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Review of Using Technologies of Artificial Intelligence in Companies

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<i>Article History</i>	<i>Abstract</i>
<p>Received: 18 February 2023 Revised: 04 March 2023 Accepted: 19 May 2023</p>	<p>Artificial intelligence (AI) has become increasingly prevalent in business as companies adopt machine algorithms that can learn and improve over time. These AI-powered solutions are used in various business areas, including operations, analytics, product personalisation, marketing, sales, customer service, and human resource (HR). AI can help companies automate mundane tasks, make smarter decisions based on data and insights, and provide capabilities for smoother customer experiences, better customer service, and increased efficiency. AI has also allowed companies to enhance the quality of their digital services, optimise supply chain processes, and gain access to real-time insights and analytics. Companies can use AI to reduce lead times, generate new customer insights, improve customer service, and create meaningful customer experiences. This paper aims to address the gap in knowledge on incorporating AI into business strategy by conducting a critical literature review, synthesising current approaches and frameworks, highlighting potential benefits, challenges, and opportunities, and discussing future research directions.</p>
<p>CC License CC-BY-NC-SA 4.0</p>	<p>Keywords: <i>Deep Learning, Artificial Intelligence, Machine Learning, Business Strategy, Information Technology</i></p>

1. Introduction

The Fourth Industrial Revolution, characterised by an integration of advanced technologies such as AI, the Internet of Things, and automation, is expected to impact business models and economic development significantly. Previous research has suggested that the Fourth Industrial Revolution may lead to the development of new jobs, social innovation, and product innovation, as well as improvements in quality of life. Additionally, adopting these technologies can shape consumer expectations, influence the quality of products and services, and alter traditional company structures to drive value creation. To fully understand the potential impacts of the Fourth Industrial Revolution on business models and the workforce, future research needs to examine the effects of these technologies on job descriptions and professional competencies within emerging company models [1].

To fully take advantage of the benefits of cloud technology, a firm needs to carefully consider its current technology infrastructure and the specific goals it hopes to achieve through a transition to the

cloud. While specific applications that require high processing power may be best suited for local maintenance, other data and programs, such as collaborative web application software used for projects, maybe more effectively retained in the cloud environment [2]. By continually improving and optimising these technologies, a company may be able to drive the development of hyper-automation and hyper-connectivity, leading to the Fourth Industrial Revolution, also known as Industry 4.0 [3].

Integrating new technologies such as the Industrial Internet, intelligent systems, virtual value chains, and AI drives significant innovation and productivity gains in the manufacturing sector. This digital revolution is leading to the emergence of new management, business, and production models that facilitate the entry of new markets and disrupt traditional sectors. As a result, manufacturing processes are becoming more efficient and agile, leading to economic growth. These advances also enable manufacturers to remain competitive in an increasingly complex and dynamic global market [4]. In today's business world, AI has become prevalent in many processes, leading some to worry that intelligent robots may eventually take over human decision-making. However, this essay takes a more positive and practical approach, focusing on how humans and AI can complement each other in decision-making processes. Business decision-making is often characterised by ambiguity, complexity, and equivocality, and both humans and AI have unique strengths that can contribute to these processes. While AI excels in computational information processing and has an analytical approach that can help tackle complexity, humans offer a more comprehensive and natural way of dealing with ambiguity and equivocality. This idea aligns with the concept of "intelligence augmentation," which suggests that AI should be used to enhance, rather than replace, human contributions [5], [6].

In recent years, corporate businesses have adopted AI, with established companies and start-ups seeking to transform themselves into AI firms to drive innovation and increase global competitiveness. The ultimate aim for these businesses is to develop the most advanced AI technology and emerge as leaders in this rapidly evolving field. This drive towards AI adoption is fueling the innovation process and contributing to the overall competitiveness of the global business landscape [7]. AI has made it possible for robots to make complex decisions that were once the exclusive domain of humans. Hyper-automation and hyper-connectivity, enabled by information and communication technology (ICT), are rising globally. The Internet of Things (IoT) is the foundation for achieving hyperconnectivity in Cyber-Physical Systems (CPS), which seamlessly integrates technology, nature, and humans [8].

This literature review aims to provide a comprehensive overview of the use of AI technologies in the context of firms. Drawing upon ideas from governance and information sciences literature, this research seeks to organise and synthesise the existing academic contributions and define the implications of intelligent automation for human resource management (HRM). While the use of Big Data has received significant attention in previous review studies, this research focuses specifically on the use of AI technologies in business and HRM.

The paper is organised as follows. Section 2 provides a review of the relevant literature on firms and AI. In Section 3, the various resources that contribute to AI capabilities were examined. The methodology and validation procedures for developing an AI capacity instrument are described in Section 4. Finally, Section 5 concludes the paper and discusses future research directions.

2. Literature Review

2.1 AI in Firms

AI and automation technologies are revolutionising how businesses operate, enabling employees to provide more value to customers and enhance their services. While machines excel at tasks that require speed, scalability, durability, and quantitative capabilities, human leadership, teamwork, innovation, and social skills are still essential for businesses to thrive. One notable example of this combination of human and machine capabilities is using post bots to assist postal workers in Germany and Norway. As AI and automation technologies continue to advance, it will be necessary for businesses to find ways to harness the benefits of these technologies while also leveraging the unique strengths of their human workforce [9]. Recent research has shown that specific AI approaches can be particularly effective in augmenting the input knowledge of experts in creative fields such as engineering, design, and the arts. By leveraging massive data sets, these approaches can provide novel ideas and insights that may be difficult to generate through traditional means; this represents a significant shift in the way that AI is being used in these fields as it moves beyond simply automating

tasks and instead supports the creative process itself [10]. Businesses are increasingly adopting AI, using the technology in many areas, such as operations, analytics, product personalisation, marketing, sales, customer service, and HR. However, adopting AI comes with risks due to the complexity of the technology, the diverse range of potential applications, and the new requirements that companies must meet to implement AI effectively. To ensure that the adoption of AI is successful and the total value of the technology can be realised, it is essential that companies carefully consider their preparedness for AI adoption and make informed decisions. Research can help businesses understand the field's current state, the potential benefits and challenges of AI, and the factors that influence successful adoption and implementation, enabling them to make well-informed decisions about their AI strategy [11]. Despite the increasing adoption of AI in the business world, there is still a lack of comprehensive understanding of how AI is accepted and deployed in companies and which processes are most critical for generating value. Previous studies have identified research gaps and examined vital elements of leveraging AI technology, but more significant and novel research is needed to understand this technology's potential fully. This includes research that explores the factors that contribute to the successful adoption and implementation of AI in different business contexts, as well as research that analyses the impact of AI on business outcomes such as productivity, efficiency, and customer satisfaction. Ultimately, this research can help to inform the development of effective strategies for leveraging AI in business and maximising its potential benefits [12].

AI's increasing prevalence and capabilities in the business world have raised concerns about the potential impact on employment and the job market. Research in this area has aimed to understand the potential consequences of the growing use of AI, including the potential displacement of jobs and the need for individuals to adapt and acquire new skills. As AI advances and expands into various business areas, researchers must examine the potential impacts on employment and the job market and identify strategies and approaches that can help individuals and organisations adapt and thrive in this changing landscape. This research can help to inform policies and practices that can mitigate potential negative impacts and support the successful integration of AI into the workplace [6]. The development of large databases has traditionally been seen as a barrier to the advancement of AI due to the volume of data involved. However, in recent years, researchers have created new AI algorithms enabled by hardware advancements and can "learn" from new data, improving their ability to anticipate future behaviour. These algorithms have the potential to enhance the accuracy and predictive power of scientific results by allowing researchers to link and cross-reference data from disparate sources. As a result, they provide a novel starting point for empirical investigation and may help to identify future lines of inquiry [13]. Overall, advancing AI algorithms can significantly improve researchers' ability to analyse and interpret data. New institutions, communication channels, and legislative frameworks have also evolved to collect, prepare, and preserve data for various digital data infrastructures and organisations trying to coordinate and enhance the global data environment [14].

Despite the potential benefits of AI, organisations need help for its successful adoption and implementation. To overcome these challenges and fully realise the value-added potential of AI, organisations must understand the business problems connected with its deployment. However, current research on AI has primarily focused on gaining a technological understanding of AI adoption rather than addressing these business-related issues. To truly harness the potential of AI, researchers must shift their focus toward understanding and addressing the business problems connected with its deployment. This will require a more significant and novel research approach to understand and solve these business-related challenges [15].

There needs to be more comprehensive research on the acceptance and deployment of AI in enterprises and the primary mechanisms through which it generates value. While some studies have identified research gaps and examined critical aspects of leveraging AI technology, others have yet to [16]. This lack of knowledge represents a significant gap in our understanding of the use of AI in the business world. Further research is needed to address this gap and provide a more complete picture of how enterprises adopt and utilise AI and how it generates value [12].

Several key factors have contributed to AI's significant progress and widespread adoption in recent years. One of the most important factors is the availability of large amounts of data, which has allowed AI algorithms to be trained on a much larger scale and with greater accuracy. Additionally, the development of advanced algorithms and machine learning techniques has played a crucial role in the success of AI, allowing it to perform a wide range of tasks and make more accurate predictions and decisions. The improvement of processing hardware, including specialised graphics processing

units (GPUs) and other specialised hardware, has enabled AI systems to operate faster and more efficiently. Together, these factors have allowed AI to advance in many fields significantly and contributed to its increasing prevalence in various industries [17]. The rapid progress of AI has led to a surge of interest in AI tools among major technology enterprises. This has prompted firms such as Google, Amazon, Microsoft, Salesforce, and IBM to deploy machine learning infrastructure on the cloud, enabling easier access and utilisation of cognitive technology. As a result of this trend, research into adopting and implementing AI in these organisations has become increasingly significant and novel. Studies can explore the specific strategies and approaches these companies are taking to incorporate AI into their business operations and the benefits and challenges they are experiencing. This research can provide valuable insights for other organisations looking to adopt AI and can inform the development of best practices for successful implementation [18]. AI has increasingly been utilised in business contexts as a means of improving or replacing human cognitive capabilities through the use of machine learning algorithms. While the incorporation of AI has the potential to enhance human cognition and streamline tasks, it also raises questions about the displacement of human jobs. Therefore, the research aims to explore the novel ways AI is being integrated into business strategy and examine the potential benefits, challenges, and opportunities it presents. By synthesising current approaches and frameworks and providing a critical literature review, this research aims to identify future directions for studying AI in business and its impact on human cognition and employment [19].

The incorporation of AI technology into business strategies has the potential to significantly improve performance and generate value across a range of dimensions. AI can enhance performance by increasing speed, flexibility, customisation, scale, creativity, and decision-making capabilities. Regarding value creation, businesses may benefit from using AI in automating processes, making data-driven decisions, improving customer and staff engagement, and creating and delivering new goods and services. Overall, integrating AI into business strategies presents exciting opportunities for improving performance and generating value [20], [21].

2.2 The Strategic Use of Technology in Firms

In this study environment [22], AI is a part of Information Technology (IT). It encompasses many areas, including hardware, software, data processing, information systems, and the human, business, and administrative components that support them. While some researchers may limit their definition of IT only to include technological elements, this study incorporates a more comprehensive view that includes the workflow, people, and information involved in the discipline. As the integration and convergence of technologies continue to advance, it is becoming increasingly important for IT to be defined broadly to include the information that organisations produce and utilise and the diverse range of technologies that process this information. This holistic view of IT is necessary to fully take advantage of the benefits and capabilities of these technologies and address the challenges and opportunities they present. By defining IT in this way, organisations can more effectively leverage the full potential of their information and technology assets to drive innovation, improve efficiency, and achieve their business objectives [23]. As such, there is a need for more novel and significant research on the role and influence of IT in the business context, particularly about how IT can support business operations, enhance customer experiences, and drive business growth.

The increasing use of IT in businesses has led to the emergence of the concept of "strategic usage," which refers to the use of IT to create or support corporate strategies and add value to businesses. Researchers have focused on understanding how IT can be strategically deployed in businesses in recent years and have identified several potential benefits and challenges. Some of the critical areas of research in this field include the role of IT in supporting innovation and agility, the use of IT to drive operational efficiency and effectiveness, and how IT can be used to enhance customer experiences and relationships. As the use of IT continues to evolve, researchers are likely to continue to explore the strategic implications of this technology for businesses and organisations [24]. However, there is a historical disagreement within this issue over enterprises' incapacity to produce value derived from IT application investments, which numerous writers ascribe to a need for more alignment between business and IT strategy [25].

There is growing recognition that businesses must adopt environmental technologies to reduce their environmental impact and differentiate themselves from competitors. However, there currently needs to be more systematic approaches for integrating IT with sustainability goals and business

objectives. In this article, critical concepts of strategic management and explore the strategic significance of sustainability efforts and IT have been presented. The authors examine the role of environmental strategies and the importance of aligning business, sustainability, and IT domains [26].

Strategy is often driven by the need to compete, but competition and strategy are different. The decision to build a bus terminal in a city led to significant political involvement from various stakeholders, including local media, businesses, unions, public transit agencies, law enforcement, urban planning experts, and even members of the general public. These groups quickly clashed over the location and size of the terminal, with city planners and the bus operator at odds over the issue [26]. The conventional belief that incremental change is slow and only leads to superficial modifications can be challenged using company change theory. This requires a non-linear perspective on change. While minor changes may seem insignificant at first, they can have a significant impact in the long term and should not be underestimated. Adopting a more holistic view of change is essential, recognising that even minor adjustments can lead to significant and lasting transformation [27].

The strategy involves developing and implementing a carefully thought-out plan to create value for the organisation. This process involves evaluating various competitive and product-market options and making decisions based on these considerations. In addition to the formulation and execution phases, strategy can also emerge in response to changing circumstances. The execution of a strategy, also known as strategy execution, involves decisions about the organisation's structure and capacity to carry out its product-market decisions. Essentially, the strategy involves a systematic process of decision-making that helps an organisation achieve its goals [27].

An effective business strategy aims to establish a unique and distinguished position within the market. It is essential to carefully select and combine various activities to create a value proposition that differentiates the business from its competitors. To create a successful and impactful strategy, it is necessary to consider these elements and ensure that they are integrated into the overall plan [28]. In the digital age, ambiguity and paradoxes are increasingly prevalent, making it necessary to identify new research directions in the field of corporate strategy. To better understand the complex phenomena of the digital age, it is essential to consider both current corporate strategy theories and new approaches that can help to explain these phenomena by generating knowledge that accounts for the unique challenges and opportunities presented by the digital age [29]. From an organisation's viewpoint, the corporate strategy addresses two issues: how the business should manage its assortment of business divisions and what industries it should engage in [30]. The business strategy focuses on how to succeed in each industry.

Competitive strategy and business strategy are often used interchangeably to refer to the creation of a competitive advantage within a corporation's markets. However, some academics argue that these terms are not synonymous and that business strategy encompasses a broader range of activities and considerations beyond just achieving a competitive advantage. Business strategy may involve the development of long-term goals and objectives, the allocation of resources, and the implementation of plans to achieve those goals. In contrast, the competitive strategy focuses on creating and maintaining a competitive advantage in a particular market. While competitive strategy is an essential aspect of business strategy, it is not the only consideration when it comes to developing a successful long-term plan for a corporation [31]. In the literature, the term "business strategy" is often used to encompass all aspects of strategy development within a company. This study adopts this definition, viewing a company's strategy as the overall plan to achieve its objectives and goals. This includes a company's full range of strategies, as various authors describe. Therefore, a business strategy can be understood as a company's direction to achieve its aims and objectives [32].

The field of e-business marketing has become increasingly competitive and effective due to the development of IT and the benefits it offers to businesses. However, the rapid pace of change in the e-business environment can make it difficult for e-business organisations to develop and implement effective strategies, leading to failures. To overcome these challenges, e-business organisations must adopt more flexible and adaptive strategies that adapt to changing market conditions.

By staying attuned to customers' evolving needs and preferences, e-business organisations can improve their chances of success and continue to offer innovative and valuable products and services in a rapidly changing market [33].

The alignment between business and IT strategies is a dynamic process that involves the ongoing adaptation and transformation of business, IT plans and the organisational and IT infrastructure and processes. This alignment is often referred to as IT strategy, but the terms strategy and IT strategy are

often used interchangeably. To ensure the successful alignment of business and IT strategies, it is essential to consider the various factors that can influence this process, including organisational culture, leadership, and the capabilities of the IT infrastructure and procedures. A solid alignment between business and IT strategies can help organisations achieve their goals and a competitive advantage in their industry [34]. In today's dynamic and highly competitive business environment, organisations must develop and effectively implement strategies that can give them a long-term competitive advantage. One way to achieve this is through digital technology, which has become increasingly crucial for commercial organisations' successful and efficient management. Research on these topics highlights their significance in helping businesses stay competitive and thrive in today's market. However, more research is needed to fully understand digital technology's potential benefits and challenges and identify the most effective ways to use it to gain a competitive advantage [35].

According to the scientific community, the study of digital business strategies has significant implications for the future of management, as these strategies will become mandatory for managers and replace the need for business-IT alignment. This shift highlights the importance of digitalisation and suggests that current assumptions about the planning process should be reevaluated in light of these developments [36]. The symbolic value of IT can provide a clear signal to interested parties and can be revealed through market reactions. However, incorporating AI into IT adds complexity to the strategic application of digital technology due to AI's ability to perform cognitive activities. Prior research has largely focused on the functional value of IT, but the symbolic value of IT is also a crucial component of strategic value [32].

Despite the expansion of research addressing the strategic application of digital technology, the incorporation of AI presents new theoretical and empirical challenges that must be considered [32]. Intelligent automation technologies present a new way to enhance company performance and manage personnel, with numerous opportunities for businesses and significant technological and ethical challenges. These technologies have been shown to affect various aspects of business strategy, such as decision-making, human-robot/AI collaboration, work substitution, educational opportunities, and company operations, including job performance, hiring, and training [37].

3. Methodology

3.1 Data Selection

The research for this study was conducted using a literature review of existing studies on the use of AI in business operations. The studies reviewed were selected from academic journals, conference proceedings, and reputable online sources. A comprehensive search of the literature was performed using relevant keywords such as "AI in business," "AI in operations," "AI in customer service," "AI in marketing," "AI in analytics," and "AI in HR." The inclusion criteria for the studies were that they must have been published in the past 5 years and must have focused on using AI in business operations.

Table 1 shows that studies have used a variety of methodologies, including literature reviews, case studies, and experiments. This diversity of methodologies provides a comprehensive and rich understanding of the topic. The table also highlights that the studies have been conducted in different years and journals, demonstrating the ongoing development and interest in the topic. Overall, the table provides an in-depth understanding of the current approaches and frameworks for incorporating AI into business strategy, the potential benefits, challenges, and opportunities. It also highlights areas for future research.

Table 1. Relevant Literature Reviews

Ref.	Year of Publication	Objectives	Methodology	Results	Implications
[38]	2019	To examine the current approaches used to incorporate AI into business operations	Literature review of peer-reviewed articles published between 2015-2019	AI can be used to automate mundane tasks and improve decision-making in business operations	Businesses should carefully consider their current technology infrastructure and specific goals before implementing AI in operations
	2020	To understand the impact of AI on customer service in leading companies.	Case study analysis of 5 companies that have implemented AI in customer service.	AI-powered customer service can lead to improved customer satisfaction and increased efficiency.	Companies should carefully plan and implement AI in customer service to ensure it complements human efforts.
[39]	2021	To explore the opportunities and challenges of using AI in digital services.	Literature review of peer-reviewed articles published between 2015-2021	AI can enhance the quality of digital services and improve customer experiences, but it also poses challenges such as data privacy and security.	Companies should clearly understand the potential implications of using AI in digital services and take necessary measures to mitigate potential risks.
[40]	2022	To examine the current applications of AI in supply chain management.	Literature review of peer-reviewed articles published between 2015-2022.	AI-powered solutions can improve efficiency and optimise supply chain processes, but it also requires significant investment and changes in organisational structure.	Companies should carefully assess AI's feasibility and potential benefits in supply chain management before implementation.
[41]	2021	To understand how AI can drive business model innovation in leading companies.	Case study analysis of 5 companies implementing AI in their business model.	AI can lead to new revenue streams and value propositions but also requires a flexible and adaptive organisational culture.	Companies should not view AI as a standalone solution but as a way to drive innovation and adapt to the changing market environment.

[42]	2021	To examine the current research on the impact of AI on the future of work.	Literature review of peer-reviewed articles published between 2011-2021	AI can lead to new jobs and improved productivity, but it also poses challenges such as job displacement and skill mismatch.	Future research should focus on understanding the implications of AI on the workforce and developing strategies to mitigate potential risks.
[43]	2020	To examine the ethical implications of AI in business.	Literature review of peer-reviewed articles published between 2015-2020.	AI can raise ethical concerns such as bias, accountability, and transparency.	Companies should establish ethical guidelines and governance structures to ensure that AI is developed and used ethically.

The results of the studies in the table suggest that AI has become increasingly prevalent in the business world. Companies are adopting machine algorithms that can learn and improve over time to help in various areas of their operations. The table shows that AI-powered solutions are used in various business areas, including operations, analytics, product personalisation, marketing, sales, customer service, and HR. These AI-powered solutions can help companies automate mundane tasks, make smarter decisions based on data and insights, and provide capabilities for smoother customer experiences, better customer service, and increased efficiency.

The table also suggests that AI has allowed companies to enhance the quality of their digital services, optimise supply chain processes, and gain access to real-time insights and analytics. Additionally, AI can be used to reduce lead times, generate new customer insights, improve customer service, and create more meaningful customer experiences. Furthermore, the table highlights that AI has the potential to drive the development of hyper-automation and hyper-connectivity, which can lead to the Fourth Industrial Revolution, also known as Industry 4.0.

However, the findings also point to potential challenges and ethical concerns with using AI in business. Some challenges include data privacy and security, job displacement, and bias. Companies should consider these potential challenges carefully and establish ethical guidelines and governance structures to ensure that AI is developed and used ethically.

Overall, the findings in the table suggest that AI can bring significant benefits to businesses. Still, companies should be aware of the challenges and opportunities associated with its incorporation into business strategies. Future research should focus on further exploring the implications of AI on business and the workforce and on developing strategies to mitigate potential risks.

4. Results and Discussion

There is a growing body of papers on the strategic use of technology in business. This research focuses on understanding how companies can effectively leverage technology to achieve their business goals and gain a competitive advantage.

One area of focus in this research is the role of AI in business strategy. AI is becoming increasingly prevalent in business as companies use machine algorithms that can learn and improve over time. Studies have explored the potential benefits of AI in areas such as operations, analytics, product personalisation, marketing, sales, customer service, and HR, as well as the challenges and opportunities associated with its adoption.

Another area of focus in this research is the role of digital technologies in transforming business models and creating new opportunities for value creation. Studies have examined how companies can use the Internet of Things, cloud computing, and data analytics to improve efficiency, optimise supply chain processes, and gain real-time insights and analytics.

Overall, research on the strategic use of technology in business is helping to provide a better understanding of how companies can effectively leverage technology to achieve their goals and gain a competitive advantage. This research will likely continue to be a significant and novel area of study as technology evolves and plays an increasingly important role in business.

AI can potentially transform how companies do business and improve efficiency. Here are a few ways that AI can have an impact on businesses:

- (1) Automation of repetitive tasks: AI can automate repetitive tasks, freeing human employees to focus on more complex, higher-level work. This can lead to increased productivity and cost savings for the company.
- (2) Improved decision-making: AI can analyse large amounts of data and provide insights that can help companies make better decisions. For example, AI can analyse customer data to identify trends and patterns, informing marketing and sales strategies.
- (3) Personalisation: AI can be used to provide personalised experiences to customers, such as:
 - a. Predictive Analytics - Companies can use predictive analytics to analyse past data, recognise patterns, and predict future trends and events. This can help them create more efficient operations, better manage risk, increase sales, and reward loyal customers.
 - b. Automation - Companies can use AI tools to automate mundane tasks and free up resources to focus on creating more value. These tools can handle structured and unstructured data to automate customer service, such as responding to customer inquiries.
 - c. Machine Learning - Companies can use machine learning applications to create more personalised user experiences, statistical models to determine customer values, and algorithms to make more informed decisions quickly.
 - d. Natural Language Processing - Companies use natural language processing (NLP) to automate customer service and improve customer interactions. NLP can help customers with a more accurate and personalised experience by understanding their natural context and translating it into machine-understood language.
 - e. Augmented Reality - Augmented reality (AR) can be used to improve customer experiences. For example, AR can provide detailed product information, enhance customer service with virtual assistance, increase safety and productivity by providing information and guidance, and increase customer engagement.
- (4) Automated Customer Relations Management (CRM): AI can automate customer service tasks, such as automated ticketing systems, natural language processing (NLP) for customer inquiries, automatic identification of customer service trends, and automated customer service campaigns.
- (5) Chatbots: AI-enabled chatbots can be used for customer service, quick responses to inquiries, 24/7 customer support, and more.
- (6) Predictive Analytics: AI-based predictive analytics can help companies better understand their customers, anticipate their needs, and develop appropriate products and services.
- (7) Automated Employee Assessments: AI-assisted techniques can automate pre-employment assessments, helping employers quickly identify candidates with the most relevant skills and experience.
- (8) Automated Hiring Processes: AI-enabled bots can assess job applications and streamline onboarding.
- (9) Process Automation: AI can also automate mundane tasks that take time and energy, such as data entry and report generation.
- (10) Recommendation Systems: AI-enabled algorithms can analyse customer histories and preferences to recommend products and services, improving user engagement and satisfaction.

5. Conclusions

The paper suggests AI can significantly benefit businesses by providing time and cost savings, improved customer experiences, and streamlined processes. Companies can use AI in customer service, automation, marketing, data collection and analysis, and more. It highlights the potential of AI in various business applications and the need for more research on the strategic application of AI to gain competitive advantages in the business world. The paper aims to evaluate the literature on intelligent automation in the workplace and provide insights for executives to implement AI with

awareness of its potential benefits and challenges, as well as its increasing prevalence in the business world and the utilisation of machine algorithms to improve various areas of operations. The benefits of AI include the automation of repetitive tasks, data-driven decision-making, and improved customer experiences. However, the paper also highlights potential challenges and ethical concerns such as data privacy, job displacement, and bias that companies should be aware of and address through ethical guidelines. Future research should focus on further investigating the implications of AI on business and the workforce and developing strategies to mitigate potential risks.

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