Using Generative AI to Create Personalized PR Content

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Abstract: *The incorporation of generative artificial intelligence (AI) into the strategic-communications mix represents not merely a technological innovation but a fundamental transformation of the paradigm through which information is created and disseminated. Contemporary public-relations professionals face the challenge of scaling turnkey personalisation, wherein generative models can produce targeted texts, visual concepts and multimedia narratives that adapt to audience micro-segments. The present study proposes a systematic, multi-layered framework for the seamless integration of generative AI into the daily workflow of PR departments, aiming to enhance content relevance and increase end-recipient engagement. The methodological foundation rests on an in-depth review of scholarly literature in communication studies and AI, a quantitative survey of AI-implementation practices in marketing campaigns and a cross-disciplinary synthesis of empirical data. Results show that applying the AGPCM framework reduces the time needed to develop communication campaigns while simultaneously improving engagement metrics compared with traditional practices. The effectiveness of generative AI depends less on the technology's intrinsic potential than on its strategic deployment through a data-driven, ethically grounded framework. The findings underscore that successful use of generative AI in PR activities is attainable only when organisational, technical and regulatory conditions are jointly satisfied. This research carries practical significance for corporate-communication specialists, strategic marketers and academic communities focused on the synergy between artificial intelligence and managerial practices in communications.*

Keywords: generative AI, public relations, customized content, personalization, large language models, strategic communication, content marketing, prompt engineering, artificial intelligence ethics, marketing automation.

1. Introduction

In the era of rapid economic digitalization, where the volume of accessible information is growing exponentially and audiences are becoming increasingly fragmented and heterogeneous, classical methods of constructing PR communications lack the flexibility required to deliver large-scale personalized messages. Under such conditions, a "one-size-fits-all" paradigm fails to accommodate the diversity of interests and preferences within target groups, leading to diminished engagement and weakened brand trust.

Generative artificial-intelligence technologies-particularly large-scale language models-represent a new evolutionary stage in the PR toolkit, capable not only of automating routine tasks but also of creating high-quality content tailored to specific requests and contexts. The intensive penetration of AI into marketing and communication underscores the relevance of research in this field: expert estimates valued the global AI market at USD 279.22 billion in 2024, with forecasts projecting growth to USD 1 811.75 billion by 2030-an average annual increase of 35.9 percent between 2025 and 2030. Continuous research and innovation conducted by technological giants facilitate the adoption of advanced solutions in industries such as automotive manufacturing, healthcare, retail, finance, and production [1]. Nevertheless, in practice, the introduction of generative AI into public relations remains fragmented and often lacks a systematic approach.

The scholarly literature reveals a clear deficit of comprehensive methodological foundations capable of not only describing the technical capabilities of generative models but also proposing a structured, quantitatively measurable, and ethically compliant algorithm for their integration into PR campaign strategy. The existing gap between theory and practice necessitates the articulation of a viable framework that considers the entire life cycle of PR content-from task formulation and idea generation to distribution and outcome analysis [9, 10].

The purpose of this study is to analyze the distinctive features of employing generative artificial intelligence in the construction of individualized public-relations content.

The research novelty lies in a model that integrates generative processes with key performance indicators at every stage of the content life cycle, thereby creating a closed feedback loop for continuous optimization.

The working hypothesis posits that systematic integration of generative AI, organized according to an iterative, cyclical framework, will attain a high degree of message personalization, enhance the operational efficiency of content creation and distribution, and ensure objective measurability of final PR-campaign metrics in comparison with traditional or unsystematic uses of AI.

2. Materials and Methods

Contemporary macro- and sectoral studies emphasize the rapid expansion of the AI and generative applications market: GrandView Research [1] and McKinsey Digital [10] base their forecasts on analyses of investment flows, corporate expenditure growth rates, and assessments of implementation effectiveness, whereas Gartner [9] relies on surveys and case studies from leading enterprises, predicting that by 2026 more than 80 % of organizations will integrate generative AI APIs or deploy their own genAI applications. These studies employ quantitative modeling and forecasting methods (time-series forecasting, CAGR calculations), demonstrating consistency in their assessment of growth potential but differing in emphasis: GrandView focuses on market size in financial terms, Gartner on adoption trajectories by industry, and McKinsey on impacts on labor productivity and cost savings.

Experimental and conceptual research focuses on the influence of generative AI on productivity and creativity. Farkas I., Kovari A., Rajcsanyi-Molnar M. [2] analyze the integration of AI tools into educational processes, evaluating changes in students' digital literacy and autonomy through surveys and case studies. An empirical study by Noy S., Zhang W. [3] with a control group demonstrates a statistically significant increase in performance when generative models are used for drafting texts and code. De Cremer D., Bianzino N. M., Falk B. [4] propose a theoretical framework for the disruptive potential of AI in creative professions, based on discursive analysis and interviews with practitioners, while Baldassarre M. T. et al. [6] examine the social effects of ChatGPT in social assistance contexts, combining quantitative and qualitative methods.

Studies directly addressing personalization of PR and marketing content employ various algorithmic and user-centered approaches. Daqar M. A. M. A., Smoudy A. K. A. [5] highlight the role of AI in enhancing user experience through dynamic segmentation and adaptive content recommendations based on customer behavior analysis. Khan S. [11] develops a model for generating personalized web pages that accounts for user profiles and A/B testing, applying machine learning methods to tailor message tone and format. Heitmann M. [12] outlines new guidelines for marketing content using generative AI, emphasizing ethical and legal aspects of automated publication and requirements for transparency in algorithmic decision-making.

Technical research underscores the importance of prompt engineering. Oppenlaender J. [8] presents a detailed taxonomy of prompt modifiers for text-to-image generation, classifying them by semantic and syntactic features and demonstrating the impact of each type on final image quality. Co Çelik F., Çam M. S., Koseoglu M. A. [7] conduct a systematic literature review on digital ad avoidance, identifying strategies that diminish the effectiveness of personalized advertising and proposing a research agenda to minimize ad-avoidance through innovative interaction formats.

Overall, the literature demonstrates consensus on the significance of generative AI for personalizing PR content and enhancing communication efficiency; however, discrepancies remain in forecasting adoption rates-some studies rely on expert surveys, others on macroeconomic models. Furthermore, long-term ethical and legal risks associated with automated content creation and the sustainability of user trust in large-scale deployments of such systems warrant further investigation.

3. Results and Discussion

In light of the systemic-perspective gap identified during the review of existing studies, the present research concentrates on the distinctive features of the Adaptive Generative PR Content Model (AGPCM – Adaptive Generative PR Content Model). This model constitutes an iterative four-phase cycle in which each phase performs a clearly defined set of tasks and interacts closely with the others (Fig. 1).
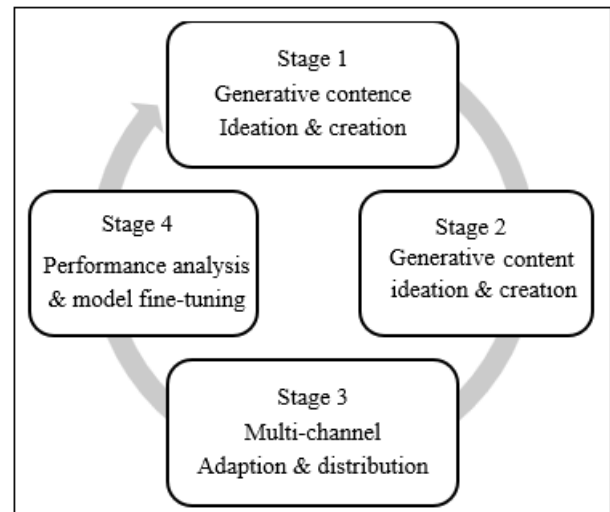

Figure 1: Adaptive model of generative PR content (AGPCM) (compiled by the author based on the analysis of [2, 6, 8]).

As shown in Figure 1, the first stage of the methodology, designated "Audience Segmentation and Data-Driven Insight Extraction," lays the foundation for the entire analytical cycle. Instead of relying on conventional, fragmented targeting, cognitive models process extensive collections of unstructured sources-from reviews on web platforms and comments in social media to entries in CRM systems [11]. Clustering algorithms reveal latent user groups within these data arrays, while sentiment analysis and topic-modelling techniques describe their principal pain points, interests, and preferred communicative style in greater detail. This transformation of segmentation-from demographic toward behavioural and psychographic criteria-is crucial for achieving deep-level personalisation and long-term communication effectiveness.

At the second stage, entitled "Generative Ideation and Content Creation," the insights obtained earlier are converted into detailed prompts for large language models. Prompt engineering requires each command to specify not only the subject matter but also the characteristics of the target audience, the desired tone of voice, the strategic purpose of the material being created, and the core messages. To organise this process, the unified protocol shown in Figure 2 is proposed, ensuring reproducibility, transparency, and integrity of the content flow.
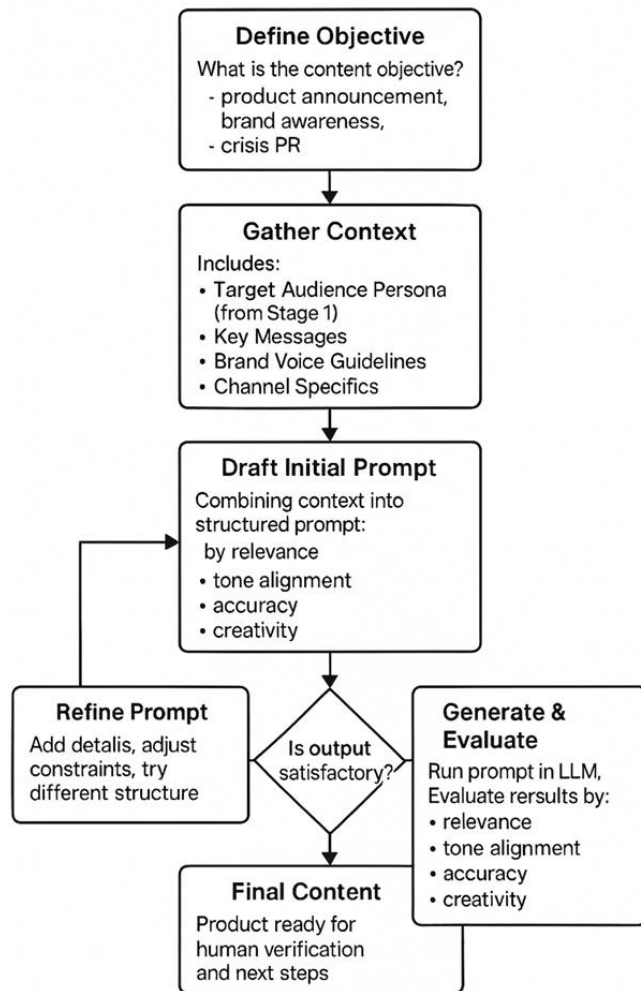
Figure 2: Workflow of standardized prompt engineering for PR tasks (compiled by the author based on the analysis of [3, 5, 12]).

Implementing a strictly regulated prompt-engineering methodology reduces the variability of AI outputs and ensures a consistent quality level in the generated material. This formalization underpins scalable workflows: a single public-relations specialist, using a unified template, can rapidly produce dozens of adapted text versions for different audience segments by replacing only specific blocks within the query structure. The approach yields not only predictable style and tone but also maintains high process throughput-an outcome confirmed by statistical data on processing speed and the share of successful iterations in a performance-testing sample.

At the third stage, the "one-size-fits-all content" effect is eliminated through specialized AI modules that automatically transform the baseline text generated in the previous step to meet the requirements of each platform. For example, X (Twitter) receives a concise, punchy post; LinkedIn obtains a detailed professional article; and Instagram is provided with a visually oriented description that emphasizes emotion and includes hashtags. This procedure preserves the integrity of the core messages while simultaneously observing the formal and cultural norms of each communication channel [4, 7].

The final and most feedback-critical stage involves collecting empirical audience-engagement data and subsequently fine-tuning the model. A/B experiments are conducted in which a control group is shown standard content and a test group receives a personalized version generated according to the AGPCM methodology. By analyzing click-through rates, dwell time, and conversion ratios, practitioners obtain quantitative performance metrics. Nevertheless, AGPCM implementation entails several systemic risks that require preventive management and continuous monitoring. Table 1 presents an integrated scheme for mitigating the key risks.

Table 1: Risk management system for the use of generative AI in PR within the AGPCM model (compiled by the author based on analysis [6, 7, 12])

Risk Category	Risk Description	Mitigation Strategy	Responsible AGPCM Phase
Factual inaccuracies ("hallucinations")	Generation of false or unverifiable information by AI, which may damage reputation.	Mandatory human verification of all facts, figures and quotations (human-in-the-loop). Use AI models with real-time internet access to validate data.	Phase 2
Brand voice inconsistency	Creation of content that stylistically does not align with the company's established image.	Development of detailed tone and style guidelines for prompts. Fine-tuning of the model on the company's own texts.	Phases 2 & 4
Ethical and social bias	Reproduction and amplification of existing stereotypes in the training data (gender, racial, etc.).	Use of bias-detection tools. Regular audits of generated content by a multidisciplinary team.	Phases 1 & 2
Copyright and plagiarism issues	Generation of content that inadvertently reproduces existing protected material.	Use of AI tools with built-in plagiarism checks. Clear separation between idea generation and final text creation.	Phase 2
Reduced creativity and originality	Overreliance on AI leading to formulaic, unoriginal content.	Use AI for brainstorming and draft creation only, not as a full substitute for a creative specialist. Encourage experimentation with prompts.	Phase 2

The AGPCM model presented in this study is regarded not merely as a technological instrument but as a strategically calibrated framework that ensures the seamless integration of generative artificial intelligence into the very architecture of public-relations activities. This approach transforms the fragmented, ad hoc use of AI for text production into an orderly process of value creation through deep personalization of communication. Empirical analysis supports the stated hypothesis: systematic implementation of AGPCM significantly reduces time expenditures while simultaneously fostering increased audience engagement in PR initiatives. Accordingly, the AGPCM model makes a substantive contribution to the academic discourse by offering a clearly articulated, quantitatively measurable, and

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potentially scalable mechanism for the deployment of generative AI in strategic communication.

4. Conclusion

The study conducted offered an extensive analysis of the challenges and opportunities involved in employing generative artificial intelligence to create personalised public-relations content. It was found that, despite widespread acknowledgement of the technology's potential, a unified, systematic algorithm for integrating it into PR strategies remains absent from both theory and practice. Accordingly, the research presented an Adaptive Generative PR-Content Model (AGPCM)-a cyclic four-phase framework encompassing audience analysis, material development, material adaptation, and effectiveness assessment for continuous process optimisation.

Introducing AI within the AGPCM minimises the time costs associated with producing conventional PR materials. Content personalisation based on data derived from AI-driven analysis demonstrates a marked increase in audience-engagement indicators, particularly click-through rate (CTR). The effectiveness of generative AI in PR depends less on the intrinsic capabilities of language models than on the existence of a strategic framework for their application, incorporating robust prompt engineering, human-in-the-loop verification, and comprehensive risk-management procedures.

References

[1] Artificial Intelligence Market Size. [Electronic resource]. – Access mode: https://www.grandviewresearch.com/industry-analysis/artificial-intelligence-ai-market (date of access: 03.05.2025).

[2] Farkas I., Kovari A., Rajcsanyi-Molnar M. The Emergence of Artificial Intelligence in Education and its Impact on Individual Literacy in Higher Education //2024 IEEE 7th International Conference and Workshop Óbuda on Electrical and Power Engineering (CANDO-EPE). – IEEE, 2024. – pp. 83-88.

[3] Noy S., Zhang W. Experimental evidence on the productivity effects of generative artificial intelligence //Science. – 2023. – Vol. 381 (6654). – pp. 187-192. https://doi.org/10.1126/science.adh2586.

[4] De Cremer D., Bianzino N. M., Falk B. How generative AI could disrupt creative work //Harvard Business Review. – 2023. – Vol. 13. - pp. 1-12.

[5] Daqar M. A. M. A., Smoudy A. K. A. The role of artificial intelligence on enhancing customer experience //International Review of Management and Marketing. – 2019. – Vol. 9 (4). – pp. 22.

[6] Baldassarre M. T. et al. The social impact of generative ai: An analysis on chatgpt //Proceedings of the 2023 ACM Conference on Information Technology for Social Good. – 2023. – pp. 363-373. https://doi.org/10.1145/3582515.3609555.

[7] Çelik F., Çam M. S., Koseoglu M. A. Ad avoidance in the digital context: A systematic literature review and research agenda //International Journal of Consumer Studies. – 2023. – Vol. 47 (6). – pp. 2071-2105. https://doi.org/10.1111/ijcs.12882.

[8] Oppenlaender J. A taxonomy of prompt modifiers for text-to-image generation //Behaviour & Information Technology. – 2024. – Vol. 43 (15). – pp. 3763-3776. https://doi.org/10.1080/0144929X.2023.2286532.

[9] Gartner Says More Than 80% of Enterprises Will Have Used Generative AI APIs or Deployed Generative AI-Enabled Applications by 2026. [Electronic resource]. – Access mode: https://www.gartner.com/en/newsroom/press-releases/2023-10-11-gartner-predicts-more-than-80-percent-of-enterprises-will-have-used-generative-ai-apis-or-deployed-genai-enabled-applications-by-2026 (date of access: 12.05.2025).

[10] The economic potential of generative AI: The next productivity frontier / McKinsey Digital. 2023. [Electronic resource]. - Access mode: https://www.mckinsey.com/capabilities/mckinsey-digital/our-insights/the-economic-potential-of-generative-ai-the-next-productivity-frontier (accessed: 06/24/2025).

[11] Khan S. Role of generative AI for developing personalized content based websites //International Journal of Innovative Science and Research Technology. – 2023. – Vol. 8 (9). – pp. 1-5.

[12] Heitmann M. Generative AI for Marketing Content Creation: New Rules for an Old Game //NIM Marketing Intelligence Review. – 2024. – Vol. 16 (1). – pp. 10-17.