice will generate some of the most compelling works of the twenty-first century – artistic achievements that will become a meaningful legacy for future generations.

## Conclusion

The COVID-19 pandemic accelerated a significant transformation in the relationship between national theatre and its audiences in Kazakhstan. What initially appeared as an emergency response gradually evolved into a sustainable mode of cultural production.

In the Kazakhstani context, digitalisation expanded access to theatres and demonstrated its potential to enrich artistic language, as illustrated by the case of the Astana Ballet Theatre. These developments indicate that digital tools are becoming a structural component of the national cultural ecosystem.

In summary, looking beyond emergency digitalisation, emerging AI-based technologies suggest further trajectories for theatrical practice, particularly in the areas of scenography, hybrid performance, and audience engagement. When integrated thoughtfully, digital and AI-driven approaches can support artistic innovation while preserving traditional theatre and essential human core.

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