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# An Insight into AI adoption in Business Management

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**Abstract:** An increasingly common practice in many organizations is the use of assistive instruments and technology to improve the efficiency of their business management processes. Using artificial intelligence (AI) to assist in the solution of various control issues is one of the most inventive and sophisticated ways now available. It is not a unique option to include digital tools into the management process; yet, because of the recent advent of such technologies, the application of artificial intelligence is a technique that has received minimal research attention. Aesthetic intelligence was first mentioned in the 1940s, according to Haenlein and Kaplan, although the majority of these references were speculations about the future development of computer technology and its potential uses in different sectors. Using artificial intelligence (AI) in business management is a technology that has the potential to improve the quality of control operations, simplify the decision-making process, and eliminate mistakes caused by the human component, among other benefits. Because of this, it is critical to evaluate this technology from the viewpoints of its advantages, applications, and further advancement. It is the purpose of this study to further develop the notion of artificial intelligence and demonstrate its use in the field of business administration.

Keywords: Artificial Intelligence, Business Management, Applications.

#### INTRODUCTION

The greater use of digital advancements in business is a logical byproduct of the computerization of different operations, including those in the management sector, which has occurred in recent years. According to Haenlein et al. (2019), merging artificial intelligence with other relevant practises is a solution that allows for the maximisation of the results of control over all operational processes. In other words, this technology acts as an auxiliary tool for decision-making, assisting in the assessment of the possibilities and dangers associated with certain judgments that are based on pre-programmed algorithmic processes. The use of artificial intelligence (AI) is becoming more popular among business owners and executives as a handy technology that works on large-scale data, analyses incoming information, and generates adaptive solutions based on it.

Given the extensive programming capabilities of AI algorithms, the use of this digital technology in business management is on par with the application of this digital technology in other fields where vast amounts of data must be handled. Incorporating recent advancements in this sector may aid in determining how extensive AI capabilities are when it comes to controlling different operational processes inside organisations. Benefit analysis is a technique that allows for the identification of the positive distinctions between this technology and other digital tools that are utilised in the corporate environment to make management more efficient. Finally, taking into account the potential for the growth and spread of artificial intelligence in the corporate environment may aid in the prediction of important reasons for implementing this technology as well as effective methods to make the implementation process more efficient. The technology under examination has the potential to be an irreplaceable instrument as one of the critical components of the decision-making process and to contribute to the strengthening of managerial positions in organisations of all sizes and types.

## APPLICATIONS OF ARTIFICIAL INTELLIGENCE IN BUSINESS MANAGEMENT

Artificial intelligence technologies are becoming more useful as the amounts of information and data that must be regulated in order to ensure company resilience continue to increase. Furthermore, because of the large range of duties that this technology is capable of completing, it is frequently used. As an example, the authors point out that AI engines can analyze a significant quantity of data by using properly built analytical algorithms, which, in turn, can equal or surpass the skills of human beings (Obschonka and Audretsch, 2019). In the context of administrative coordination and control maintenance, the use of these high-precision algorithms is significant. It is possible that the adoption of artificial intelligence processes would simplify managerial operations such as evaluating subordinates' performance and analysing current outcomes, among other things.



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An additional area of study in company management is problem-solving, which is directly associated with the ability to sustain a productive collaborative environment. According to Kolbjrnsrud, Amico, and Thomas (2016), predictive systems are capable of deciding which solutions are the most effective in overcoming certain hurdles. The field of strategic planning is one of the most often used applications of artificial intelligence, owing to the potential to analyse the perspectives of a specific organisation and compare the outcomes obtained. This is a comprehensive list of important factors of company management that influence the overall image of executives' responsibilities. The introduction of unique artificial intelligence programmes is a successful and sought-after technique to preventing mistakes.

## BENEFITS OF ARTIFICIAL INTELLIGENCE IN BUSINESS MANAGEMENT

The use of artificial intelligence systems, which are complicated programmes with several functions, not only simplifies the job of corporate managers, but also provides considerable benefits over conventional methods of maintaining control. When compared to outdated firewalls, Hirsch (2018) claims that one of the advantages of developing AI technology is the ability to deliver more trustworthy cybersecurity in the future. A threat-recognition system that can also categorise and prevent threats is in high demand, and this is factually true.

Furthermore, the variety of applications of artificial intelligence above other rudimentary systems aimed to ease company administration is a significant benefit. The fact that such a benefit exists is significant, as it permits the technology under evaluation to be identified as the primary instrument for corporate administration and management. The chance to assess the performance of artificial intelligence systems and make objective judgments about their productivity and relevance to a certain business environment is the last and most important advantage to highlight. Using such a system, the head of any structural unit of a specific organisation may evaluate its functioning and acquire a full analysis of the job completed. Business management becomes more secure under such circumstances, which has a positive impact on the financial results of the company's operations as a result.

#### ARTIFICIAL INTELLIGENCE IN BUSINESS MANAGEMENT: WHAT TO EXPECT IN THE FUTURE

The peculiarities of their service should be taken into consideration when evaluating the potential for the development and application of artificial intelligence algorithms in company management. According to Haenlein and Kaplan (2019), the continual implementation of this technology will give a chance to discover the most effective methods for its control. Therefore, the adoption of artificial intelligence will become more sensible from the aspect of a given system's compliance with the objectives set out. Due to a lack of relevant research data on the capabilities and limits of this technology, this viewpoint is crucial in the current environment.

As Per Nurm & Maria (2019), using Artificial Intelligence (AI) in marketing has a number of advantages and disadvantages, and this research sought to compile scholarly information on the advantages and disadvantages of this practise. Experts were asked to anticipate the future of Artificial Intelligence, and three research topics were offered. Artificial Intelligence: What do marketers hope to gain from it? And what are some of the possible concerns that have been identified by professionals in the scientific literature. Content analysis was carried out on the basis of a survey of the literature that included solely academic evidence. Experts point out a variety of applications for artificial intelligence in marketing, as shown by the outcomes. The future of artificial intelligence (AI) is expected to have an even greater influence on numerous disciplines, including marketing, according to industry experts. Also shown by the findings is that artificial intelligence is projected to bring about a variety of hazards, including widespread underemployment. This problem requires further investigation, and the majority of writers advocate for some kind of artificial intelligence (AI) oversight.

More and more managers are using comparable products to supplement their existing resource base, which will inevitably lead to the growth of artificial intelligence. Lichtenthaler (2018) points out that when "human and artificial intelligence operate together," improving the linkages between CEOs and machine algorithms is a natural and clear viewpoint to consider. There is no escaping the digitisation of numerous sectors, including business, and the sooner acceptable techniques to successfully use artificial intelligence are discovered, the greater the possibility of more productive management activities in the future will be. Given the aforementioned advantages and ease, it is reasonable to predict that the use of this technology will become more sensible and, at the same time, more widespread in the future. This is supported by research and development.

According to Soni et.al (2020), because of the rapid proliferation of intelligent goods and services, as well as their commercial availability and socioeconomic influence, the debate arises as to whether the current advent of artificial intelligence is just hype, or if it really has the potential to revolutionise the world. A broad variety of implications of artificial intelligence (AI) are explored in their study, with particular attention paid to both good and negative repercussions on governments, communities, businesses, and people. It is the purpose of this study to examine the whole effect of artificial intelligence - from research and development through implementation. The article discusses



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the most significant academic accomplishments and technological developments in the area of artificial intelligence, as well as their influence on entrepreneurial operations and, therefore, on the global market as a whole.

## POSSIBLE BARRIERS IN THE ADOPTION OF ARTIFICIAL INTELLIGENCE

As a scientific area, artificial intelligence has risen to prominence. As the number of new types of employment has expanded significantly in recent years, there has been a notable growth in the use of artificial intelligence technologies by enterprises. The implementation of artificial intelligence (AI) is still a work in progress for many businesses, despite the anticipated advantages.

Alsheiabni, Cheung and Chris Messom, (2019), in their study were able to gain insight into AI adoption from the viewpoint of an organisation, they were able to identify the variables that hinder organisation growth, with a specific focus on the hurdles to AI adoption. They discovered a number of important roadblocks to the adoption of artificial intelligence. The impediments that have been discovered are divided into three categories: organisational, environmental, and technological. Despite the fact that they performed this study with care, there are certain limits to our findings and recommendations. Because their findings are based on companies in Australia, future study should explore the generalizability of their findings, given that the current sample is not likely to be unique and typical of organisations in general, as is the case with most studies. In the case of organisations involved in information, media, and telecommunications, for example, it is possible that they have a higher adoption rate in general because they are constantly confronted with and utilising large amounts of data, and because they have access to more IT skills than many other industries, such as manufacturing or transportation.

#### **CONCLUSION**

In corporate management, the use of artificial intelligence is a smart practise because of the many advantages that this technology provides, in addition to the potential to protect operational controls. These algorithms have a wide range of applications, including decision-making, strategic planning, and a variety of other domains. Among the indisputable benefits, one should point out the broad range of applications of artificial intelligence, the simplicity with which it can be used to multi-structured activities, and the opportunities to assess the present performance. Because of the continually expanding methods for governing artificial intelligence systems, as well as the potential of merging human efforts with machine operations, the use of this technology will become more prevalent in the future.

### REFERENCES

- 1. Nurm, Kristi-Maria. (2019). The Possibilities and Potential Risks of Using Artificial Intelligence In Marketing A Literature Review.
- 2. Neha Soni, Enakshi Khular Sharma, Narotam Singh, Amita Kapoor, Artificial Intelligence in Business: From Research and Innovation to Market Deployment, Procedia Computer Science, Volume 167,2020,Pages 2200-2210,ISSN 1877-0509, https://doi.org/10.1016/j.procs.2020.03.272.
- 3. Duan, Y., Edwards, J. S. and Dwivedi, Y. K. (2019) 'Artificial intelligence for decision making in the era of Big Data evolution, challenges and research agenda', International Journal of Information Management, 48, pp. 63-71
- 4. Haenlein, M. et al. (2019) 'Artificial intelligence (AI) and management analytics', Journal of Management Analytics, 6(4), pp. 341-343.
- 5. Haenlein, M. and Kaplan, A. (2019) 'A brief history of artificial intelligence: on the past, present, and future of artificial intelligence', California Management Review, 61(4), pp. 5-14.
- 6. Hirsch, P. B. (2018) 'Tie me to the mast: artificial intelligence & reputation risk management', Journal of Business Strategy, 39(1), pp. 61-64.
- 7. Kolbjørnsrud, V., Amico, R. and Thomas, R. J. (2016) 'How artificial intelligence will redefine management', Harvard Business Review, 2, pp. 1-6.
- 8. Lichtenthaler, U. (2018) 'Substitute or synthesis: the interplay between human and artificial intelligence', Research-Technology Management, 61(5), pp. 12-14.
- 9. Obschonka, M. and Audretsch, D. B. (2019) 'Artificial intelligence and big data in entrepreneurship: a new era has begun', Small Business Economics, 55, pp. 1-11.
- 10. Quan, X. I. and Sanderson, J. (2018) 'Understanding the artificial intelligence business ecosystem', IEEE Engineering Management Review, 46(4), pp. 22-25.