

Advanced Analytics

Auhor – Vivek Sharma



Introduction

Making rapid, informed decisions is more important than ever in the fast-paced corporate climate of today. But the amount of data that companies provide can be overwhelming, making it difficult to draw conclusions and decide with certainty. Advanced analytics and artificial intelligence (AI) can help with that. Businesses can analyse enormous volumes of data, spot patterns, and trends, and make quicker, more informed decisions that could give them a competitive advantage with the aid of advanced analytics and AI technologies. Businesses today confront the difficult task of processing and analysing vast amounts of data to get insightful information due to the rapid increase of data. The answers to these problems are advanced analytics and AI, which provide organizations with the capacity to make precise and knowledgeable decisions in real time. Businesses may significantly increase operational efficiency, improve customer experience, and spur revenue growth by utilising the potential of these technologies.

Abstract

This whitepaper looks at how advanced analytics and AI may help businesses make decisions more quickly, accurately, and with less uncertainty by giving them the appropriate information at the right time. The whitepaper gives an overview of advanced analytics and AI technologies, their advantages, and examples of how they are being used in different fields. The study examines how these technologies can aid organizations in streamlining their decision-making procedures, enhancing operational effectiveness, and gaining a competitive advantage. The whitepaper also gives instances of successful implementation in the real world and identifies implementation factors for companies wishing to use advanced analytics and AI. The paper offers solutions to the problems and shows how firms can use these solutions in their day-to-day operations. This whitepaper illustrates the potential use of advanced analytics and AI to alter businesses and open up new development prospects through real-world examples and use cases.

Overview

Since businesses face increased pressure to make quick and informed decisions, advanced analytics and artificial intelligence (AI) technologies are emerging as a powerful solution. This whitepaper digs into these technologies' capabilities and their capacity to provide fast and precise information that can minimise uncertainty and enhance better decision-making.

The article presents an overview of advanced analytics and artificial intelligence (AI), demonstrating the benefits they provide to businesses in a variety of industries. It contains instances of how these technologies have been applied in the real world to increase operational efficiency, improve customer experiences, and drive revenue development.

Businesses can obtain greater insights into their operations, customers, and market trends by employing sophisticated analytics and AI. This enables them to make more informed decisions and respond to changing conditions more swiftly. As a result, you'll have more adaptability, better performance, and a competitive advantage in the market. Ultimately, this whitepaper demonstrates how advanced analytics and AI can help businesses make faster, more informed, more precise decisions.

Business Case

To stay ahead of the competition in today's highly competitive business environment, firms must be able to make quick and intelligent judgements. With so much data available, however, it can be difficult to filter through and extract significant insights. Here is where advanced analytics and AI technology can truly emerge.

Businesses can quickly and accurately analyse enormous volumes of data using advanced analytics and AI to reveal patterns, trends, and insights that would be difficult or impossible to identify through manual examination. These technologies can also help firms make better informed judgements and take action faster by automating repetitive operations and identifying opportunities for improvement.

As a result, companies can obtain the correct information at the right moment, which reduces ambiguity and improves decision-making. This can result in more efficiency, better client experiences, and higher revenue growth.

Overall, advanced analytics and AI technologies are critical tools for firms seeking to remain ahead of the competition and make informed real-time decisions. Companies who use these technologies can acquire useful insights and gain a competitive advantage in the market.

Problem Statement

Companies are overwhelmed with vast volumes of data in today's digital world, which can be overwhelming and difficult to make sense of. Conventional data analysis approaches may be unable to keep up with the volume and complexity of data available. To achieve a competitive advantage, organisations must employ advanced analytics and AI technology. Organizations that use these technologies can make faster, more informed, more precise decisions, reducing uncertainty by giving the correct information at the right time.

Proposed Solution

Companies can use advanced analytics and AI systems that enable real-time processing and evaluation of enormous volumes of data to make faster, more knowledgeable, and precise decisions. Machine learning algorithms, for example, can recognise patterns and anticipate outcomes, whereas natural language processing and sentiment analysis technologies can extract insights from unstructured data such as consumer comments and social media posts. Dashboards, a type of business intelligence and data visualisation tool, can be used to provide key indicators of performance and other relevant metrics to decision-makers.

Using these technologies, on the other hand, necessitates a thorough strategy that matches with company objectives, significant investment in technology and infrastructure, and a culture that supports innovation and experimentation. Businesses must also guarantee that they have the requisite skills and ability to successfully use and manage these tools. Businesses can gain a competitive advantage and promote revenue development by integrating advanced analytics and AI.

Introduction of Solution(s)

Use of advanced analytics and AI technology is central to the offered solutions for making faster, more informed, and precise judgements. These tools allow businesses to efficiently collect and analyse massive amounts of data, resulting in important insights that can be utilised to improve decision-making.

Machine learning algorithms can be used to find patterns and anticipate outcomes, natural language processing and sentiment analysis can be used to extract insights from unstructured data, and business intelligence and data visualisation tools can be used to communicate crucial metrics to decision-makers.

The benefits of implementing these solutions include increased operational efficiency, improved customer experience, and a competitive advantage in the market.

Application of Solution(s)

Advance analytics and artificial intelligence (AI) technology can be used in a variety of corporate domains, including sales and marketing, customer service, supply chain management, and operations. Businesses can uncover consumer needs, preferences, and behaviour patterns by analysing customer data, resulting in more tailored customer experiences and higher retention rates.

Advanced analytics and artificial intelligence (AI) can also be utilised to improve supply chain management by identifying bottlenecks and optimising procedures. These technologies can also help firms make better decisions by giving real-time insights and allowing them to respond rapidly to changing market conditions. Data analytics methodology that uses predictive modelling, machine learning algorithms, deep learning, business process automation and other statistical methods to analyze business information from a variety of data sources.

Future/Long-Term Focus

The future of advanced analytics and AI technologies is bright, with ongoing increase in their usage across industries. These technologies are fast changing, and additional applications are constantly being discovered. To fully realise the potential of new technologies, organisations must focus on developing a culture of innovation and experimentation. Furthermore, businesses must invest in upskilling their personnel to ensure that they have the essential abilities to properly work with advanced analytics and AI technologies.

Conclusion

Businesses may use advanced analytics and AI technologies to extract useful insights from massive volumes of data and make informed decisions in real time. These technologies have the ability to alter businesses by enhancing operational efficiency, increasing customer satisfaction, and driving revenue growth. A comprehensive plan, investment in technology, and a culture of creativity and experimentation are required for successful deployment of these technologies. Organizations can obtain a competitive advantage and survive in today's fast-paced business climate by embracing these technologies

Appendix A

Scenarios: This appendix contains a list of scenarios in which advanced analytics and AI technologies can be used to solve business problems. These scenarios are not exhaustive and are provided as illustrations of the potential of certain technologies.

- Segmentation and targeting of customers

- Optimization of the supply chain
- Predictive maintenance
- Detection and prevention of fraud
- Social media monitoring and sentiment analysis
- Churn forecast and prevention
- Credit risk evaluation
- Forecasting sales
- Predictive hiring
- Quality assurance and fault prediction

Appendix B

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