Alınteri Sosyal Bilimler Dergisi (2025), *9*(2), 308-328 https://doi.org/10.30913/alinterisosbil.1815718
Alınteri Journal of Social Sciences (2025), *9*(2), 308-328

dergipark.org.tr/tr/pub/alinterisosbil

Sosyal Bilimler Dergisi
Journal of Social Sciences
| e-ISSN 2602-229X |

https://prensip.gen.tr

ARAŞTIRMA MAKALESİ RESEARCH ARTICLE

From Data to Message: Public Relations Practices Transformed by Artificial Intelligence

Veriden Mesaja: Yapay Zeka ile Dönüşen Halkla İlişkiler Uygulamaları

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Geliş Tarihi/Received Date: 02.11.2025 **Kabul Tarihi/Accepted Date:** 03.12.2025

ABSTRACT

This study examines the use of artificial intelligence (AI) in the field of public relations and the role of this technology in the digital transformation of the discipline. Advances in technology have fundamentally transformed public relations processes, methods, and communication tools, enabling the adoption of data-driven and measurable communication approaches. AI facilitates practitioners in data collection, analysis, content creation, social media management, campaign planning, sentiment analysis, and crisis management. The study discusses the functions, application areas, and benefits of AI-based tools commonly used in public relations. The findings indicate that AI enhances the effectiveness of public relations practices and reshapes strategic decision-making processes. The comparative analysis conducted within the scope of this research demonstrates that AI-supported tools enhance time and cost efficiency in PR activities, rationalize decision-making processes, and enable objective measurement of communication performance. However limitations and risks such as data privacy, misinformation, and ethical responsibilities should also be considered. The study emphasizes that AI, beyond being a technological tool, profoundly transforms communication processes and professional practices in public relations.

Keywords: Public Relations, Artificial Intelligence, Digital Transformation.

ÖZ

Bu çalışma yapay zekanın halkla ilişkiler alanındaki kullanımını ve bu teknolojinin halkla ilişkiler alanında dijital dönüşümündeki rolünü incelemektedir. Teknolojideki ilerlemeler halkla ilişkiler süreçlerinin yöntemlerini ve iletişim araçlarını köklü biçimde dönüştürmüş, veri odaklı ve ölçülebilir iletişim yaklaşımlarının benimsenmesini sağlamıştır. Yapay zeka veri toplama, analiz, içerik üretimi, sosyal medya yönetimi, kampanya planlama, duygu analizi ve kriz yönetimi gibi alanlarda uygulayıcılara kolaylık sağlamaktadır. Çalışmada halkla ilişkiler alanında yaygın olarak kullanılan yapay zeka tabanlı araçların işlevleri, kullanım alanları ve sağladıkları avantajlar ele alınmıştır. Elde edilen bulgular yapay zekanın halkla ilişkiler uygulamalarının etkinliğini artırmakla kalmayıp, stratejik karar alma süreçlerini yeniden şekillendirdiğini göstermektedir. Araştırma kapsamında yapılan karşılaştırmalı inceleme yapay zeka destekli araçların halkla ilişkiler faaliyetlerinde zaman ve maliyet verimliliğini artırdığını, karar alma süreçlerini rasyonelleştirdiğini ve iletişim performansının nesnel biçimde ölçülmesine imkan tanıdığını göstermektedir. Bununla birlikte veri gizliliği, yanlış bilgilendirme ve etik sorumluluklar gibi sınırlılıklar ve riskler de göz önünde bulundurulmalıdır. Çalışma yapay zekanın halkla ilişkilerde yalnızca bir teknolojik araç olmanın ötesinde iletişim süreçlerini ve mesleki uygulamaları da derinden dönüştürdüğünü vurgulamaktadır.

Anahtar Kelimeler: Halkla İlişkiler, Yapay Zeka, Dijital Dönüşüm.

Please cite this paper as follows/Atıf için:

Karakulle, İ. (2025). From data to message: Public relations practices transformed by artificial intelligence. *Alınteri Sosyal Bilimler Dergisi*, *9*(2), 308-328. https://doi.org/10.30913/alinterisosbil.1815718

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INTRODUCTION

Advances in technology have not been limited to the technical sciences but have also significantly influenced the social sciences. As technology has become an indispensable part of daily life, the extent of this impact has become more apparent. This process began with the emergence of radio in the early 19th century and continued with developments such as television, computers, and the Internet. It has multifacetedly transformed the communication structure, leading to profound changes in the practices and methods of subfields and contributing to their widespread adoption. Public relations, a field nourished by multiple disciplines, has benefited substantially from technological advancements. Digital and new media technologies, in particular, are widely used in public relations practices, accelerating processes and providing various conveniences to professionals in the field. In this context, organizations are interested in adopting and effectively utilizing new technologies to maintain strong and sustainable communication with the public. Artificial intelligence (AI), one of the leading examples of technological innovation, has begun to demonstrate its impact across numerous sectors, from medicine to art, engineering to defense, and has frequently been addressed in academic studies across various disciplines. AI's superior data collection, analysis, and decision-making capabilities have allowed it to contribute significantly to the development of social sciences, beyond its applications in technical fields (Fidan & Rençber, 2019, p. 219). Although research on AI dates back to the 1950s, the field has truly developed and become widespread only in more recent times. Today, AI is extensively utilized across various sectors, including e-commerce, finance, telecommunications, public relations, and advertising. Technological advances, innovations provided by digitalization, and the emergence of new communication tools have profoundly affected the field of public relations. Although contemporary public relations practices are still conducted using traditional methods, they also benefit from AI-supported solutions (Aka, 2024, p. 294; Güven, 2024).

In public relations AI is employed in numerous activities such as digital media management, content creation, management of social media accounts, preparation and distribution of press releases, campaign planning, and sentiment analysis. These applications facilitate practitioners' work while enhancing the overall effectiveness of public relations efforts (Virmani & Gregory, 2021, p. 9). Liu and Zhang (2012) evaluated the functionality of artificial intelligence applications for analyzing emotional content and identifying meaningful opinions from social media data in their study. Galloway and Swiatek (2018) emphasized in their study that artificial intelligence should be regarded not as a technology intended to replace public relations professionals, but rather as a complementary tool that expands their areas of expertise and enhances their professional performance. Arief and Saputra (2019) underscore that artificial intelligence technologies exert a transformative influence on the field of public relations. They argue that, in the future, attaining professional success will necessitate that public relations practitioners acquire new competencies such as data analytics, social media management, content design, and artificial intelligence literacy. The study further suggests that professionals possessing these skills will gain a marked advantage in achieving leadership positions within the sector. The adoption and use of AI-based tools make it possible to automate many public relations tasks, thereby saving practitioners time and enabling the planning

of goal-oriented activities, monitoring processes, and evaluating outcomes. AI in public relations has the capacity to automate and execute various tasks, including data-driven content creation, generating and updating media lists, supporting crisis management processes, transcribing and analyzing audio recordings, monitoring and predicting media trends, and social media monitoring and management (Panda et al., 2019, p. 197). Integrating AI-based tools into public relations processes facilitates the execution of many tasks, providing practitioners with additional time to engage in the field actively, design research projects aligned with their objectives, and track and evaluate these projects (Smith & Waddington, 2023). The increasing impact of AI on public relations, through numerous positive contributions and innovations, necessitates a detailed understanding of the purposes for which these technological tools are used and their functions. The implementation of AI-based tools in public relations practices not only enhances process efficiency but also contributes to strategic decision-making mechanisms. In this context, it is essential to systematically examine the application areas, advantages, and opportunities these tools provide to professionals. This study aims to determine the levels of use of AI tools in public relations, identify their functional contributions and evaluate their potential impact from an academic perspective. In doing so the role of AI in public relations can be more clearly understood theoretically and practically.

LITERATURE REVIEW

The first known study in artificial intelligence (AI) was conducted in 1943 by Warren McCulloch and Walter Pitts. McCulloch, educated in philosophy and having obtained a medical degree from Columbia University, served as the director of the Basic Research Laboratory at the Department of Psychiatry, University of Illinois. While working there, he researched the central nervous system and developed a model based on brain neurons, providing one of the first significant contributions to AI (Azadbeh, 2024, p. 140). The beginning of AI research is commonly associated with a seminar held at Dartmouth College 1956. This seminar featured Alan Newell and Herbert Simon from Carnegie Mellon University, John McCarthy, Marvin Minsky, and Arthur Samuel from the Massachusetts Institute of Technology. The term "artificial intelligence" was first used in the literature in 1965 and was defined as an independent scientific discipline and a knowledge field. However, concrete research and practical applications in the field gained momentum primarily from the 1960s onwards (Russell & Norvig, 2022).

Artificial intelligence is the simulation of human intelligence in systems capable of imitating human thinking, reasoning, and behavior. AI emerges by developing algorithms and computer-based programs capable of performing tasks that typically require human cognitive abilities, such as visual perception, speech recognition, decision-making, and language translation (Smith & Waddington, 2023, p. 6). At its core, AI is approached as a conceptual framework associated with cognitive and intelligence-based behaviors such as perception, learning, communication, and reasoning. The primary goal of this field is to design and develop intelligent systems capable of demonstrating human-like cognitive abilities, and in some cases, outperforming human capacities (Nilsson, 1998). According to another definition, AI encompasses various machines that can learn either with human assistance or fully autonomously and perform specific cognitive tasks beyond human performance (Mike, 2020). There is no consensus in the academic

literature regarding the definition of AI. Studies present different approaches, associating AI with algorithms, software applications, robots, and humanoid machines. The main reason for differing definitions is which systems or applications should be considered AI or AI products. According to some researchers, AI refers to systems that can analyze and make decisions even though they are not alive. In contrast, others define it as a general framework of advanced information technologies that facilitate human life (Fidan & Rençber, 2019, p. 222).

Public relations practitioners must consider social and relational dynamics when making sense of new technologies, rather than focusing solely on existing applications (Kent & Saffer, 2014). AI has become an increasingly prominent topic in the communications sector, particularly in public relations, and practitioners and academic circles have recognized its innovative and productive potential. Today, organizations of various sizes increasingly leverage AI technologies both within their own public relations departments and through external PR agencies to enhance competencies and improve process efficiency (Galloway & Swiatek, 2018). AI has the potential to transform and improve communication processes by making interactions in computer-mediated communication environments more efficient and effective. As AI becomes a more influential element in communication, interactions between humans and machines intensify, shifting the nature of interpersonal communication to a new level (Hancock et al., 2020, p. 89). Public relations practitioners must understand the effects of technologies on social behaviors in order to provide ethical and responsibility-based recommendations to their organizations (Valentini, 2015). In this respect, integrating AI-based tools into communication processes is important, but practitioners must also be able to use the technologies that underpin core communication processes. Previous research supports this notion. Despite the importance attributed to digital platforms and social media, public relations practitioners have been found to have limited or moderate competence in using new communication processes (Macnamara et al., 2018). With the development of AI, systems such as chatbots can operate for extended periods without human intervention, make their own decisions, and function autonomously. These technologies employ advanced analytical techniques to enhance the efficiency of message reception, storage, and analysis processes. Consequently, public relations professionals must understand the functional contributions of AI-based systems in supporting and enhancing human communication. As AI applications rapidly expand within the public relations discipline and the broader communication ecosystem, it is necessary to recognize the multidimensional roles this technology plays today and may play in the future (Galloway & Swiatek, 2018, pp. 738-739). The integration of smart devices, the intensive use of smartphones, and the hyper-connected structure of digital networks are significantly reshaping the professional practices of public relations practitioners. Under current conditions, it is critical for a public relations professional not only to possess traditional skills but also to have knowledge of the functional features and potential applications of AI-based technologies, as this has become a vital requirement for maintaining professional competence (Tench et al., 2013).

Use of Artificial Intelligence in Public Relations

The emergence of computer-mediated communication has fundamentally transformed interpersonal communication by providing various forms and channels that

enable individuals to convey messages and interact with others beyond time and space constraints (Herring, 2002). In classical social science approaches, the nature and characteristics of the communication medium are considered essential in explaining how individuals use technology to achieve interpersonal goals. Within this framework, the subject remains the individual who communicates; message creation and impression management are generally viewed as reflections of the communicator's objectives. Similarly, it is assumed that the message recipient perceives and approves the subject. Including artificial intelligence in interpersonal communication can redefine how people interact, challenge established assumptions about subjectivity and mediation, and create new areas for discussion. Computer-mediated communication is now expanding to encompass AI-assisted communication. In this new form, messages are transmitted through technological tools and can be curated, enhanced, or entirely generated by an AI system to achieve communication objectives (Hancock et al., 2020, pp. 89-90).

Today, AI technology is recognized as an important research topic in academia and a transformative tool across various professional domains. One field where AI is studied and applied is public relations. The innovative opportunities AI provides to PR activities, the resulting changes in practitioners' work practices, and its potential future impact on the profession continue to be debated in academic and industry contexts (Boztepe Taşkıran & Önay Doğan, 2024, p. 13). In other words, AI applications are driving fundamental transformations in organizations and PR processes. This transformation differs from the changes initiated by adopting computers and the Internet in public relations; it is shaped not by moving to a new platform but by the increasing significance of existing digital environments. The use of AI is particularly facilitated by digital channels such as social media, where data the most valuable resource for AI is abundant. Thus, this transformation occurs through the support of communication tools and methods in PR with algorithm-, automation-, and machine learning-based AI systems, as well as the implementation of advanced self-learning AI technologies such as deep learning and neural networks (Çeber, 2022, p. 125). Technological advancements have profoundly influenced traditional PR practices and transformed how organizations engage with target audiences and manage reputation. AI enables PR practitioners to evaluate large datasets with unprecedented speed and accuracy, opening new areas of efficiency and capability. This technological progress allows previously inaccessible patterns and insights to emerge, enhancing the precision and effectiveness of PR strategies. AI-based tools also automate routine tasks, freeing practitioners to focus on strategic initiatives. Technology increases the efficiency of PR processes and contributes to the redefinition of roles and responsibilities in the field. Therefore, PR practitioners must adopt these changes and leverage AI technologies to maintain relevance and succeed in an increasingly data-driven environment (Çöllü, 2024, p. 111). PR practitioners must adopt up-to-date and creative strategies to remain effective in a competitive landscape. The influence of social media influencers has recently grown significantly, making collaborations with influencers a critical tool for reaching large audiences and enhancing brand awareness. PR practitioners using influencers rely on AI to select the most suitable individuals. AI's comprehensive data and content analysis capabilities enable practitioners to identify the most effective influencers for their brands (Ilıcak Aydınalp, 2020, p. 2292). The importance of new AI technologies in enhancing PR effectiveness is

emphasized under three main categories: data-driven PR campaigns, automation of routine tasks, and sentiment analysis with crisis management. AI-generated insights allow the design of new PR campaigns, moving the field away from purely predictive methods. Automation and machine learning provide PR practitioners with a better understanding of the factors contributing to campaign success, while automating routine tasks allows them to perform repetitive work more efficiently. AI also supports PR professionals in analyzing various factors and emotional responses, including social listening, and enables more sensitive and strategic management of crises through comprehensive data support (Biswal, 2020).

In public relations, AI primarily collects data, analyzes it, interprets results, creates action plans, and implements them (Valin Hon, 2018). AI technologies in PR enable deep analyses of target audiences and competitors, media monitoring, identification of influential individuals and groups, stakeholder relationship management, media relations, risk and crisis management, content creation, production of communication materials, social media management, and campaign planning and execution (Virmani & Gregory, 2021). AI-supported technologies transform many processes, such as content scanning and summarizing news and ideas, increasingly impacting PR practices (Radley, 2018). The key transformations resulting from integrating AI into public relations can be grouped into three main dimensions (Seidenglanz & Baier, 2023):

- Automation of publication tasks: Automating repetitive and time-consuming PR processes, such as processing media data, preparing texts, selecting and editing visuals, and producing video content. This facilitates interactions with target audiences while increasing operational efficiency.

- Data analysis and audience understanding: To extract valuable insights, large datasets can be examined using machine learning and algorithmic approaches. Unlike traditional, time-consuming, and resource-intensive methods, enhanced computing power allows real-time collection and analysis of multiple data sources, enabling quick and effective decisions. This capability supports responses to organizational developments and predictions of trends, developments, and potential crises.

- Specific functional applications of AI in PR: Examples include analyzing target audiences and stakeholders, preparing personalized messages, identifying trends with AI, optimizing communication strategies, and enabling faster communication in routine situations.

Advanced AI technologies equipped with flexibility, adaptability, and context sensitivity are introducing new work methods, norms, and approaches in public relations, offering innovative, field-specific solutions. In the AI era, technological systems have evolved beyond supportive tools, becoming active elements capable of directly executing tasks for PR professionals (Panda et al., 2019, p. 197). AI is generally viewed as an assistive tool rather than a threat. Leveraging AI allows PR practices to be executed rapidly and efficiently, enabling practitioners to achieve objectives faster (Rogers, 2019). Various case studies demonstrate AI's practical application in PR strategies and its transformative impact on the industry. For example, a leading online retailer utilized AI to analyze customer feedback and social media posts in real time to enhance reputation

management efforts (Jeljeli et al., 2024). AI systems have adapted to existing PR tools and are often used alongside them. For instance, machine learning and deep learning-based AI solutions are applied to social media platforms, allowing users to convert audience data into meaningful organizational outputs. AI applications enable users to generate data-driven predictions, strengthen communication with target audiences, and increase engagement. Integrated AI solutions in social media help identify audience preferences and tendencies, analyze experiences, categorize insights, and inform strategy development (Eşitti, 2020). AI integration in PR has advanced personalized content creation, fundamentally transforming the design and delivery of messages. AI processing large datasets allows practitioners to tailor content according to individual interests and behavioral tendencies, making communication strategies more impactful and engagement-focused (Babatunde et al., 2024). Organizations can leverage AI's predictive analytics to understand audience expectations and interests better, delivering the most appropriate messages at the optimal time. This personalized approach extends beyond content to the channels through which communication occurs, ensuring messages reach audiences on platforms where they are most engaged (Kumar et al., 2024). Real-time AI-based sentiment analysis enables a more detailed and nuanced understanding of public opinion, leading to significant transformations in PR. AI algorithms evaluate social media posts, news content, and other digital data to gauge general attitudes toward a brand or topic, providing PR professionals with immediate insights. This capability allows practitioners to capitalize on positive or mitigate negative trends, facilitating flexible and rapid responses. Continuous monitoring of sentiment data helps identify public opinion trends. It provides insights into consumer behavior, enabling PR teams to shape strategies aligned with audience expectations and strengthen brand credibility and reputation (Çöllü, 2024, p. 118). AI-supported systems play an active role in generating meaningful value. Emotionally intelligent AI applications can detect and analyze target audiences' emotional tendencies, psychological responses, and mental states, producing appropriate responses. These technologies have significant potential for creating personalized interaction experiences (Öztürk, 2020, p. 158). Predictive analysis of media trends and crisis management is another area where AI's impact is evident. AI algorithms can analyze historical data and current media trends to predict future events and their impact on brand reputation, enabling PR professionals to develop proactive strategies and manage potential crises effectively. Predictive analysis also helps identify emerging trends, providing brands competitive advantage. These insights support data-driven decision-making and are vital for strategic planning. The ability to anticipate media developments and prepare accordingly is a game-changer for timely and informed responses in the fast-changing PR environment, helping maintain a positive public image (Çöllü, 2024, pp. 118-119). The existing literature highlights a strong interaction between AI and the PR discipline. AI-based technologies are recognized as having high potential for enhancing PR activities, and the transformations they create in work practices provide new opportunities for the field (Boztepe Taşkıran & Önay Doğan, 2024, p. 15). The benefits of AI in PR can be summarized as follows (Duran, 2021, p. 39):

- Personalization: Tailoring options based on users' emotional states, thought patterns, and past behaviors, allowing content or recommendations to target specific individuals or groups rather than general audiences.

- Chatbots: Automating customer support via digital platforms through AI-based messaging without human intervention. Chatbots communicate in natural language, mimic human-like dialogues, and respond quickly to consumer queries, expectations, and requests.

- Content Creation: Using AI to generate texts that would take humans significantly longer to produce.

- Search Engines: Systems that predict relevant results based on users' past behaviors and actions, enabling insights into which terms are being searched and in what context.

- Campaign Optimization: Continuously updating promotional messages based on collected feedback. AI-enhanced campaign optimization aims to deliver content that is aligned with users' interests using big data.

- Voice, Text, and Image Recognition: Detecting and generating appropriate responses to voice commands, text, or images. Examples include voice-activated application commands, text analysis for feedback categorization, and facial recognition technologies.

AI software used in PR varies according to its functional purposes and features. The degree of differentiation increases as usage expands, and the content and contributions of the software change according to practitioners' approaches. Widely used AI-based applications in PR include:

Synthesia (AI-Based Video Production Tool): An advanced AI-supported video production platform that enables users to create professional-quality videos without advanced technical knowledge or expensive equipment. Synthesia is particularly effective for PR activities or content production requiring video usage. By eliminating cameras, editing, and acting costs, the platform offers 65 different languages and accents for voiceovers and over 40 virtual characters for high-quality corporate video content. Originally developed to support customer relations, PR professionals now use it effectively to produce marketing materials such as interviews, promotional videos, and testimonials.

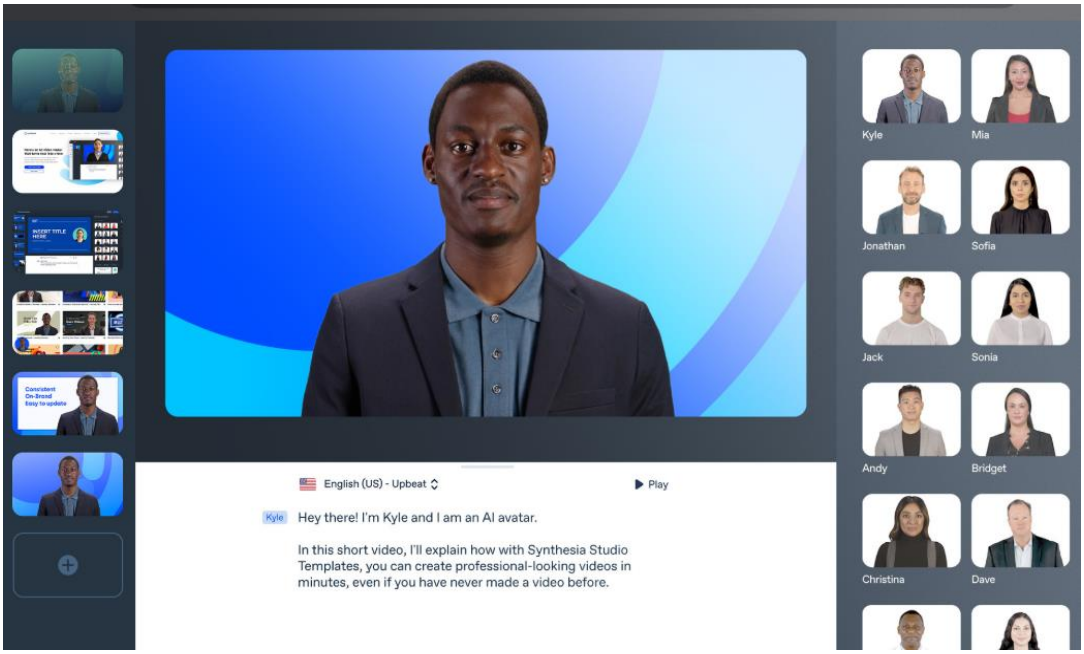

Figure 1. AI tool for public relations-oriented video production.

Jasper (AI-Powered Content Writing Platform): An advanced AI writing tool that accelerates content creation processes for public relations practitioners and enables the production of personalized texts. This platform utilizes natural language processing technology to understand the user's intent and context instantly. PR professionals can adapt their messages for higher audience engagement and optimize their communication strategies.

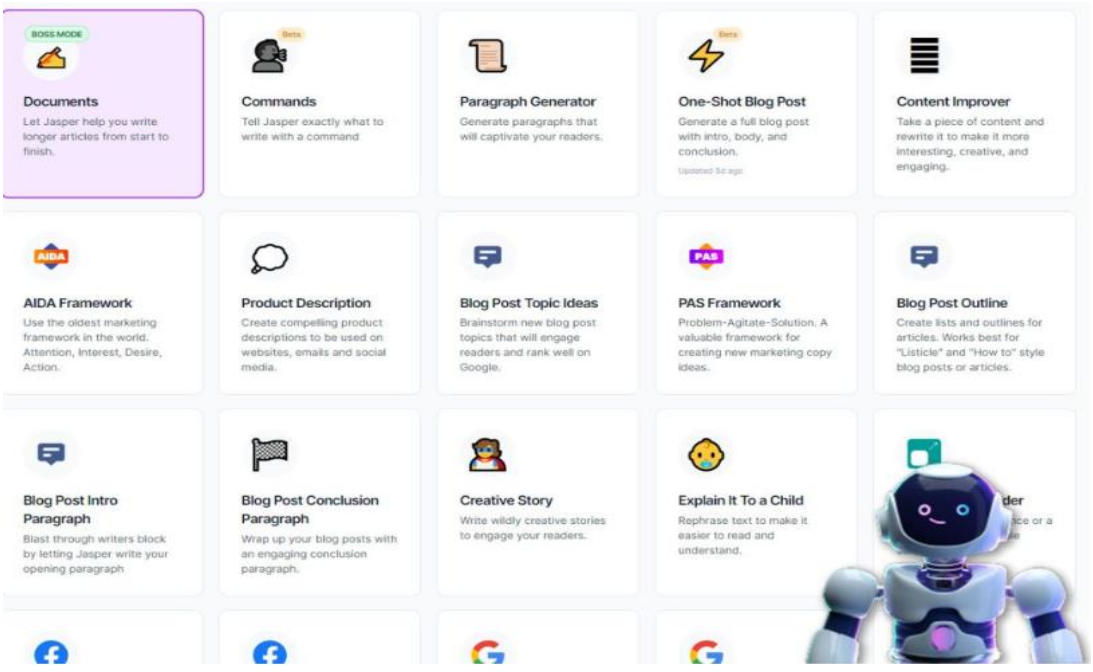

Figure 2. AI writing tool for content creation.

Determ (AI-Based Social Listening Tool): An AI-powered social listening software that enables brands or products to monitor discussions across various digital channels (e.g., blogs, news portals, online forums, and social media platforms) and obtain detailed analyses of consumers' perceptions of the brand or product over time. This system is not limited to tracking brand reputation or product feedback; it also effectively

utilizes AI algorithms for competitor analysis, crisis management, and campaign performance measurement. Among all AI tools in the field of public relations, Determ is widely used by PR professionals for the often challenging tasks of data analysis and interpretation. Its key features include extensive data analysis capabilities, real-time and automated alerts for online keyword usage, customizable analytical solutions based on user needs, and the ability to monitor how and how frequently a brand is mentioned in digital spaces in real time.

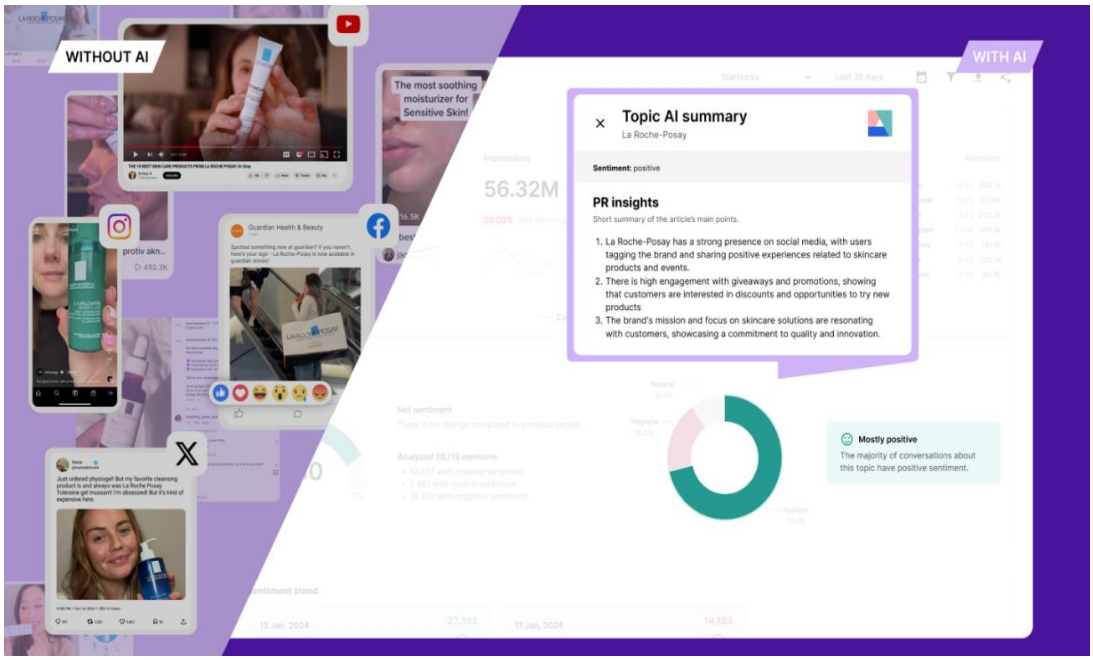

Figure 3. AI-Based social listening tool.

Sprinklr (AI-Based Enterprise Management Platform): An AI-powered enterprise management system that enables businesses to manage their digital assets holistically. The platform consolidates numerous processes under a single roof, including content creation and distribution, social media planning and monitoring, customer relationship management, web experience oversight, and performance measurement. Additionally, it offers advanced analytical tools that allow real-time tracking of the ROI of public relations activities and accelerate decision-making processes.

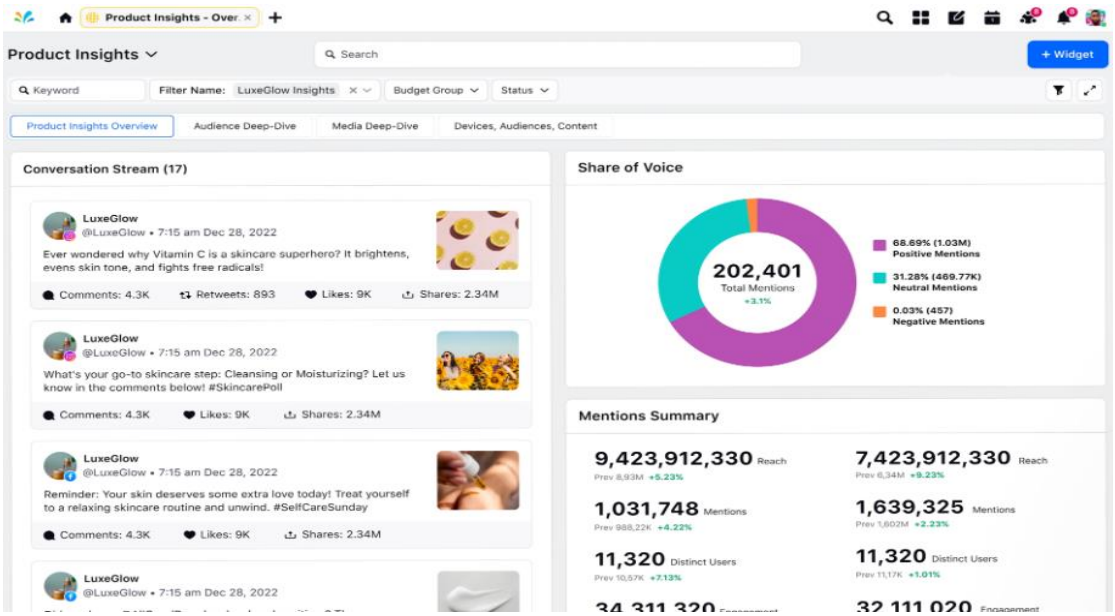

Figure 4. AI-Based enterprise management platform.

Hemingway Editor (AI-Powered Writing and Editing Application): An AI-based writing tool that allows public relations practitioners to review their texts for grammar and spelling errors easily. Additionally, its ability to simplify complex sentences and transform texts into a more understandable format significantly helps users improve the readability of their content.

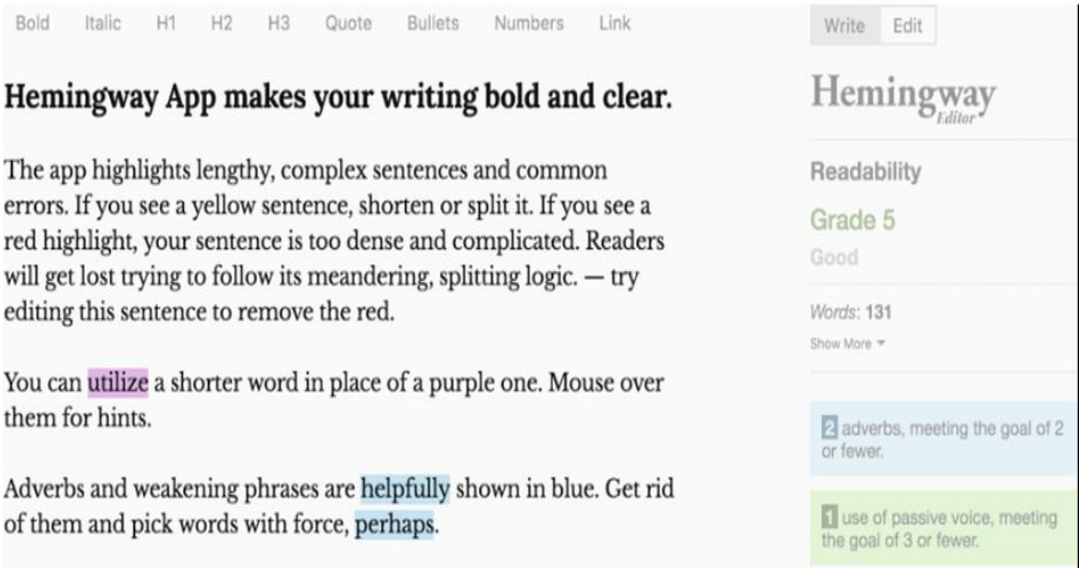

Figure 5. AI-Powered writing and editing application.

CoverageBook (AI-Powered Public Relations Reporting Tool): A digital platform that enables public relations and corporate communication professionals to systematically and efficiently report their media visibility. This tool allows the placements a brand or organization achieves in press, blogs, or digital media as a result of PR activities to be organized and transformed into reports supported with visual and quantitative data. The platform offers an automated process that replaces traditional media coverage reporting methods, allowing users to produce professional-level reports quickly. When the user adds the relevant news or content links to the system, CoverageBook automatically collects data such as headlines, visuals, publisher information, and publication dates. It

also calculates performance metrics such as estimated reach, social media sharing rates, and engagement statistics, integrating them into the report. CoverageBook's main advantages include time savings and the ability to generate visually professional reports. These features make CoverageBook a preferred reporting tool for public relations agencies, corporate communication departments, and brand managers.

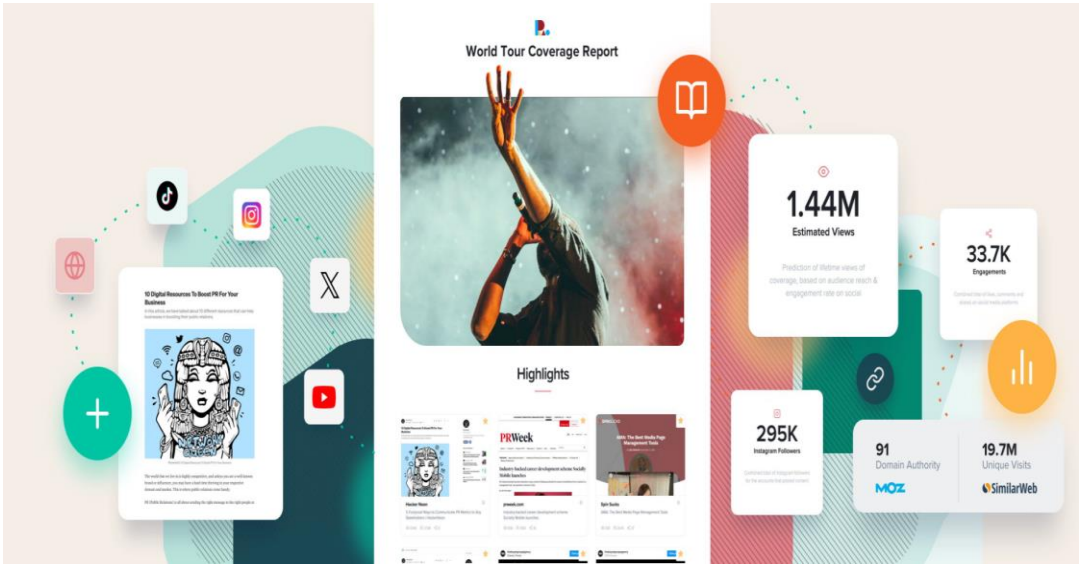

Figure 6. AI-Powered public relations reporting tool.

Brand24 (AI-Powered Social Listening and Analytics Tool): Brand24 is an AI-based social listening and analytics tool developed for monitoring, evaluating, and managing brand reputation in digital environments. This platform provides strategic information and data support in the field of public relations by tracking all content shared online about brands, organizations, or individuals in real time. Brand24 scans various digital sources, including social media networks (X/Twitter, Facebook, Instagram, YouTube, TikTok, LinkedIn, etc.), blogs, news portals, forums, and podcasts, offering users a comprehensive visibility analysis based on a brand or specific keywords. This enables organizations to monitor positive or negative brand evaluations while developing data-driven strategic decisions for crisis management, competitor analysis, and market research. Public relations agencies and social media managers particularly prefer Brand24. Through this tool, organizations can measure their target audience's perception of the brand, evaluate the impact of their campaigns, and identify potential crises early to create proactive communication strategies.

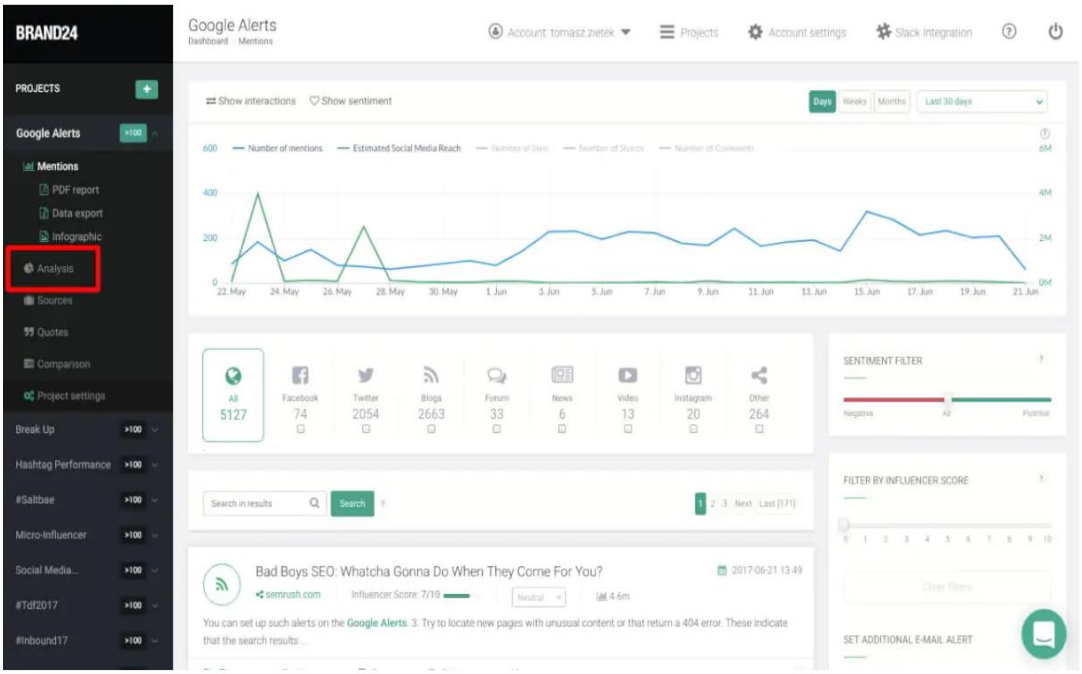

Figure 7. AI-Powered social listening and analytics tool.

Meltwater (AI-Powered Media Monitoring Tool): Meltwater is a comprehensive AI-based media monitoring tool in public relations, media tracking, and data analytics. The primary purpose of Meltwater is to continuously observe a brand's or organization's digital presence, analyze the collected data, and generate insights that contribute to strategic decision-making processes. Meltwater monitors all brand-related content in real time by scanning various digital sources. This allows users to track news, comments, and interactions about their brand through a single system. Additionally, the platform analyzes social media conversations to assess user sentiment and plays an active role in crisis management by sending alerts when negative mentions increase. Key functions of Meltwater include media monitoring, social listening, comparative analysis of competitor brands, sentiment analysis, influencer identification, and advanced reporting. The collected data is supported with visual analyses, providing public relations professionals with comprehensive media visibility and impact evaluations. Meltwater is effectively used by public relations agencies, corporate communication units, brand managers, and marketing specialists.

Figure 8. AI-Powered media monitoring tool.

Prezly (AI-Powered Management and Content Sharing Tool): Prezly is an integrated public relations management and content sharing platform developed to transition public relations, communication management, and media relations processes to the digital environment and make these processes more efficient. Its primary function is to enable public relations professionals to share press releases, stories, and brand content with journalists, media representatives, and stakeholders more effectively, quickly, and systematically. This platform replaces traditional email-based press communication methods, consolidating communication activities within a single digital system. Through Prezly, users can create press releases online, send them to designated media lists, and monitor real-time statistics on content views, clicks, and shares. Additionally, Prezly allows brands to design their own corporate digital press rooms. These press rooms serve as dynamic communication spaces where up-to-date news, visuals, videos, and documents related to the brand can be easily shared with media professionals. Prezly is considered a user-focused, modern, and strategic public relations technology platform that allows public relations professionals to plan, execute, and evaluate press communication, content management, and media relations in the digital environment.

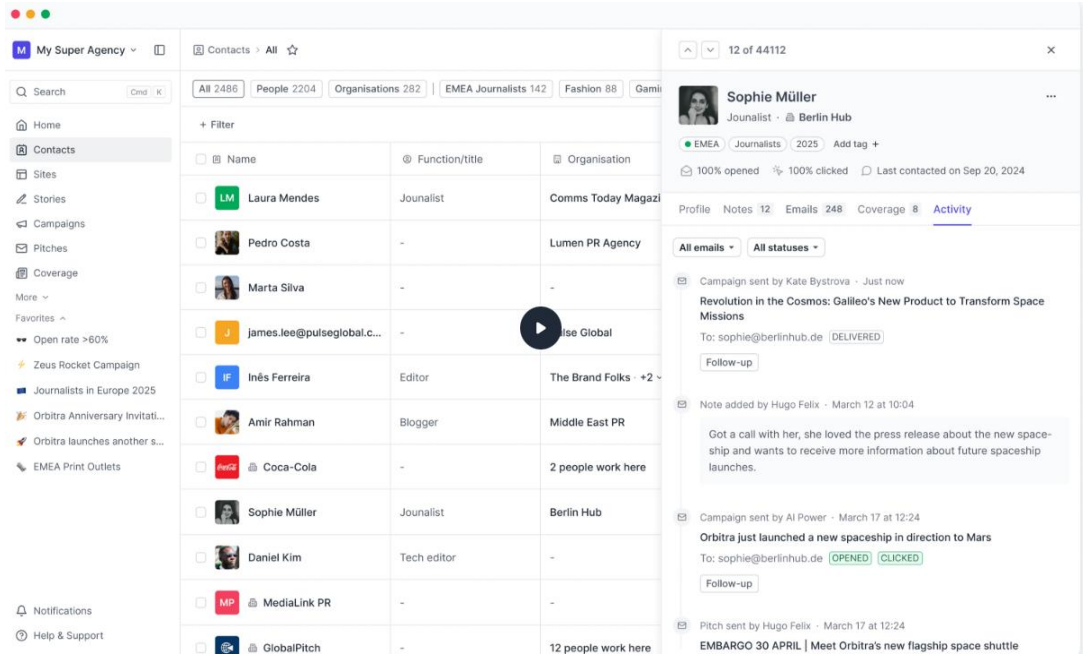

Figure 9. AI-Powered management and content sharing tool.

Considering the development level of artificial intelligence, a significant increase can be observed in both the number and functional diversity of digital tools used in public relations. These tools offer various services, including media monitoring, content analysis, data visualization, press release distribution, social listening, crisis management, engagement measurement, and reputation management. This diversity allows public relations practitioners to monitor brand visibility and public perception in digital environments and enables data-driven strategic communication planning. AI-based media monitoring and public relations management tools are currently among the key examples representing the digital transformation of the public relations discipline. These tools contribute to the structural development of the field through functions such as automation of communication processes, data-driven decision-making, and strategic impact measurement. The table below presents a comparative overview of the core features of different platforms and their applications in public relations practices.

Table 1. AI-Based public relations software (Source: Compiled by the author).

Tools	Description and Key Features	Applications in Public Relations
BuzzSumo	A content analysis and social media monitoring tool developed for digital marketing and content strategies. It analyzes the most shared content based on specific keywords, brands, or topics.	Content performance analysis, trend monitoring, influencer identification, competitor comparison, strategic content planning.
Newswire	A news distribution platform that enables organizations and brands to digitally deliver press releases to media outlets and target audiences. It increases visibility through SEO-optimized content.	Press release distribution, increasing media reach, online visibility, campaign performance measurement.

Table 1. (continued).

Tools	Description and Key Features	Applications in Public Relations
Cision	A globally used platform for media monitoring, public relations management, and communication analytics. It provides an extensive media database and real-time analysis.	Media relations management, sentiment analysis, reputation tracking, press release distribution, campaign impact measurement.
MediaHQ	An up-to-date database and news distribution tool containing contact information for journalists and media representatives. It allows users to create media lists and send targeted press releases.	Media list management, press release planning and distribution, media relations tracking, performance reporting.
PRgloo	A digital public relations management tool that consolidates PR processes, press relations, and content management on a single platform. It facilitates managing press requests, releases, and media interactions.	Press communication planning, monitoring media requests, content approval processes, increasing corporate communication efficiency.
Quid	An AI-based data analysis and visualization platform. It scans millions of news articles, social media posts, and content to reveal semantic connections.	Data-driven decision-making, analyzing market trends, generating competitive and brand intelligence.
Outbrain	A content discovery and placement platform based on advertising and promotional technology. It uses a native advertising model.	Delivering brand content to target audiences, increasing visibility, digital PR, and content marketing.
PR Underground	A digital network for online press release distribution. SEO-optimized press releases gain visibility on Google News and other media sites.	Cost-effective press communication and online reputation management for small and medium-sized businesses.
e·silentpartner	A project management and client relationship platform designed for agencies and communication professionals. It centralizes tasks, budgets, and communications.	Digitalization of operational processes and efficiency improvement in PR and marketing agencies.
Wiztrust	A blockchain-based digital trust platform. It verifies the accuracy of news shared by organizations and ensures information security.	Corporate reputation management, fake news prevention, credibility verification, and transparent communication.

Table 1. (continued).

Tools	Description and Key Features	Applications in Public Relations
Muck Rack	A media relations and news monitoring tool that connects journalists, PR practitioners, and media outlets. It offers real-time media tracking.	Creating media lists, press release distribution, impact analysis, measuring news visibility.
BuzzStream	A digital PR and relationship management platform. It manages the tracking and communication with influencers, bloggers, and journalists.	Relationship management, outreach, influencer communication, content dissemination, backlink strategies.
Prowly	Management software that digitizes public relations processes. It provides press release creation, media list management, and digital newsroom capabilities.	Press communication, media relations management, content sharing, campaign performance measurement.
PressPage	A corporate newsroom and news management platform. It allows organizations to create digital press pages and communicate directly with media.	News and content management, monitoring press inquiries, brand identity integration, multi-channel communication.

CONCLUSION

This study examined the role of artificial intelligence (AI)-based public relations (PR) tools in the digital transformation of the PR discipline. The findings indicate that AI in PR is not merely a technological innovation but a phenomenon that transforms the methodological foundations of communication processes. The increasing adoption of AI-based applications in areas such as media monitoring, content creation, crisis management, audience analysis, and strategic planning is redefining the role of PR practitioners. This transformation has accelerated the shift from traditional communication practices to a data-driven, measurable, and predictable communication model. The comparative analysis conducted within the scope of this research demonstrates that AI-supported tools enhance time and cost efficiency in PR activities, rationalize decision-making processes, and enable objective measurement of communication performance. However, integrating AI technologies into the PR field also introduces certain methodological and operational limitations and specific risk areas. Data privacy violations and the potential for misinformation emerge as critical concerns, defining the ethical and professional boundaries of AI use in public relations. This necessitates maintaining a balance between the innovation potential provided by technological advancement and a strong sense of responsibility.

Research on AI-based applications in PR shows that the subject is approached from multiple perspectives. Aka (2024) highlights that AI-supported platforms used in PR offer diverse functional capabilities, including digital asset management, coordination

of communication processes, content creation and management, and campaign planning and execution. Çerçi (2024) emphasizes the growing interest in AI within the PR discipline, noting a significant increase in related studies between 2014 and 2023. Boztepe Taşkıran and Önay Doğan (2024) report that the literature generally reflects a positive outlook toward AI in PR. Özgen and Yılmaz Tiryaki (2024), in their study analyzing the TRAI Initiative Map, identified five different AI tools applicable in PR, categorized under media monitoring, social listening, analytics, and content creation. Çağlayan (2021) finds that the most frequently used PR software falls under categories such as analytics, visual content management, campaign organization, social media management, and content production, and that AI is perceived as a means to enhance the speed and effectiveness of PR processes, providing a competitive advantage. In light of these studies, the findings of this research contribute to filling a gap in the literature. AI-based PR tools were described in detail, and their potential applications in the PR field were evaluated. Despite its contributions, this study has certain limitations. Due to the rapidly evolving nature of AI technologies, the relevance of the tools examined may change over time.

Additionally, since the findings are primarily based on literature review and comparative analysis, the real-time performance or user experiences of AI-based PR tools were not empirically tested, which may limit the generalizability of the results. AI-based PR tools reshape strategic decision-making processes in communication, offering a data-driven and dynamic framework. However, for this transformation to progress sustainably and ethically, the opportunities provided by AI must be balanced with careful consideration of the associated ethical and social responsibilities. Future academic studies on AI and PR should approach the topic from a technological perspective and address its cultural, ethical, and normative dimensions, thereby strengthening the intellectual depth and societal function of the PR discipline.

REFERENCES

Published Works

Aka, L. B. (2024). Halkla ilişkiler alanının değişimi ve dönüşümü: Dijital halkla ilişkiler ve yapay zeka. *Tarih ve Gelecek Dergisi*, *10*(3), 293-304. https://doi.org/10.21551/jhf.1533486 (In Turkish)

Arief, N. N., & Saputra, M. A. (2019). Kompetensi baru public relations (PR) pada era artificial intelligence: Case study praktisi PR di Indonesia. *Jurnal Sistem Cerdas*, *2*(1), 1-12. https://doi.org/10.37396/jsc.v2i1.19

Azadbeh, A. (2024). Dünyada ve Türkiye'deki halkla ilişkiler uygulamalarında yapay zekanın ve metaverse'ün kullanımı. *Premium E-Journal of Social Sciences (PEJOSS)*, *8*(38), 138-150. https://doi.org/10.5281/zenodo.10642722 (In Turkish)

Babatunde, S. O., Odejide, O. A., Edunjobi, T. E., & Ogundipe, D. O. (2024). The role of AI in marketing personalization: A theoretical exploration of consumer engagement strategies. *International Journal of Management & Entrepreneurship Research*, *6*(3), 936-949. https://doi.org/10.51594/ijmer.v6i3.964

Biswal, S. K. (2020). The space of artificial intelligence in public relations: The way forward. In A. J. Kulkarni & S. C. Satapathy (Eds.), *Optimization in machine learning and applications* (pp. 169-176). Springer. https://doi.org/10.1007/978-981-15-0994-0_11

Boztepe Taşkıran, H., & Önay Doğan, B. (2024). Halkla ilişkiler ve reklamcılık perspektifinden yapay zeka çalışmaları: Ulusal alan yazının bibliyometrik aAnalizi. *Uluslararası Halkla İlişkiler ve Reklam Çalışmaları Dergisi*, *7*(2), 9-35. https://doi.org/10.61766/hire.1472693 (In Turkish)

Çağlayan, S. (2021). Yapay zekanın halkla ilişkilerin geleceğine etkisi: Türkiye'de halkla ilişkiler profesyonelleri ekseninde bir alan araştırması. *Gümüşhane Üniversitesi İletişim Fakültesi Elektronik Dergisi*, *9*(2), 783-816. https://doi.org/10.19145/e-gifder.916684 (In Turkish)

Çeber, B. (2022). *Yapay zeka uygulamalarının halkla ilişkiler aracı olarak kullanımı* (Doctoral dissertation, Marmara University). (In Turkish)

Çerçi, Ü. Ö. (2024). Yapay zekanın halkla ilişkiler alanıyla ilişkisinin ve araştırma eğilimlerinin haritalandırılması: Bibliyometrik ağ analizi. *Üçüncü Sektör Sosyal Ekonomi Dergisi*, *59*(4), 2684-2698. https://doi.org/10.15659/3.sektor-sosyal-ekonomi.24.11.2513 (In Turkish)

Çöllü, E. F. (2024). *Halkla ilişkilerin yeni dünyası: Dijital araçlar ve küresel dinamikler*. Eğitim Yayınevi. (In Turkish)

Duran, C. (2021). Yapay zeka temelli pazarlama: Geleneksel pazarlamanın sonu mu? In M. K. Yılmaz & N. Ö. İyigün (Eds.), *Yapay zeka: Güncel yaklaşımlar ve uygulamalar* (pp. 31-50). Beta Kitap. (In Turkish)

Eşitti, Ş. (2020). Sosyal medya ve yapay zeka. In H. Bakırtaş & S. Çavuş (Eds.), *Yapay zeka disiplinleri dönüştürüyor. Değişime hazır mıyız?* (pp. 265-290). Ekin Kitabevi Yayınları. (In Turkish)

Fidan, M., & Rençber, H. (2019). *İki yönlü simetrik halkla ilişkiler sürecinde bir modaratör olarak yapay zekanın rolü*. 6. Uluslararası İletişim Günleri Dijital Dönüşüm Sempozyumu. İstanbul. (In Turkish)

Galloway, C., & Swiatek, L. (2018). Public relations and artificial intelligence: It is not (just) about robots. *Public Relations Review*, *44*(5), 734-740. https://doi.org/10.1016/j.pubrev.2018.10.008

Güven, A. (2024). *Yapay zeka: Dost mu, düşman mı? Tehdit mi, fırsat mı?* Uluslararası İktisadi ve İdari Çalışmalar Kongresi. Tokat. (In Turkish)

Hancock, J. T., Naaman, M., & Levy, K. (2020). AI-mediated communication: Definition, research agenda, and ethical considerations. *Journal of Computer-Mediated Communication*, *25*(1), 89-100. https://doi.org/10.1093/jcmc/zmz022

Herring, S. C. (2002). Computer-mediated communication on the internet. *Annual Review of Information Science and Technology*, *36*(1), 109-168. https://doi.org/10.1002/aris.1440360104

Ilıcak Aydınalp, Ş. G. (2020). Halkla ilişkiler perspektifiyle yapay zeka. *Turkish Studies – Social*, *15*(4), 2283-2300. https://doi.org/10.29228/TurkishStudies.42106 (In Turkish)

Jeljeli, R., Farhi, F., Setoutah, S., Lagha, F., Mohsen, M., & Mallek, M. (2024). The role of artificial intelligence and public relations in reputation management: A structural equation modelling-based (SEM) study. *International Journal of Data and Network Science*, *8*(3), 1815-1828. https://doi.org/10.5267/j.ijdns.2024.2.007

Kent, M. L., & Saffer, A. J. (2014). A Delphi study of the future of new technology research in public relations. *Public Relations Review*, *40*(3), 568–576. https://doi.org/10.1016/j.pubrev.2014.02.008

Kumar, V., Ashraf, A. R., & Nadeem, W. (2024). AI-powered marketing: What, where, and how? *International Journal of Information Management*, *77*, 102738. https://doi.org/10.1016/j.ijinfomgt.2024.102783

Liu, B., & Zhang, L. (2012). A survey of opinion mining and sentiment analysis. In C. Aggarwal & C. Zhai (Eds.). *Mining text data* (pp. 415-463). Springer. https://doi.org/10.1007/978-1-4614-3223-4_13

Macnamara, J., Zerfass, A., Adi, A., & Lwin, M. O. (2018). Capabilities of PR professionals for key activities lag: Asia-Pacific study shows theory and practice gaps. *Public Relations Review*, *44*(5), 704-716. https://doi.org/10.1016/j.pubrev.2018.10.010

Nilsson, N. J. (1998). *Artificial intelligence: A new synthesis*. Elsevier. https://doi.org/10.1016/C2009-0-27773-7

Özgen, E., & Yılmaz Tiryaki, E. (2024). Halkla ilişkiler alanında kullanılabilecek yapay zeka destekli araçlar üzerine bir inceleme. *Gümüşhane Üniversitesi İletişim Fakültesi Elektronik Dergisi*, *12*(1), 88-122. https://doi.org/10.19145/e-gifder.1406398 (In Turkish)

Öztürk, G. B. (2020). Yapay zekâ teknolojisinin kullanıldığı reklamların "birlikte değer yaratma" kavramı açısından değerlendirilmesi. In M. K. Yılmaz & N. Ö. İyigün (Eds.), *Oyun değiştiren güç yapay zekâ* (pp. 141-162). Beta Yayıncılık. (In Turkish)

Panda, G., Upadhyay, A. K., & Khandelwal, K. (2019). Artificial intelligence: A strategic disruption in public relations. *Journal of Creative Communications*, *14*(3), 196-213. https://doi.org/doi:10.1177/0973258619866585

Russell, S. J., & Norvig, P. (2022). *Artificial intelligence a modern approach*. Pearson Education Limited.

Seidenglanz, R., & Baier, M. (2023). The impact of artificial intelligence on the professional field of public relations/communications management: Recent developments and opportunities. In A. Adi (Ed.), *Artificial intelligence in public relations and communications: Cases, reflections and predictions* (pp. 14-25). Quadriga University of Applied Sciences.

Valentini, C. (2015). Is using social media 'good' for the public relations profession? A critical reflection. *Public Relations Review*, *41*(2), 170–177. https://doi.org/10.1016/j.pubrev.2014.11.009

Internet Resources

Mike, K. (2020). *AI and advertising: Everything you need to know*. Marketing AI Institute. https://www.marketingaiinstitute.com/blog/ai-in-advertising

Radley, S. (2018). *Opinion: We must use AI to excel in the next frontier of PR*. Gorkana. https://www.gorkana.com/2018/05/kerry-sheehan-opinion-use-ai-to-excel-in-the-next-frontier-of-pr

Rogers, C. (2019). *How artificial intelligence and big data will affect the future of PR*. Institute for Public Relations. https://instituteforpr.org/how-artificial-intelligence-and-big-data-will-affect-the-future-of-pr/

Smith, A. B., & Waddington, S. (2023). *Artificial Intelligence (AI) tools and the impact on public relations (PR) practice*. CIPR. https://mediatalks.uol.com.br/wp-content/uploads/2023/08/AI_tools_and_the_impact_on_public_PR_relations_practice.pdf

Tench, R., Zerfass, A., Verhoeven, P., Verčič, D., Moreno, A., & Okay, A. (2013). *Competencies and role requirements of communication professionals in Europe. Insights from quantitative and qualitative studies*. ECOPSI Research Report. https://www.researchgate.net/profile/Dejan-Vercic/publication/258109633_Competencies_and_Role_Requirements_of_Communication_Professionals_in_Europe_Insights_from_quantitative_and_qualitative_studies/links/5615262008ae4ce3cc6520a8/Competencies-and-Role-Requirements-of-Communication-Professionals-in-Europe-Insights-from-quantitative-and-qualitative-studies.pdf

Valin Hon, J. (2018). *An introduction to AI in PR*. CIPR. https://cipr.co.uk/CIPR/CIPR/Our_work/Policy/AI_in_PR_/AI_in_PR_guides.aspx

Virmani, S., & Gregory, A. (2021). *AI and big data readiness report: Assessing the public relations profession's preparedness for an AI future*. CORE (COnnecting REpositories). https://core.ac.uk/outputs/483962980/?source=2