

BRIDGING THE EXPERIENCE GAP: STRATEGIC COLLABORATIONS IN THE AGE OF GENERATIVE AI

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Purpose: The primary aim of this study is to analyze the real-world adoption of generative AI within organizational contexts. This work aims to contribute to the broader understanding of how generative AI is reshaping business processes and driving innovation across industries.

Design/Methodology/Approach: The study adopts a qualitative content analysis approach, grounded in a systematic review of peer-reviewed articles and grey literature published from 2022 to 2024. Articles were screened based on strict inclusion and exclusion criteria, emphasizing documented real-world applications of generative AI. Data extraction focused on identifying sector-specific use cases, challenges encountered during its integration, and the strategies employed by organizations to overcome these obstacles, as well as the organizational impacts of generative AI.

Findings: The review identified six empirical studies documenting real-world implementations of generative AI across diverse sectors, including insurance, finance, creative industries, retail, and fact-checking. Generative AI is shown to enhance efficiency, streamline workflows, and support decision-making, while also fostering creative innovation. Challenges such as data reliability, legal ambiguities, and organizational readiness were commonly observed. Strategies to address these barriers include leveraging human-AI collaboration, ensuring regulatory compliance, and investing in cohesive organizational structures.

Research Limitations/Implications: The research is constrained by the limited number of empirical studies available, reflecting the nascent stage of generative AI adoption. Additionally, the findings are subject to the rapid evolution of AI technologies, requiring ongoing updates through longitudinal research. Expanding future studies to include a broader geographic and sectoral scope is essential for generalizability.

Practical Implications: The study provides actionable insights for organizations considering the adoption of generative AI. It highlights the importance of strategic planning, ethical data management, and fostering collaboration between human experts and AI systems. These findings are particularly relevant for small and medium-sized enterprises seeking to leverage AI to enhance efficiency and competitiveness.

Social Implications: Generative AI democratizes access to advanced technology, enabling non-specialists to use AI tools. However, its rapid adoption demands robust regulation and stakeholder engagement from policymakers.

Originality/Value: This study addresses a critical gap in the academic literature by focusing on the documented implementation of generative AI.

Keywords: Generative AI, organizational challenges, AI adoption

Category of the paper: research paper.

1. Introduction

Artificial intelligence (AI) has emerged as a transformative force across industries, driving innovation and enabling substantial improvements in productivity and efficiency. Despite its potential to optimize processes and enhance decision-making, the adoption of AI technologies within organizations presents significant challenges. Issues related to data governance, scalability, workforce readiness, and ethical considerations remain pervasive, complicating the integration of AI across sectors such as retail, banking, energy, and technology (Sheikh et al., 2023; Bevan et al., 2024; Davenport et al., 2024). These obstacles underscore the need for robust strategies to support AI implementation and maximize its organizational benefits.

The conceptualization of generative AI reflects broader debates surrounding the definition of artificial intelligence, which varies significantly across academic, governmental, and societal contexts. AI is commonly categorized into Artificial Narrow Intelligence (ANI), Artificial General Intelligence (AGI), and Artificial Super Intelligence (ASI). Generative AI is situated within ANI, characterized by its focus on specific, task-oriented functions, in contrast to the more generalized and autonomous capacities of AGI, which remains theoretical (Salmon et al., 2021). This distinction underscores the specialized yet impactful nature of generative AI as a tool for addressing targeted applications.

AI can be broadly defined as systems that display intelligent behavior by analyzing their environment and taking actions to achieve specific goals (Sheikh et al., 2023; Bevan et al., 2024;). Various definitions of AI exist, with some focusing on the replication of human cognitive functions while others emphasize its ability to process large datasets and automate decision-making (Kalota, 2024; Strickland, 2024). Among the diverse forms of AI, generative AI has garnered increasing attention for its ability to create novel outputs. Researchers have highlighted its capacity to transcend traditional analytic applications, such as decision-making, by introducing probabilistic techniques that enable creative and often artistic content generation (Feuerriegel et al., 2023). This paper focuses on generative AI, a subset of AI, defined by its capability to produce new content, such as text, images, or even code, based on learned patterns from existing data (Feuerriegel et al., 2023; Strickland, 2024). This form of AI has gained particular attention for its applications in content creation, customer service, and product recommendations, significantly transforming industries like retail and finance (Buhler, 2024; DeVon, 2024). The adoption of this new technology may significantly enhance and streamline work processes, enabling employees to perform their tasks with greater efficiency and effectiveness. By reducing the time required for numerous tasks, it becomes particularly appealing to organizations

seeking to optimize operations and improve overall productivity. However, the implementation of generative AI (GenAI) may also pose significant challenges, including the potential for substantial workforce reductions, raising concerns about job displacement and the need for strategic workforce planning to mitigate social and economic impacts. Nonetheless, this innovation redefines the role of AI, expanding its potential applications and reshaping the dynamics of human-AI collaboration. The release of ChatGPT in late 2022 marked a pivotal moment in the evolution of AI, significantly broadening its accessibility and public engagement. Unlike earlier systems that often required technical expertise, ChatGPT democratized AI usage, enabling non-specialists to interact with advanced generative models. This development not only accelerated the adoption of generative AI but also highlighted its potential to transform industries by bridging technical barriers and fostering widespread integration (Kalota, 2024).

Despite these advancements, the challenges associated with scaling generative AI and other AI technologies are substantial, especially in sectors with structural limitations such as inadequate infrastructure and resource constraints (Lamarre et. Al., 2024). While large corporations like Amazon and Walmart have demonstrated success in leveraging AI for logistical optimization and customer service automation, smaller businesses and micro, small, and medium enterprises (MSMEs) face more significant hurdles in their AI adoption journey. These challenges include a lack of technical expertise, financial constraints, and difficulties in aligning AI systems with existing business processes (Bevan et. Al., 2024). For these organizations, strategic collaborations with AI vendors, consultants, and cross-functional teams have become essential in overcoming these obstacles and ensuring successful AI adoption (Davenport et al., 2024).

This paper makes a significant and original contribution by examining the real-world adoption and integration of generative AI within organizational contexts, addressing a critical gap in existing scholarship. While generative AI has captured widespread attention in both academic and industry settings, empirical research on its practical implementation remains scarce. Through a systematic analysis of sector-specific use cases, associated challenges, and the strategies employed to overcome them, this paper provides a deeper understanding of the factors that facilitate successful adoption. Moreover, the research highlights the transformative role of generative AI in driving innovation, optimizing workflows, and enhancing human-AI collaboration. These findings are particularly valuable as they not only advance theoretical discussions but also offer actionable insights for practitioners and policymakers aiming to harness the potential of generative AI while addressing its complexities.

2. Rationale for the literature review

Generative AI has emerged as a transformative technological innovation, characterized by its advanced capabilities and unprecedented accessibility for users with limited technical

expertise. This democratization of AI technology offers significant opportunities for micro, small, and medium enterprises (MSMEs) to enhance their business operations. Generative AI enables the creation of high-quality advertising content, facilitates seamless multilingual communication, and supports automation in workflows—all without the need for specialized IT knowledge. Such low barriers to entry position generative AI as a potentially indispensable tool in driving innovation and operational efficiency within the MSME sector.

The growing enthusiasm for generative AI is evident in industry surveys, such as the Forbes Advisor study of 600 business owners (Haan, 2024), where 97% of respondents expressed confidence in ChatGPT's potential to benefit their organizations. Among the most cited applications were gathering and summarizing information, supporting decision-making process, generation of website content and the creation of multilingual materials and international communication, illustrating its practical relevance to businesses seeking to expand their market reach or improve their operational capacity. The study also shows that business owners overwhelmingly perceive artificial intelligence as a valuable tool for enhancing various aspects of their operations. A significant proportion of respondents (64%) anticipate that AI will strengthen customer relationships and boost productivity, while 60% expect it to contribute directly to sales growth. Additionally, AI is viewed as a critical asset for improving decision-making processes (44%), reducing response times (53%), and minimizing errors (48%). Businesses also foresee AI playing a pivotal role in cost reduction (59%) and streamlining operational processes (42%), highlighting its potential to drive both efficiency and profitability.

These high expectations underscore the optimism surrounding AI's transformative potential. However, they also raise important questions about how these anticipated benefits align with real-world experiences of AI implementation. This alignment between expectations and lived experiences requires empirical insights, particularly in areas where challenges such as technical barriers, organizational readiness, and resource limitations may temper the anticipated benefits.

Bridging the gap between high expectations business owners have towards generative AI and the practical realities faced by organizations adopting AI technologies is essential. Understanding how businesses navigate challenges, optimize strategies, and measure the outcomes of AI adoption is crucial to ensuring that these technologies deliver on their promise. Despite this optimism, there remains a critical need to examine the real-world implementation of generative AI through rigorous empirical research.

3. Research methodology and objectives

This study employed a qualitative content analysis approach to explore how companies implement generative AI across various sectors. The focus on generative AI stems from

its transformative potential to be utilized by non-IT specialists in a wide range of organizational contexts. Consequently, the literature search was restricted to articles published from 2022 onward, reflecting the period after generative AI, Chat GPT became publicly accessible.

A structured set of research questions was developed to guide and organize the systematic review. Integrating research questions into the review process ensures a focused and comprehensive analysis of the relevant literature. These questions were designed to address the practical applications of generative AI, the challenges encountered during its adoption, and the strategies employed to overcome these obstacles. Additionally, the review sought to examine specific companies utilizing generative AI, the sectors in which these technologies are applied, the types of AI technologies implemented, and the barriers to their adoption.

The study was structured around the following key questions:

1. What are the practical applications of generative AI across various industries, and how is it transforming organizational processes?
2. How does the implementation of generative AI impact business performance and organizational outcomes?
3. What challenges do companies encounter during the integration of generative AI technologies into their operations?
4. What strategies have companies employed to successfully overcome the obstacles associated with generative AI adoption?

Through these inquiries, the study aimed to provide a comprehensive understanding of how generative AI is being implemented, the hurdles faced during its adoption, and the practical solutions that enable organizations to realize its potential.

4. Systematic review process

The systematic review was conducted using EBSCO databases, including EBSCO Host and the EBSCO Business Search Interface. The search query utilized was: “(generative artificial intelligence OR GAI OR generative AI OR ChatGPT OR GenAI) AND (companies OR businesses OR corporations) AND (application OR apply OR implementation OR integration OR integrate)”. The search was restricted to full-text, English-language, peer-reviewed scientific articles published between January 1, 2022, and December 31, 2024. For the Regional Business News database, an additional filter was applied to include only articles classified as case studies. This initial search identified 191 articles. Also grey literature was incorporated to supplement the analysis with case studies and insights from publicly available, non-peer-reviewed sources. The grey literature search employed a search engine-based approach and yielded an additional 23 articles. These articles included diverse examples from industry and featured publications

by leading consulting firms, such as McKinsey & Company, business media outlets like Forbes, and academic resources such as IEEE.

To refine the dataset of a total of 214 articles, duplicate entries were removed, resulting in 190 unique articles. Further screening excluded articles categorized as book reviews, calls for papers, or editorials, narrowing the selection to 135 articles. The abstracts of these articles were then assessed for relevance. Of the 135 articles, 105 included abstracts, while 30 did not. For the articles lacking abstracts, a manual review of the full text was conducted to determine whether they addressed real-world implementations of generative AI in organizational contexts or merely discussed hypothetical benefits and challenges.

Where the abstract alone did not clarify whether an article focused on hypothetical impacts or documented actual implementations, the full text was reviewed. Following this comprehensive evaluation, 75 articles were deemed suitable for further analysis.

The data extraction process centered on gathering detailed insights into the use of generative AI in organizational contexts. Specific attention was given to identifying real-world applications, challenges faced during implementation, and strategies adopted to address these barriers. Key data points included the companies and sectors involved, the types of generative AI technologies applied, and the practical obstacles encountered.

From the initial pool of 190 articles, only 6 were selected for in-depth analysis based on their relevance of inclusion criteria. These articles were reviewed to extract actionable insights presented in Table 1.

For the purpose of this study, “real-world use or integration” refers to the practical application of generative AI technologies within organizational settings, supported by direct evidence such as case studies, implementation reports, or documented observations. This excludes hypothetical scenarios, speculative analyses, or purely theoretical discussions, focusing instead on instances where generative AI tools are actively deployed to enhance workflows, processes, or decision-making.

The study focuses on actual, documented implementations of generative AI in organizations. This excludes hypothetical scenarios, speculative analyses, or purely theoretical discussions, focusing instead on instances where generative AI tools are actively deployed. Therefore, the following inclusion and exclusion criteria were defined:

Inclusion Criteria:

1. **Documented Implementation of Generative AI:** Articles must provide evidence of real-world use or integration of generative AI within organizational processes, supported by case studies, examples, or direct observations.
2. **Application in Business Operations:** Studies must focus on specific applications of generative AI in a corporate setting, detailing its impact on workflows, processes, or outcomes.
3. **Empirical Data on Challenges and Solutions:** Articles should report observed challenges during generative AI adoption and describe strategies or approaches used to overcome these barriers.

Table 1.
Summary of Systematic Literature Review

Bukhtueva, I.	Dahle, J.				First
2024	2024				Year
Science	Journal of Total Rewards				Journal
Accenture	nonprofit organization	multinational technology	broadcast satellite TV	Insurance brokerage	Sector
	Vehicles for Change	IBM	Infinity Dish	Newfront	Company
	Virtual reality training program: Onboarding and employee training makes training accessible to people in schools and prisons and gives them the experience needed for a career in the much-needed occupation of auto mechanics	Compensation systems: can analyze internal and external data for skills, talent supply, market pay rates and performance ratings to give managers salary increase recommendations	Chatbots - 1. can automate many administrative aspects of the hiring process: screen applicants, schedule interviews and conduct background and reference checks. 2. provide self-guided training,	Customer support chatbot - Can accurately answer complicated benefits questions and point employees to the corresponding section of their benefits guide for verification	Application of GenAI
Accelerate the digital transformation of its customers, offering solutions that include automation of processes	Customize learning modules to simulate real workplace scenarios and tailor to specific needs leading to a more effective and engaging learning experience	Make better-informed pay decisions	Save time	Faster, consistent, and round-the-clock support for clients, improved operational efficiency by freeing HR teams to focus on complex issues	Impact on Business
Not mentioned	The lack of a clear strategy, appropriate organizational structure, well-defined processes, and cohesive teams may hinder the effective implementation of AI tools, limiting their potential impact.				Challenges
Not mentioned	Invest in AI tools and people Navigate data-compliance and information-security regulations Respond to “hallucination” and false data Prevent the accidental misuse or mishandling of confidential information Address ethical questions Data provided to these tools must be thoroughly examined via the perspective of people knowledgeable about the information, its context and its application to identify quality issues.				Strategies to Overcome Challenges

Erickson, K.	Bulau, C. M.	Sheikh, R. A.	First	
2024	2024	2024	Year	Journal
Creative Industries Journa	Economica	PM World	Sector	Company
Creative industries	finance		Bain & Company	Deloitte
**	*	Instacart	Application of GenAI	
Used as a co-creative tool rather than a replacement for human workers, enabling firms to rapidly explore new creative expressions with fewer constraints than traditional methods, used as an experiment	Used to support the accounting profession by providing reliable assessments of financial statements, ratio calculations, interpretations, scoring, ratings, and decision validation	Uses GenAI to improve their core value proposition of providing fast, reliable, affordable grocery delivery to customers at home	Uses GenAI to optimize supply chains and forecast demand in retail and manufacturing. It implements predictive models that help customers predict changes in demand based on analysis of historical data and current market trends	Uses GenAI to automate data analysis processes in the financial sector
AI allows firms to explore new creative possibilities quickly and at scale, expanding their range of outputs; hypothetical competitive effects from more widespread adoption of AI across the industry, Implementing AI increases overall workload rather than reduces it.	Automates many routine financial analysis and reporting tasks with a high degree of accuracy, significantly enhances efficiency in finance functions through automation	To strengthen this value proposition by increasing the speed and efficiency of ordering groceries online	This allows retailers and manufacturers to better manage inventory, reduce storage and logistics costs, and improve delivery accuracy	Uses predictive models to identify financial risks and predict market trends, which helps banks and investment companies minimize risks and increase profitability
Extensive labour involved in AI production, including additional expert in computer software and data curation; collaboration with third parties; intellectual property complexity, audiences are intrigued by the unique flaws of AI outputs, making it harder to replace human creations entirely	Limited compared to employees expertise in depth of analysis, consideration of alternative viewpoints and strategic decision-making, the outcome depends on the professional expertise of the user who builds the interrogation questions.	General challenges were discussed but not company-specific	Challenges	
Emphasize human involvement alongside AI to refine outputs and reduce risks Policymakers and researchers need to develop coordinated regulations to reduce legal and technological uncertainties	Should be used as a productivity tool to automate basic, repetitive tasks rather than a replacement for experienced professionals	General strategies were discussed but not company-specific	Strategies to Overcome Challenges	

First	Year	Journal	Sector	Company	Application of GenAI	Impact on Business	Challenges	Strategies to Overcome Challenges
Cuartielles, R.	2023	Profesional de la Información	fact-checking Spanish platforms	***	Use of ChatGPT3.5, in particular internally, to test the chatbot's performance;	ChatGPT's viralization influences work routines of fact-checkers, by potentially hindering, reinforcing, or expanding their processes. It serves as an auxiliary resource for tasks such as information gathering, detecting falsehoods, and identifying contradictions.	The use and reliability of sources, limitations in data training and processing, scope of chatbot-generated data, and inconsistencies in the production and format of responses	Leveraging ChatGPT as a supplementary tool to improve reporting accuracy, detect misinformation, and expose contradictions in data or statements

Note: * Finance Wizard - a case study of using this GenAI; ** Botnik Studios, Dave's Games, Wayne McGregor Studio with Google Arts & Culture Lab, Uncanny Valley, Generated Photos, Celestino Soddu, Architect; *** Maldita.es, Newtral, EFE Verifica, AFP Factual España, Verificat, VerificaRTVE

Source: Own elaboration based on the conducted research.

Exclusion Criteria:

1. Hypothetical or Speculative Applications: Articles that exclusively discuss potential or anticipated uses of generative AI without providing real-world implementation examples.
2. Theoretical Frameworks Only: Studies focusing purely on conceptual frameworks, model designs, or hypothetical scenarios without practical implementation insights.
3. Lack of Organizational Context: Articles that do not specify how generative AI is applied within an organizational setting or fail to address sector-specific applications.

5. Findings from the literature review

The analysis of the six articles that met the inclusion criteria reveals diverse applications of generative AI across sectors such as insurance, technology, finance, retail, creative industries, and fact-checking. The use cases illustrate both the potential of generative AI to transform organizational operations and the multifaceted challenges organizations encounter during implementation.

Research question 1: What are the practical applications of generative AI across various industries, and how is it transforming organizational processes?

Generative AI is employed to enhance efficiency and support decision-making in various domains. For instance, Newfront, an insurance brokerage, utilizes AI-powered chatbots to streamline HR operations and address client queries more efficiently (Dahle, 2024). In the financial sector, tools such as Finance Wizard automate routine tasks like financial statement assessments

and ratio calculations, significantly enhancing operational efficiency (Bulau, 2024). In creative industries, AI is leveraged as a co-creative tool to explore new artistic expressions, enabling rapid ideation while preserving human input (Erickson, 2024).

In retail and manufacturing, Bain & Company applies AI to optimize supply chains and forecast demand using predictive models, improving inventory management and reducing logistics costs (Bukhtueva, 2023). Fact-checking organizations such as Maldita.es and Newtral utilize ChatGPT internally to enhance workflows by identifying falsehoods and contradictions, though challenges with data reliability and training persist (Cuartielles, 2023).

Research question 2: How does the implementation of generative AI impact business performance and organizational outcomes?

The integration of generative AI has led to tangible improvements in efficiency, decision-making, and customer interactions. For instance, in HR and financial operations, generative AI automates repetitive tasks, allowing professionals to focus on complex, high-value activities (Dahle, 2024; Bulau, 2024). Creative industries benefit from the flexibility and scale generative AI provides for exploring novel ideas, while supply chain optimization improves delivery accuracy and reduces costs (Bukhtueva, 2023). Fact-checking processes have become more robust, with AI assisting in detecting misinformation and enhancing reporting accuracy (Cuartielles, 2023).

However, the impact is not uniformly positive. In the creative sector, AI adoption increases overall workload rather than reducing it, as human expertise remains critical for refining AI outputs and addressing intellectual property complexities (Erickson, 2024).

Research question 3: What challenges do companies encounter during the integration of generative AI technologies into their operations?

Challenges associated with generative AI implementation are both technical and organizational. Key issues include:

- **Data-related Challenges:** Inaccuracies, limitations in data training, and inconsistencies in AI-generated outputs hinder reliability (Cuartielles, 2023);
- **Human Resource Dependency:** Extensive human involvement is required for data curation, software expertise, and output refinement, complicating adoption processes (Erickson, 2024);
- **Legal and Ethical Issues:** Ambiguity around intellectual property rights and the legal status of upstream datasets poses significant risks (Erickson, 2024; Bulau, 2024);
- **Organizational Barriers:** A lack of clear strategy, cohesive teams, and well-defined processes limits the effective implementation of AI tools (Bulau, 2024).

Research question 4: What strategies have companies employed to successfully overcome the obstacles associated with generative AI adoption?

Organizations have adopted several strategies to mitigate these challenges. In finance and HR, AI tools are positioned as productivity enhancers rather than replacements for human expertise, ensuring experienced professionals retain oversight (Bulau, 2024; Dahle, 2024).

In the creative sector, collaboration between humans and AI is emphasized to refine outputs and address intellectual property concerns (Erickson, 2024). Fact-checking organizations leverage AI as a supplementary tool, with subject-matter experts verifying outputs to ensure accuracy (Cuartielles, 2023).

Additionally, broader recommendations include investing in cohesive organizational structures and regulatory compliance, addressing ethical considerations, and ensuring data quality through rigorous validation processes (Erickson, 2024; Bulau, 2024). Policymakers and researchers are called upon to develop coordinated regulations to reduce legal and technological uncertainties surrounding AI use.

These findings demonstrate the versatility and transformative potential of generative AI across industries. However, they also highlight the need for organizations to address significant challenges proactively. Future research and organizational practices must focus on bridging the gap between generative AI's promise and the practical realities of its implementation.

The literature reviewed during the process predominantly focuses on theoretical frameworks, research roadmaps, anticipated challenges, and proposed solutions. Although numerous articles were categorized as research or empirical studies, closer scrutiny revealed that much of the purported empirical evidence was grounded in predictive assessments or assumptions about AI's potential, rather than examining concrete instances of generative AI implementation in organizations. In contrast, the primary objective of our study is to analyze the actual deployment and integration of generative AI technologies within companies, emphasizing real-world applications over theoretical predictions or speculative frameworks. However, empirical investigations into generative AI applications remain limited. Existing studies largely explore its implementation in higher education, reflecting academics' interest in testing and evaluating new technologies. While this focus provides valuable insights, it leaves a notable gap in understanding how small and medium-sized enterprises (SMEs) adopt and integrate generative AI.

This study aimed to bridge the gap between industry enthusiasm and documented evidence by systematically analyzing how organizations are adopting generative AI technologies. The focus was to identify the specific challenges encountered during implementation, the strategies employed to overcome these barriers, and the impact of generative AI on business outcomes.

The results of the review reveal a significant limitation in the academic literature. Of the numerous 190 articles initially identified, only 6 met the stringent inclusion criteria, highlighting the scarcity of empirical studies documenting the implementation of generative AI in business settings. This paucity underscores an urgent need for further research to provide evidence-based insights into the integration of generative AI and to inform best practices for its adoption in organizational contexts.

6. Additional findings

While these findings do not stem directly from the targeted review, they emerged as a secondary outcome of analyzing articles that did not meet the inclusion criteria. They provide valuable context by highlighting broader trends and applications of generative AI across various industries. These observations complement the core review by offering a wider perspective on the scope and potential of generative AI.

6.1. Additional findings: sector-specific applications of generative AI

In education, generative AI is frequently used to enhance personalized learning, assist with test preparation, and support academic content creation. Tools like ChatGPT and Grammarly are widely integrated across K-12, higher education, and professional development contexts (Biloš, Budimir, 2024; Urdan, Marson, 2024; Li et al., 2024). The finance sector utilizes generative AI for fraud detection, credit control, and predictive analytics, streamlining decision-making and automating repetitive tasks to improve operational efficiency (Lee et al., 2024; Liu et al., 2024; Zheng, Kim, 2024). Healthcare applications emphasize patient communication, emergency triage, and analytics, with AI tools contributing to improved decision-making and patient interaction processes (Haleem et al., 2024; Sarbay et al., 2023). Generative AI is also widely applied in marketing, where it enhances digital strategies through personalized content creation and improved customer engagement (Yue et al., 2024; Gulati et al., 2024). Cross-industry applications are prominent, demonstrating the flexibility of AI in areas like customer service, marketing, and human resources, where it automates workflows and fosters collaboration (Kelly et al., 2023; McKnight et al., 2024; Ventayen, 2024).

Other sectors, such as manufacturing (Fonseca et al., 2024), gaming (Zhecheva, 2024), and digital entrepreneurship (Duong, 2024), reveal innovative uses of GenAI, ranging from customer personalization to sustainability efforts and exploratory data analysis. Generative AI is also finding a foothold in niche areas like project management (Sheikh et al., 2024) and pet healthcare (Jokar et al., 2024), where it facilitates workflow optimization and client education.

These findings highlight the widespread adoption of generative AI across industries, reflecting its ability to address specific organizational needs while driving efficiency, creativity, and innovation.

6.2. Additional findings: challenges of generative AI implementation

The implementation of generative AI across industries is hindered by several challenges, including scaling difficulties, data quality and governance issues, organizational resistance, and ethical concerns. Scaling AI beyond pilot projects remains a major barrier, as companies often struggle to integrate solutions into broader operations due to infrastructure limitations and workflow complexity (Lamarre et. al., 2024; Buhler, 2024).

Data-related challenges, such as fragmented datasets, inconsistent formats, and insufficient governance frameworks, are widespread, limiting the effectiveness of AI applications and increasing the risk of algorithmic bias (Davenport et al., 2024; Lamarre et. al., 2024). Organizational resistance also poses significant obstacles, with concerns about job displacement and disruptions to traditional workflows necessitating robust change management and reskilling efforts (Buhler, 2024; Davenport et al., 2024).

Ethical concerns, including data privacy and algorithmic bias, further complicate adoption. Ensuring compliance with privacy regulations and maintaining transparency in AI decision-making are critical, particularly in sectors handling sensitive data (Sheikh et al., 2023; Lamarre et. al., 2024). Addressing these challenges requires coordinated strategies encompassing technical, organizational, and ethical dimensions to enable responsible and scalable AI integration.

6.3. Additional findings: overcoming AI implementation challenges

Organizations have employed various strategies to address the challenges of generative AI implementation, including strategic collaborations, reskilling programs, robust data governance, and change management initiatives. Partnerships with external vendors and cross-functional teams have proven effective in accessing expertise and scaling AI across operations (Buhler, 2024; Lamarre et. al., 2024).

To address talent shortages, many companies have invested in reskilling programs, equipping employees with the skills needed to work effectively alongside AI systems. These initiatives have reduced resistance to AI adoption and enhanced workforce efficiency (Davenport et al., 2024; DeVon, 2024).

Improvements in data governance have been critical to overcoming data-related challenges. By standardizing and integrating data management practices, organizations have ensured the quality and availability of data for AI applications, leading to more accurate outcomes and better system performance (Davenport et al., 2024).

Change management strategies, emphasizing employee engagement and role redefinition, have helped organizations mitigate resistance to AI adoption. Framing AI as a tool for augmenting rather than replacing human decision-making has eased concerns about job displacement (Davenport et al., 2024; DeVon, 2024).

Finally, companies have implemented ethical oversight frameworks to address concerns around data privacy and algorithmic bias. Transparent AI practices and third-party audits have been employed to mitigate risks and maintain public trust (Sheikh et al., 2023; Lamarre et. al., 2024).

7. Limitations

This study is subject to several limitations that should be acknowledged to contextualize its findings and inform future research directions.

While generative AI has gained immense popularity since becoming available to the general public two years ago, it is often not clearly distinguished from other types of artificial intelligence by users and non-experts. This lack of differentiation in terminology may have limited the ability to capture nuanced perspectives or distinct applications of generative AI in the literature.

The research and conclusions presented are constrained by a specific time frame, reflecting the state of generative AI technology during the first two years of its widespread public availability. Given the rapid and ongoing advancements in generative AI models, the findings are inherently dynamic and subject to change. Longitudinal studies are recommended to track how evolving generative AI capabilities impact adoption, challenges, and outcomes over time.

Only a small number of articles met the strict inclusion criteria, underscoring the relative scarcity of empirical studies documenting real-world generative AI applications in organizational settings. This limitation may reflect the nascent stage of generative AI adoption, as two years may be insufficient to establish a robust body of empirical research. Future research in partnerships between academia and industry could revisit this topic as the adoption of generative AI matures and more comprehensive case studies become available.

The literature reviewed may not fully represent all sectors or regions, as the included articles were predominantly focused on specific industries or geographic contexts. Expanding future research to include a more diverse set of industries and international perspectives could enhance the generalizability of findings.

By addressing these limitations, future studies can provide a more comprehensive understanding of generative AI's evolving role in business contexts and its implications for organizational processes and outcomes.

8. Conclusions

This study underscores the transformative potential of generative AI while addressing the multifaceted challenges associated with its implementation in organizational contexts. The findings demonstrate that generative AI has been adopted across a range of industries, including insurance, finance, retail, creative sectors, and fact-checking, with applications focused on automating workflows, enhancing decision-making, and facilitating creative innovation. These

technologies have proven instrumental in streamlining operations and improving organizational outcomes; however, their adoption is accompanied by significant obstacles.

Key challenges include data governance issues, organizational resistance, legal and ethical concerns, and the technical complexities of scaling AI solutions beyond pilot projects. The strategies employed to mitigate these challenges emphasize the importance of human-AI collaboration, the establishment of robust data governance frameworks, and the development of ethical oversight mechanisms to ensure transparency and accountability in AI adoption.

Despite these insights, the limited number of empirical studies meeting the inclusion criteria highlights a notable gap in the literature, particularly regarding the adoption of generative AI by small and medium-sized enterprises. This paucity of evidence underscores the need for future research to prioritize longitudinal studies that explore the evolving implications of generative AI adoption, while also broadening the scope to include diverse industries and geographic contexts.

By addressing these challenges and capitalizing on the opportunities presented by generative AI, organizations can harness its potential to drive innovation, enhance operational efficiency, and foster sustainable growth. This research contributes to bridging the gap between the theoretical promise of generative AI and its practical implementation in business environments.

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