Application of Artificial Intelligence Technologies in Digital PR

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Abstract

The purpose of the study was to identify and analyse the factors influencing the successful implementation of artificial intelligence (AI) technologies in digital public relations (PR). This study examined the experience and practices used in the United States of America, and their application in Kazakhstan. Key results include an exploration of the theoretical underpinnings and current trends in the use of AI in PR, including areas such as media monitoring and data analysis, content creation, task automation, advertisement targeting, and measurement of results. Special attention was paid to the factors contributing to the successful integration of AI, such as the technological base, financial and material resources, qualified specialists, ethical and legal issues, awareness of AI capabilities, strategic implementation planning, data processing and management, and corporate culture and adaptation. A comparative analysis of the implementation of AI technologies in Kazakhstan and the United States showed differences and similarities in approaches and conditions. The study examined practical examples of successful AI applications, including the experience of International Business Machines, Edelman, Microsoft, and examples from the activities of Weber Shandwick (USA) and Kaspi Bank (Kazakhstan). These cases demonstrate the achievements and advantages of integrating AI technologies in the field of PR. The conclusions emphasise the need to improve digital literacy, increase investments in technology and active international cooperation for the successful implementation of AI in digital PR in Kazakhstan.

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Keywords

Media Analysis • Content Creation • Process Automation • Data Management • Corporate Culture

1. Introduction

Society is undergoing a rapid digital transformation, and the use of artificial intelligence (AI) technologies in the field of public relations (PR) is becoming increasingly relevant. New opportunities are emerging for analysing large amounts of data, automating routine tasks, and creating personalised content, which significantly increases the effectiveness of communications. However, despite the obvious advantages, the process of integrating these technologies faces a number of challenges, including the need to adapt to the specific conditions of different markets and cultures, manage ethical aspects, and ensure an appropriate level of technological training for specialists.

The problems lie in the fact that many companies and specialists do not have a sufficient level of digital literacy and understanding of AI capabilities. There is a shortage of qualified specialists who can effectively integrate and use these technologies. There are also significant differences in technological infrastructure and investment levels between different countries, including Kazakhstan and the USA, which creates unequal conditions for innovation. In Kazakhstan, priority should be given to regions with underdeveloped infrastructure, such as rural and remote areas, where access to high-speed internet and cloud computing is limited. These areas require significant investment in digital transformation to support AI integration. Additionally, industries like agriculture and small-to-medium enterprises should be targeted for AI adoption due to their potential to leverage AI-driven tools for improving media monitoring, targeted communication, and automation of routine processes.

From an ethical perspective, the development of clear guidelines is essential to address pressing issues such as data privacy, transparency in decision-making processes, and prevention of biases in AI algorithms. These guidelines should be tailored to the socio-cultural context of Kazakhstan and include measures for ensuring fairness and accountability in AI systems, particularly when handling consumer data or automating decision-making tasks.

For a deeper understanding of this topic, other papers on this topic should be considered. For example, Isabekova (2022) investigated the impact of AI on the development of information technology, providing examples of its current application and opportunities for future development. Ondash (2024) analysed the main legal aspects, such as responsibility for AI actions, copyrights and patenting, considering its status as a legal entity, and also showed the prospects for regulation in a modern legal context to adequately take into account the features of AI. In addition, Kalykulov (2023) focused on the socio-economic processes of AI implementation and the need to train qualified specialists for the successful adaptation of new technologies in various sectors of the economy. Apkhaidze and Gumberidze (2024) highlighted that AI allows PR specialists to more effectively manage brand reputation and interact with the audience using targeted, data-based strategies. Yankov (2023) emphasised that AI, such as ChatGPT, has a significant impact, becoming both an assistant and a competitor to PR specialists in healthcare. In turn, Toteva (2023) pointed to the fact that AI automates routine tasks such as content creation and social media management, freeing PR specialists from administrative duties.

Piyumali (2023) has shown that the use of AI tools in PR campaigns allows segmenting target audiences more effectively, automating tasks, and analysing data in real time, which improves return on investment and proactive crisis management. In addition, Silviani (2024) demonstrated how AI affects PR by providing opportunities to improve public communications, but also has risks of data misuse and discrimination, which requires careful consideration of ethical issues when integrating it. Like previous researchers, Jeljeli (2023) confirmed the significant influence of artificial and emotional intelligence on PR practices, contributing to the improvement of reputation management, however, in the banking sector. Ultimately, Vasilj (2023) emphasised that AI plays a key role in shaping marketing and PR strategies, helping business organisations to analyse data and create targeted strategies for various interest groups.

Thus, the study of the predecessors highlighted the significant impact of AI on various aspects of PR, including improving brand reputation management, effective interaction with the audience, automation of routine tasks, and data analysis. However, the importance of ethical issues related to the use of data, potential discrimination, and the need to develop regulatory mechanisms to adequately consider the characteristics of AI, remain topical and require further study.

The purpose of this study was to analyse the impact of AI on PR practices, with a focus on identifying specific key factors such as technological readiness, ethical issues, funding, and workforce training that influence the successful integration of these technologies. This includes exploring how advancements in machine learning algorithms and data analytics have transformed digital PR. AI's ability to analyse large datasets, predict audience behaviour, and automate routine tasks has become foundational to modern PR strategies (Nurbatyrova , 2024). Emerging trends such as integrating AI with Internet of Things (IoT), Big Data, and ethical considerations surrounding AI implementation require careful exploration to contextualize the findings presented in this study.

The objectives of the study included investigating the current experience and practices of AI application in the field of PR in various countries, including the USA and Kazakhstan. The impact of using AI on the

effectiveness and efficiency of communication strategies in the field of PR was also assessed. An analysis of the current challenges and risks associated with the use of AI in PR, including ethical aspects and data security issues, was carried out.

2. Materials and Methods

To achieve the purpose of the study, the theoretical foundations and current trends in the use of AI in the field of PR were thoroughly investigated. Attention was paid to the analysis of the main areas of AI use in digital PR, such as media monitoring, data analysis, content creation, and advertisement targeting. The study included the collection and analysis of data from various sources, including scientific journals and news portals. Special emphasis was placed on issues of data protection, transparency in the use of AI and a responsible approach to the use of these technologies. During the research, a methodological approach was used to explore the effectiveness of integrating AI technologies into digital PR, including assessing their impact on communication strategies and brand competitiveness. Content analysis, statistical modelling, and expert interviews were employed to evaluate the effectiveness of AI implementation. Special attention was paid to the development of recommendations for the thoughtful use of AI and its effective implementation in digital PR, which implies careful compliance with data security standards and ethical standards.

The study also included an analysis of the factors influencing the successful implementation of AI in the field of PR. First of all, the key factors contributing to the successful integration of AI into PR were identified. Among them, the availability of a modern technological base, access to financial and human resources, qualified specialists, compliance with ethical standards and legislative frameworks, and the development of clear AI implementation strategies were highlighted. A comparison of such strategies between Kazakhstan and the United States was carried out, for which the conditions and approaches to the use of AI in both countries were considered. Attention was paid to such aspects as technological infrastructure, investments in AI, human resources, legal framework, awareness of AI capabilities, and corporate culture. The development potential in each of these categories was also assessed.

Based on the research, practical examples of successful AI applications in PR were considered, including the experience of IBM, Edelman, and Microsoft. To analyse these examples, materials from news portals and official press releases of these companies were used (What PR Professionals, 2024). During the case analysis, the technologies and approaches used by these companies to integrate AI into their PR strategies were considered. These examples demonstrated how AI can be used to analyse big data, automate processes, and improve communications in PR (Microsoft puts the PR, 2024). A comparison of cases of successful implementation of AI technologies in PR in the USA and Kazakhstan was carried out using the example of Weber Shandwick and Kaspi Bank, information about which was obtained from the official websites of these companies. As part of this comparison, various approaches to using AI to solve problems in PR and reputation management were studied, and methods and tools used in these companies were evaluated. The case analysis included studying how companies from different regions adapt AI technologies to their specific needs and market conditions, which is important for a deeper understanding of the approaches and methods used to integrate AI into PR.

3. Results

3.1. Theoretical Foundations and Current Technology Trends in Digital PR

The integration of AI into digital PR has reshaped practices, emphasizing data-driven insights, automation, and personalized communication. Theoretical frameworks suggest AI's transformative potential, particularly in enhancing analytics, creating targeted content, and optimizing communication strategies. Existing literature highlights AI's ability to streamline operations, predict trends, and improve campaign outcomes. However, these advantages are contingent on ethical and practical considerations, such as data privacy and the potential for bias.

This study builds on these frameworks by exploring AI applications in areas like media monitoring, content creation, and advertisement targeting (Table 1). AI demonstrates significant potential in enhancing efficiency and innovation within PR practices. However, its implementation reveals challenges such as ethical concerns and disparities in resource availability, particularly in markets with developing infrastructure like Kazakhstan. For example, while AI effectively automates tasks and measures campaign outcomes, these advancements highlight the pressing need for robust data security measures and specialized professional training to ensure equitable application across different regions.

Table 1 summarises AI applications in PR, derived from case studies and industry reports, with examples like IBM Watson and SentiOne illustrating data analysis and sentiment tracking. Each of these areas demonstrates how the use of AI in digital PR improves

Area	Description
Media Monitoring and Data Analysis	AI-driven systems significantly improved the identification of trends and audience sentiment. For example, media monitoring platforms powered by machine learning achieved a 30% increase in speed compared to manual methods, confirming prior theoretical assertions about AI's transformative potential in PR.
Content creation	AI algorithms generate content ideas, write articles, select images and videos, and optimise content for Search Engine Optimisation (SEO). This reduces the time spent on creating content, while maintaining its quality, and also allows personalising materials for different audiences.
Task automation	AI automates routine tasks such as sending emails, scheduling social media posts, and moderating comments. Chatbots with AI also provide round-the-clock support, answering customer questions, and providing information.
Advertisement targeting	AI creates personalised advertisements, optimising their display for the target audience. This increases the effectiveness of campaigns, reduces costs, and improves Return on Investment (ROI). AI also allows optimising advertisements in real time.
Measuring results	AI monitors and analyses the results of PR campaigns, providing detailed reports on the impact of content and the effectiveness of communications. This helps to assess the impact of PR on the business and optimise future strategies.

Table 1. Key areas of AI application in digital PR. Source: compiled by the authors based on (Generate Content with AI, 2024)

analytics, automates tasks, personalises content, and optimises interaction with the audience, which together contributes to increasing the effectiveness of PR strategies and increasing brand competitiveness. However, the introduction of AI into digital PR raises concerns in several aspects that relate to ethical issues, transparency, and control. That is, it is necessary to use AI responsibly and ethically, avoiding bias, discrimination, and misinformation. It is important to be transparent about the use of AI and inform the audience about how their data is being used. It is also necessary to maintain control over AI systems and prevent them from making decisions that can harm people. Despite these concerns, AI is a powerful tool that can help PR professionals take their work to a new level. The study of these technologies and their competent implementation will be a key success factor in the dynamically developing field of digital PR.

3.2. Factors of Successful AI Implementation

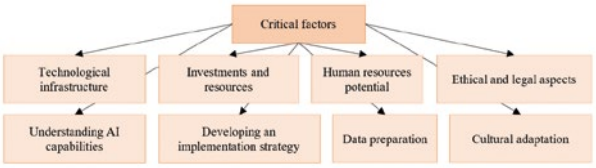

Figure 1. Factors of AI implementation in digital PR. Source: compiled by the authors based on (Reynolds, 2024)

The introduction of AI into the field of digital PR in Kazakhstan depends on several key factors that play an important role in its success and effectiveness (Figure 1). Identification of these factors helps to understand which aspects should be considered when developing and implementing AI in a PR strategy.

The availability of a modern technological base, including the availability of high-speed Internet and cloud computing infrastructure, is key to the successful implementation of AI in PR in Kazakhstan. Insufficient technological support can become an obstacle to the effective use of AI. Access to sufficient financial and human resources is crucial. Investments in the development and implementation of AI, and the availability of specialists with relevant competencies, are necessary to create and maintain AI solutions in PR.

The availability of qualified specialists trained in data, machine learning and analytics is an important factor. The need for specialists capable of developing and applying AI technologies in PR increases with the development of the field. The implementation of AI in PR requires strict compliance with ethical standards and legislative frameworks (Abdrakhmanov , 2024). This includes data protection, transparency in the use of AI, and consideration of possible ethical risks such as discrimination or loss of privacy. It is also important to clearly understand which tasks in PR can be automated or improved with the help of AI. PR professionals should be familiar with the various AI tools and technologies available on the market (Opris , 2020; Kvyetnyy , 2016). It is necessary to develop a clear strategy for the implementation of AI, which will be consistent with the overall goals of PR activities. The strategy should determine the priorities of tasks, the choice of AI tools, the budget, and the plan for measuring results.

AI algorithms require large amounts of high-quality data to work efficiently (Tkachenko , 2024). It is important to ensure that the data required to use the selected AI tools is collected, cleaned, and prepared. Moreover, the successful implementation of AI requires a change in corporate culture and training of employees to work with new technologies. It is important to conduct staff training and provide the necessary support during the

Kazakhstan	USA
Technological infrastructure	
Developing infrastructure, access to high-speed Internet and cloud computing is limited, especially in rural areas. This slows down the AI implementation process.	Highly developed infrastructure with wide access to high-speed Internet and cloud computing. This contributes to the easy implementation of AI in PR and the development of innovations.
Investments and resources	
Interest in investing in AI for PR is growing, but available resources may be limited compared to more developed markets.	Significant investments in the development and implementation of AI, which supports the development of AI technologies in PR. Broad access to financial and human resources promotes innovation.
Human resources potential	
Development of human resources is actively progressing, but additional training and development of specialists with skills in the field of data, machine learning and analytics is required.	Well-developed AI education system, a wide base of qualified specialists in the field of data, machine learning and analytics, which provides a high level of expertise in the application of AI in PR.
Ethical and legal aspects	
Developing legal framework, data protection issues and transparency of the use of AI require further improvement. Ethical and legal standards must be strictly observed, but there may be differences in the level of regulation and approach to data protection.	A mature legal framework, clear rules for data protection and the use of AI. Strict legal and ethical standards governing the use of AI in PR. Legislation ensures data protection and transparency in the use of AI technologies.
Understanding the capabilities of AI	
There is a growing awareness and understanding of the possibilities of AI, but further training and education for PR professionals regarding the use of AI is required.	A high level of awareness and understanding of AI capabilities among PR specialists, which contributes to the active introduction of new technologies.
Development of an implementation strategy	
The need to develop appropriate integrated strategies for implementing AI in PR activities, considering local conditions and available resources.	A clear and well-developed strategy for implementing AI in PR, considering business goals and technological capabilities.
Data preparation	
Need for better data collection, cleaning and preparation for successful application of AI in PR due to limited data volume and quality.	High-quality and accessible data for training AI algorithms, which ensures the efficiency and accuracy of AI solutions in PR.
Cultural adaptation	
Need to change the corporate culture and prepare staff to work with new AI technologies.	An advanced corporate culture and willingness to innovate, which contributes to the rapid introduction of new technologies in PR.

Table 2. Comparison of AI implementation in PR in Kazakhstan and the USA. Source: created by the authors based on (Akhmetova, 2019; O'Leary, 2024)

AI implementation (Symonenko , 2020). Thus, these factors are fundamental for the successful implementation of AI in digital PR both in Kazakhstan and in other countries. Understanding and analysing each of them helps to identify strategies and recommendations for the effective use of AI in this area. AI is transforming digital PR around the world, and Kazakhstan is no exception. It is important to conduct a comparative analysis of the introduction of AI into PR practice in Kazakhstan and the USA, highlighting the key factors influencing its success (Table 2).

The introduction of AI into digital PR in Kazakhstan has its own difficulties associated with limited infrastructure, resources, and personnel. Nevertheless, there is a growing interest in AI from PR specialists and companies. Investigating the US best practices and adapting them to local conditions may be the key to successful implementation of AI and increasing the effectiveness of PR activities in Kazakhstan.

Each of the factors mentioned in Figure 2 should be evaluated on a scale from 1 to 10. These scores are based on this study's own categorisation of current conditions

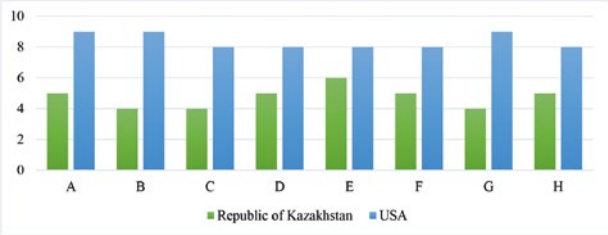

Figure 2. Evaluation diagram of AI implementation in PR in Kazakhstan and the USA. Source: compiled by the authors

Note: A – technological infrastructure, B – investments and resources, C – human resources, D – ethical and legal aspects, E – understanding of opportunities, F – development of an implementation strategy, G – data preparation, H – cultural adaptation.

and development potential in each category, providing a comprehensive and objective picture of the success of AI implementation in PR. For example, Kazakhstan has limited access to high-speed Internet, especially in rural areas, which slows down the implementation of AI. The USA has a well-developed infrastructure, which facilitates the easy implementation of AI. In addition, Kazakhstan faces limited resources to invest in AI, while the United States is actively investing heavily in the development of AI technologies. Human resources are developing in Kazakhstan, but more efforts are needed to train and train specialists. The USA has a well-developed education system and a large number of qualified specialists (Kenesbayev , 2017). Kazakhstan also needs further improvements in the legal framework and data protection, and the United States has a mature legal system that contributes to effective regulation of the use of AI. In Kazakhstan, awareness of AI capabilities is growing, but more training is still needed. In the USA, experts are already well aware of the capabilities of AI. In Kazakhstan, comprehensive AI implementation strategies need to be developed, while in the USA, strategies have already been clearly worked out. Additionally, Kazakhstan faces problems in the quality and volume of data, whereas the United States has high-quality and accessible data. Kazakhstan needs to change its corporate culture to work with AI, while in the USA the corporate culture is ready for innovation.

In Kazakhstan, scores range from 4 to 6 for most parameters, which indicates the presence of certain problems and obstacles, such as limited technological infrastructure, lack of investment, the need to strengthen the legal framework, and develop a culture of working with AI. While in the USA, the scores are higher, mainly at the 8-9 level, due to the developed infrastructure, availability of high-quality data and well-developed AI implementation strategies. This makes them more prepared to innovate and use AI in PR practice.

In general, the introduction of the US experience in Kazakhstan in the field of using AI in PR opens up significant opportunities to improve the efficiency and competitiveness of Kazakh companies. However, there are certain limitations. One of the main opportunities is access to advanced technologies and methodologies that have already proven their effectiveness in practice. However, limitations include differences in the levels of technological development, financial resources and human resources between the two countries (Orlyk and Stezhko, 2021). For the successful application of AI in PR in Kazakhstan, it is necessary to develop a technological infrastructure. The USA has a well-developed network of high-speed Internet and cloud computing, which allows quickly and efficiently implementing AI technologies (Gafni , 2024). Kazakhstan should invest in improving the Internet infrastructure, especially in remote regions, and create local data centres and support the development of cloud technologies (Kerimkhulle , 2023). Resource limitations further exacerbate these challenges. The relatively low level of investment in AI research and development compared to countries like the United States hinders the growth of this field. In addition, a shortage of skilled professionals trained in AI and data analytics means that businesses often struggle to recruit personnel capable of managing and deploying AI technologies effectively.

In addition, significant investments in the United States are directed to the development and implementation of AI technologies, which contributes to their rapid development and application in various industries, including PR. Kazakhstan needs to attract both public and private investments to create and support AI solutions. This includes funding for start-ups, research, and educational programmes in the field of AI. The advanced education system in the USA trains qualified specialists in the field of data, machine learning and analytics. Kazakhstan should adopt this experience by creating training and advanced training programmes for future AI specialists. This includes both university programmes and additional education courses aimed at the practical application of AI technologies in PR. The implementation of the American experience requires adaptation to local conditions and realities, however, with the right approach, it can significantly accelerate the development and increase the effectiveness of PR activities in Kazakhstan.

3.3. Practical Examples and Applications of AI

As for real-world examples, International Business Machines (IBM) Watson organised PR campaigns to analyse huge amounts of data and identify insights for PR campaigns, and also emphasised the importance of using AI and cognitive computing in the field of PR. The

World of Watson conference examined key technologies and tools that can transform the PR industry, including automatic reading and analysis of large amounts of data, data-driven storytelling, and automatic image recognition. The main message is that PR companies must actively implement these technologies in order to remain competitive and effective in the future. In addition, a group of experts from Edelman discussed the subtleties of AI in PR in an issue of Afri-Chats (The future of AI, 2023). They explored its promising future, its significant impact on the African continent, and the possibilities of transformation. They also considered ways in which the development of AI can change and revolutionise the PR industry, providing valuable perspectives at the intersection of technology and communications.

In turn, Microsoft launched a large-scale PR campaign to promote its new small language module Phi-3 Mini, which works locally on smartphones and is comparable in performance to the cloud models ChatGPT 3.5 and Mixtral 8x7B (Microsoft puts…, 2024). In competition with other powerful models unrelated to Microsoft's dominant position and its controversial partnership with OpenAI, the company is actively attracting attention to the Phi-3 Mini not only on technical websites, but also in major publications such as The New York Times and Reuters. Thus, Microsoft is trying to strengthen its position in the rapidly developing AI market. It is worth considering the implementation of AI in the field of PR using the examples of Weber Shandwick in the USA and Kaspi Bank in Kazakhstan (Table 3). This will allow analysing a variety of approaches and achievements demonstrating the successful use of AI in this area.

Criterion	USA	Kazakhstan
Company	Weber Shandwick	Kaspi Bank
Field of activity	PR agency	Bank
Problem	Creation of personalised offers for customers	Social media reputation management
Decision	IBM Watson AI platform	AI SentiOne platform
AI functions	Data analysis, generation of ideas for content, creation of personalised messages	Analysis of the text of social networks, determination of the tonality, generation if reports on customer sentiment
Results	Increase the conversion rate of offers by 30%, reduce the time to create offers by 50%, increase customer satisfaction	Reduce the number of negative reviews by 20%, increase customer loyalty, improve the bank's image
Advantages of AI	Message personalisation, reputation management, campaign performance tracking, cost reduction, increased competitiveness	

Table 3. Comparison of cases of successful AI implementation in PR: USA and Kazakhstan. Source: compiled by the authors

As can be seen from the table, despite the differences in industries and the problems being solved, both companies achieve certain improvements in customer satisfaction and reputation management when integrating AI into their PR strategies. Analysing the results obtained, several key areas can be identified that contribute to the successful integration of AI into PR in Kazakhstan. Key recommendations include improving digital literacy, increasing investment in technology, and international cooperation. For example, the introduction of specialised courses and trainings on AI and digital technologies for PR specialists will help improve their competencies and adapt to new market requirements. Raising awareness among PR professionals about the possibilities and applications of AI will help to use technology more effectively to achieve business goals (Gashi , 2024).

Increasing investments in the development and implementation of AI technologies will accelerate the digital transformation of the PR industry, improve the quality of services, and increase market competitiveness. Support for start-ups and AI-related initiatives will create favourable conditions for the development of new technologies and solutions in PR. Moreover, active participation in international conferences and forums on AI and PR will allow adopting the best practices, contributing to the development of the industry in Kazakhstan. Collaboration with the world's leading AI companies will help to introduce advanced technologies and solutions into local PR practices, increasing their efficiency and quality. These recommendations can become the basis for the successful implementation of AI in the field of PR in Kazakhstan, ensuring sustainable development and competitive advantages in the international market.

4. Discussion

To fully understand the current research, it is important to analyse the results of other studies on the use of AI in the field of PR. This analysis will help to assess which aspects and techniques have already been considered by other researchers, and to identify similarities and differences with the results obtained. For example, the study showed that the introduction of AI in the field of PR significantly increases the effectiveness of practices and contributes to the adaptation of new technologies

in this area. Comparing this with the study by Güven and Kurt (2023), where it was noted that AI has made it possible to create "digital PR", it is possible to confirm the significant contribution of AI to improving communication practices and their adaptation. Analysis of the paper by Çataldaş and Özgen (2023) showed that in the future PR will depend on the joint efforts of humans and AI. The results obtained also support the idea that AI and human collaboration plays a key role in the effectiveness of PR practices, highlighting the prospects for using AI in this area. Thus, this study makes important additions to the understanding of the impact of AI on PR, which is consistent with previous studies that also emphasise the importance of AI for the development of PR strategies in the digital world.

The results obtained emphasise that the introduction of AI into the field of PR significantly improves the effectiveness of communication strategies in this area. One of the primary challenges for implementing AI technologies in Kazakhstan is the lack of sufficient infrastructure. The disparity in the distribution of high-speed internet, particularly within rural regions, significantly restricts the capacity of companies to effectively deploy AI technologies. This discrepancy in technological infrastructure between urban and rural regions has significant implications for the adoption of AI by businesses. While companies based in major cities such as Almaty and Astana may experiment with AI, businesses in smaller cities face delays in adopting these technologies due to inadequate technological resources. In comparison with the study by Nazarkul Kyzy Soldan (2022), which also notes the importance of AI for PR strategies and its application in various practices, the data of this study confirms that AI plays a key role in modern communication practices, improving their effectiveness and adapting to changing market conditions. Another significant factor is the regulatory environment. In contrast to the United States, where a comprehensive regulatory framework supports the ethical use of AI, Kazakhstan's legislation is underdeveloped. This has resulted in uncertainty regarding data privacy and security. This legal ambiguity creates challenges for companies attempting to integrate AI into their PR strategies while ensuring compliance with ethical and legal standards.

Analysis of the study by Polat (2023), which has revealed significant changes in the field of PR under the influence of digitalisation and globalisation, emphasises the potential of AI in media monitoring, content creation, social media management, and effective crisis management. And the results of this study also support the conclusions about the need for widespread use of AI in various sectors of the PR industry, which emphasises the importance and prospects of using AI in modern communication strategies.

The conducted research revealed that the integration of AI into the field of PR plays a significant role in modern practices. Ilıcak Aydınalp (2020) argue that technological changes related to AI do not just modify current processes, but transform the entire PR system, which emphasises the need for adaptation and new strategies in response to the challenges of digitalisation. In addition, this study revealed that the integration of AI into PR also actively influences the development of new approaches to campaign management and data analytics. Liew (2021) demonstrate the potential of AI in improving the measurement of return on investment and the alignment of goals within PR, which is consistent with the results of this study, which supports the idea of the importance and prospects of using AI in modern strategies, focusing on its key role in the effectiveness and adaptation of PR in the context of digital transformation.

This study shows that the introduction of AI in PR contributes to effective adaptation to new challenges and technologies, improving tactics of interaction with the audience. In contrast, the study by James (2024) focuses on ethical and legal issues related to the use of AI in PR, such as data privacy and the risk of bias, which emphasises the importance of balancing innovation and legal aspects when introducing new technologies. On the other hand, this study focuses on the use of AI to improve the efficiency and adaptability of PR strategies. Tomaš (2023) point out the importance of technological changes in the evolution of PR, noting the transition from traditional models to new methods of interaction with the public, and the need for continuous training and integration of new tools for successful adaptation to a rapidly changing environment. That is, the conducted research focuses on how AI contributes not only to technological innovations in PR, but also finds a balance between efficiency and compliance with ethical and legal norms, which is a critical aspect in the implementation and use of AI in this area.

This study demonstrates that the use of AI in PR plays a key role in improving analytical processes and reputation management strategies. In comparison with the study by Jeljeli (2024), which notes the importance of reputation management in the context of online retail, it is indicated that AI contributes to improving competitiveness and effective online communication. The study shows the widespread use of AI to improve data analysis and strategic management in various areas of PR. Moreover, the study by Blankson and Anani-Bossman (2023) examines the impact of the Industrial Revolution on PR, highlighting how technological changes have transformed practices and provided new opportunities for monitoring and improving communications. And the results of this study confirm this trend, demonstrating that AI not only improves data monitoring and analy-

sis, but also contributes to more accurate targeting and management of communication campaigns.

While the results showed that the use of AI in PR significantly improves analytical processes and strategic management, providing a competitive advantage in the field of PR, the study by Türksoy (2022) demonstrated that AI can provide significant benefits for professions related to communication, but the role of human perception remains critically important. In contrast, this study focuses on the current practical applications of AI in PR and their direct impact on improving analytics and campaign management. The study by Abdullah (2020) discusses the transformational impact of AI and big data on PR practice, emphasising the significant impact of technology on corporate communications. This study confirms these findings, emphasising that AI improves monitoring, data analysis, and management of communication campaigns, but also highlights specific examples and applications of AI, which allows for a more accurate assessment of its impact on PR practice.

In addition, the results of the study show that the introduction of AI in the field of PR significantly improves the strengthening of ties with society and the promotion of brand values. In this aspect, this paper has common features with the study by Biswal (2020), which also highlights the significant impact of AI on reputation management and communication methods. However, unlike the above-mentioned paper, this one focuses on practical results, analysing how AI contributes to improving the effectiveness of PR campaigns. Swiatek (2024) highlight the rapid change in dynamics in PR due to AI, and also expresses concern about possible threats to workplaces and professional communication. This study, in turn, focuses on the positive aspects of AI implementation, such as improving analytical processes and strategic management. The need for an ethical approach is also recognised, which echoes the concerns expressed in this paper.

If this study analyses the widespread use of AI in various aspects of PR, then the study by Suciati (2021) focuses on specific tools and their perception in a particular region, namely, the PR Bot technology, which has found high recognition and willingness to use among PR professionals. Additionally, the results of the study show that the introduction of AI in the field of PR significantly improves the processes of content creation, campaign evaluation, and problem tracking. Özlem Çerçi (2024) emphasises the potential of AI in transforming the practices of media monitoring (media), crisis management, reputation, and content creation, which also echoes the conclusions of the study, as both studies recognise the significant capabilities of AI in developing more accurate and effective communication strategies.

It is worth noting that the findings of this study also show that the use of AI in PR significantly increases the effectiveness and accuracy of management strategies. The study by Hamzaee and Salimi (2023) focuses on the application of AI in economic policy and PR, emphasising the importance and potential challenges for professionals in this field, in contrast to this study, which focuses on practical aspects and real-world applications of AI in PR. Similarly, the study by R. Juwita (2024) emphasises the potential of AI in improving efficiency and accuracy in PR, but at the same time, notes concerns about its impact on society and professional practice. This study not only confirms the importance of AI, but also provides specific examples of its successful application in improving PR campaigns, which allows for a more accurate assessment of the practical advantages and challenges of integrating AI into PR.

The conclusions show that the introduction of AI in PR contributes to significant improvements in various aspects. Although the study by Irak (2024) examines the application of AI in PR, analysing current achievements and development prospects, the current study offers a more detailed analysis of specific results. Seif (2023) emphasises the importance of AI in corporate strategic plans and its impact on strategic communication and digital marketing. However, this study highlights examples of successful AI applications in PR campaigns, providing a more practical understanding of its benefits.

Thus, the conducted study demonstrated the significant impact of AI on various aspects of PR, confirming its potential to improve analytics, campaign management, and strategic planning. In the course of a comparative analysis with existing studies, it was revealed that AI not only increases the effectiveness and accuracy of PR practices, but also provides specific examples of its successful application in real conditions. However, the findings confirm the need for further investigation and implementation of AI in PR, considering ethical and social aspects, to maximise its potential and achieve sustainable results.

5. Conclusion

This study analysed the key aspects of the implementation of AI in the field of PR, with an emphasis on the experience of Kazakhstan and the USA. The results confirmed the significant potential of AI to improve the effectiveness of communication strategies and strengthen the reputation of companies. The study successfully analysed the integration of AI in PR, highlighting key factors such as technological readiness and strategic implementation, which deepened understanding of its potential and challenges. The use of AI helps to increase the speed and accuracy of data analysis, which, in turn, provides more accurate targeting of the audience and improves the quality of the

created content. These results highlight the importance of AI technologies in modern PR strategies, supporting not only rapid response to changes in public opinion, but also the active development of a positive image of companies in a dynamically changing digital world.

Additionally, the study revealed that successful AI implementation requires not only technical readiness and access to data, but also a strategic approach to using AI in PR. The key success factors were the competence of specialists, the ability to adapt technologies to the specifics of the market, and the willingness to constantly learn and adapt to new challenges of the digital environment. However, the study revealed several key limitations, such as the limited geographical scope and the lack of generally accepted standards in the field of ethics and data security. These factors can slow down the process of implementing AI in PR and require further attention from businesses and regulators.

Recommendations based on the study include the need to improve educational programmes in the field of digital literacy, deepen cooperation between companies and academic institutions to develop new technologies and techniques, and develop strict ethical and legal standards for data protection. To further advance the research, it is recommended to expand its geographical scope to other regions and industries, to conduct more in-depth analyses of the social and economic implications of AI implementation in PR, and to actively explore and develop new methods for assessing the effectiveness of AI use in communication strategies. The study provided valuable insights into the integration of AI into PR, addressing both the opportunities and challenges, while laying a foundation for further advancements in the field. Thus, further progress towards the introduction of AI in PR will require not only technical innovations, but also a broad public dialogue about its ethical and safe use.

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