

AI A TOOL REVOLUTIONIZING DECISION MAKING

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ABSTRACT:

In the commercial sector, artificial intelligence (AI) is a rapidly expanding field that is receiving increased attention. Artificial intelligence is already being used in many facets of business and daily life. Utilising AI in business might compel the sector to depend on more effective, economical, and focused marketing techniques. By integrating AI into business strategy, a business owner may increase audience reaction and get a major competitive advantage over competing online enterprises. It can use creative ideas to reorganise a business in addition to advertising. Moreover, it provides solutions for complicated problems, which promotes outstanding business growth.

Moreover, it provides solutions for complicated problems, which promotes outstanding business growth. Because of the number of data being provided today and an excess of information brought about by the enormous amount of data growing to the size of big data, business intelligence (BI) appears to no longer be practicable to track any every day physical locations of organisations. It is getting harder to evaluate the massive amounts of data that comprise the data in a way that would allow us to classify it as real-time, or rapidly enough to offer a viable approach for making decisions. This technique was once known as business intelligence. The study looked at 204 individuals in a variety of professional fields to find out what elements influence artificial intelligence's role in business intelligence and decision-making. The research finds that numerous factors—such as productivity growth, problem resolution, efficiency and automation, and decision-making—determine the function of artificial intelligence in business intelligence and decision-making.

Keywords: Business Intelligence, Decision Making, AI, Artificial Intelligence.

INTRODUCTION:

It is now evident that throughout the COVID-19 pandemic, socioeconomic, political, and socio-technical developments have all advanced quickly. In these difficult times, modern organizations have had to refine their adaptive skills to handle shifting market dynamics and customer behavior. Adaptable capabilities, which serve as the foundation for organizational change and digital transformation, enable rapid organization growth. However, to keep pace through the increasing pace of modern technology, adaptable capabilities still require strategic guidelines. Modern technology is used by established companies to enhance and modify their operations. Among the technologies in question is artificial intelligence, which is sometimes referred to as the following wave of analytics.

The term "artificial intelligence" encompasses a broad spectrum of cutting-edge data analysis, programs, and logic-based techniques that mimic human decision-making, behaviour, and cognitive functions which includes the ability to learn and solve problems. Nevertheless, AI technologies provide organisations several opportunities to alter how they operate throughout multiple industries as a component of the digital transformation. Employing AI-driven making choices to sales, financing, or loan projections is one example. Furthermore, AI may be extremely beneficial by eliminating previously manual operations and allowing improved processes where people and AI work together positively.

According to a new Gartner survey, senior executives see analytics and artificial intelligence (AI) as critical game changers that help organisations survive the current crisis. Notwithstanding the enthusiasm surrounding AI's potential, there is now a significant academic debate over the barriers to adoption as well as the competencies needed for strategic AI outcomes that are beneficial. Businesses may gain a great deal from AI, but in order to use AI and enable a high effect that does not reverse all of the costs and efforts, organisations must create a compelling shared vision when a big change is required. Furthermore, companies need to employ a variety of cutting-edge technologies, including artificial intelligence (AI), to develop adaptive transformation and sense-and-respond capabilities that will foster innovation, increase customer satisfaction and experience, and advance better performance.

Research on information systems (IS) and business conducted by academic and professional organisations suggests that artificial intelligence is becoming more and more popular. The field of artificial intelligence has seen steady advancements in research since the 1950s, when the concept was initially proposed. However, due to the increasing availability of massive data, increased computer power, and innovative AI methodologies, learning algorithms, and applications, the research and practical application of AI have significantly accelerated during the past 10 to 15 years.

AI is becoming more and more prevalent in many areas of society, including as marketing, healthcare, and human rights. Allowing the development of AI applications to continue unchecked might be harmful. Therefore, it is imperative to promote a trustworthy AI that respects moral principles and conforms with legal criteria (both technically and socially). Governance of AI should therefore extend beyond content to include its analysis, as AI should be seen as a dynamic computational frontier. In addition to IT and data governance, governance procedures for analytics are also necessary to handle challenges like the misalignment between business users and analytics practitioners.

While many organisations are currently experimenting with AI (e.g., utilising first pilots), relatively few organisations have integrated AI into their daily operations, despite the fact that other researchers share this viewpoint. Despite this, businesses have made significant investments in AI and the underlying machine learning algorithms in order to improve operations and facilitate decision-making. As was previously said, organisations now face new challenges in addition to new chances and advantages brought about by technology like artificial intelligence. Businesses are putting AI technologies into practice and using them to automate procedures, increase output, reduce expenses, and get a competitive advantage over competitors. In order to achieve these goals, AI governance is essential.

Butcher and Beridze assert that AI governance "may be characterised as a collection of tools, methods, and levers that influence AI development and applications." Still, there is room for more study on the use of AI governance in the workplace and how it aids in the accomplishment of organisational goals.

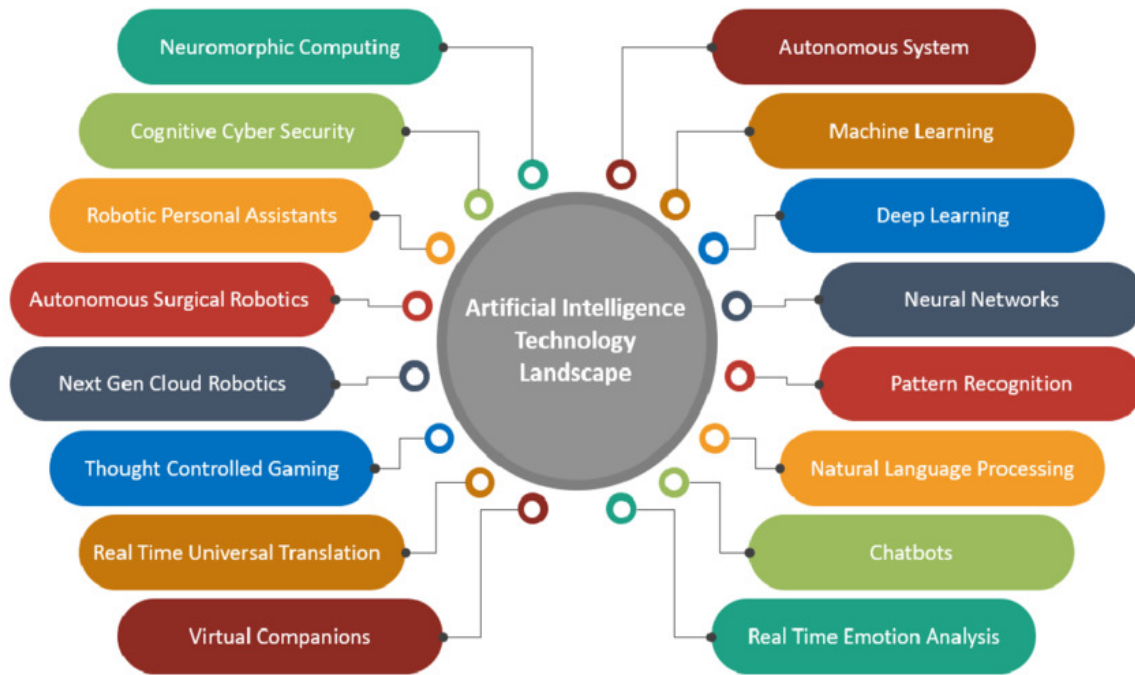
Thanks to the IS literature, we know that firms use and integrate a range of complementary firm-level resources to create unique, hard-to-copy capabilities. Building on this body of work, this study sees AI technology as one such resource that is insufficient on its own but crucial for the creation of an AI capacity.

This basically means that even while AI techniques are easily replicable and easily accessible in the market, they are not expected to produce appreciable competitive advantages on their own. Furthermore, the data required for these techniques alone won't be sufficient to create unique AI capabilities. According to early assessments from industry experts in AI adoption, in order to set up an AI capacity that can truly create value by setting an organisation apart from rivals, an organisation needs a unique combination of organisational, human, and physical resources. There is a dearth of thorough theoretical and experimentally supported understanding about how to significantly enhance and apply AI capabilities.

Adaptive transformation capability, as described by van de Wetering et al., is the capacity of an organisation to identify and capitalise on new technical and market possibilities as well as to build organisational capacities in tandem with the adoption of new strategic orientations. The capacity to dynamically allocate organisational resources and competences to achieve the desired result and propel the organization's future entrepreneurial endeavours and commercial value potential is another way to conceptualise this aptitude. But little is now understood about how ambidextrous AI may be used, how

businesses can use it regularly and innovatively, how this enhances dynamic skills, and especially how they collaborate to create value.

Even though more businesses are utilising AI these days to enhance and modify organisational processes, there is a dearth of data that is both theoretically and empirically supported to support organisations in their strategic direction. Therefore, in order to address this research problem in the previously mentioned connection, the main objective of this paper is to highlight important aspects of how artificial intelligence capabilities contribute to various perspectives on the business value realised through the alignment of business and IT strategies during the digital transformation. Following an analysis via the Webster and Watson approach, 139 sources were looked at in total. Due to AI's constant change and the need to carefully analyse all of its many value aspects, businesses everywhere are finding it difficult to integrate. As artificial intelligence (AI) advances from simple algorithms to



revolutionary super intelligence and beyond, it is imperative to stay abreast of the latest research on the enhanced business value outcomes generated by the deployment of AI in the various modalities of digital transformation.

Fig 1: AI Technology Landscape

The integration of AI with business and IT initiatives within the framework of digital transformation is the subject of this study. The study discovered that technological advancements and regulatory changes frequently cause organisations to go through a digital transformation. It also discovered that integrating AI capabilities with business and IT strategies is essential to achieving better business value outcomes and facilitating digital transformation alignment. The report also emphasised the necessity of responsible AI governance, the use of AI to enable adaptive transformation, and the significance of having a dual strategy focus on regular and creative AI deployment. The study's conclusions advance our knowledge of how businesses may best leverage AI to foster value realisation and strategic flexibility.

Recent papers on use of AI in Decision Making

According to Buntak et al. (2021), AI technology may be a part of any of these systems that have powerful computational capabilities. These are a few noteworthy instances illustrating the variety of topics and artificial intelligence methods covered in recently launched IDSS apps. It is evident that the applications—which include those for clinical and professional decision-making—have to do with choices that have an impact on people's lives and are beneficial. However, among the many applications are standard tasks like fixing the electrical system and handling crises. These systems can't operate intelligently or support human decision-making without AI technology. While there is scholarly documentation on additional AI approaches, we will focus on three of the most significant ones: Artificial Neural Networks, Fuzzy Logic, Simulated Annealing, and Intelligent Agents.

According to Zohuri (2020), despite the fact that the term "artificial intelligence" is becoming more widely used, its definition is still unclear. Artificial intelligence (AI) is the process of imbuing computers with cognition, or the capacity to reason independently and respond rationally to their environment. Technically speaking, artificial intelligence is the integration of virtualized environments, network devices, computers, robotics, and digital content production with diverse business operations, systems, and procedures. Artificial intelligence is being used by computers now and will be used in the future. Plans for marketing in the future must take artificial intelligence's development and expansion into account. AI software is frequently used in business to automate procedures, save expenses, increase productivity, and speed up reaction times.

According to research by Barnea (2020), artificial intelligence (AI) is playing an increasingly important role in both the marketing and advertising sectors of the current digital world. "Artificial intelligence is transforming industries one by one, from Google AI, which can learn online games in a matter of hours, to Tesla's self-driving cars and the witty and intelligent Siri." Using automated virtual assistants to improve customer experience, recognising graphs and charts to reduce market risks, or even searching through millions of data files on various servers throughout an enterprise to locate compliance issues are just a few applications for artificial intelligence (AI) technology. But businesses have only just started to realise the potential that artificial intelligence (AI) and machine learning may provide for tomorrow's workforce.

Through the use of techniques like data collecting, pattern recognition, and natural language processing, artificial intelligence leverages self-learning systems. Given its inherent economic benefits over human intelligence, artificial intelligence is therefore far more scalable and yields significantly lower costs. Additionally, artificial intelligence and rule-based programming's consistency helps businesses reduce mistakes. Because of its robustness, frequent updates, and capacity to log operations, it offers advantageous business opportunities.

Artificial intelligence applications make use of robotics, computer vision, speech recognition, machine learning, and natural language processing technologies, according to Vizgaitytè&Skyrius (2012). These technologies provide a number of business opportunities. Deep learning is one of machine learning's branches and a means of comprehending machine learning, which may be used to create artificial intelligence. Deep learning places a strong emphasis on algorithms designed to mimic the structure and functions of the nervous system. Like every other business, marketing has been profoundly influenced by and will continue to be impacted by the usage of cutting-edge information.

Importance of AI in Decision Making

When it comes to making data-driven decisions, AI may be quite helpful, offering advantages like:

- **Improved precision:** Artificial intelligence (AI) may reduce the possibility of bias and human mistake by using sophisticated algorithms, data science, and analysis to consistently produce accurate and impartial findings.
- **Quicker decision-making:** AI is capable of processing enormous volumes of data at incredibly fast speeds, allowing for prompt analysis and real-time insight generation.

- **Quicker and more effective decision-making procedures:** particularly when several process components can be automated.
- **Increased effectiveness:** Artificial Intelligence (AI) streamlines repetitive and time-consuming activities in decision-making processes, freeing up valuable human resources to concentrate on more strategic and difficult issues.
- **Improved evaluation and reduction of risks:** AI can evaluate and analyse a wide range of risk indicators, assisting decision-makers in identifying possible hazards and creating efficient mitigation plans.
- **Insights based on data:** AI uses vast amounts of data to find connections, patterns, and trends that people would miss. Although it might be difficult to understand data, you can make the process easier by using AI computer science in your study.

AI's weaknesses in decision-making

Even if many data scientists are seeing a quick transformation in their decision-making process thanks to AI, there are still some issues that need to be resolved. Be mindful of the potential problems listed below:

- **Dependability and quality of data:** AI's ability to make decisions is strongly reliant on accurate and trustworthy data. Dealing with partial, erroneous, or biased data presents difficulties since it can provide deceptive results known as hallucinations or faulty insights and conclusions.
- **Absence of context and human understanding:** To generate outputs that its algorithms anticipate from its training data, artificial intelligence (AI) employs sophisticated algorithms to inputs and data. However, it is unable of comprehending the subjective elements and context that influence decision-making since it lacks the subtleties of human comprehension.
- **Moral issues:** Artificial intelligence (AI) decision-making systems may give rise to ethical questions, especially with privacy, justice, accountability, and openness.
- **Both explainability and interpretability:** Deep learning neural networks are one example of an AI system that may be extremely sophisticated and challenging to understand. The opaque nature of the data these systems utilise to make choices may make it difficult for users to trust AI systems because of their lack of interpretability.
- **Decision bias and over-reliance:** Without sufficient human monitoring, depending only on AI systems to make decisions might result in overconfidence and possible biases. Striking the correct balance between human judgement and AI support is necessary to prevent over-reliance or duty abdication.

Types of AI used in decision-making

Artificial Intelligence has several forms. Furthermore, although the overall mechanism of automated technology doing a sequence of tasks is constant, the specifics of how and why this occurs will differ. Here are a few instances of many forms of artificial intelligence that you may encounter.

1. Deep Learning

This more comprehensive method, which is a development of machine learning, involves programming artificial intelligence (AI) to recognise text, pictures, and sounds without the

assistance of a person. Deep learning allows AI to interpret and comprehend images on its own, whereas machine learning may require you to physically explain them.

2. Natural Language Processing (NLP)

You have engaged with natural language processing (NLP) if you have ever spoken to Alexa, Siri, or any other virtual assistant. This technology has the ability to understand, alter, and produce human language in a way that gives it a unique "voice." When you ask NLP a question, it can comprehend it and react appropriately. It may also be utilised in text format, such in a website chatbot.

3. Computer vision

Computers can now perceive and analyse the human world by classifying items and photos thanks to this futuristic technology. It enables an AI to perceive the world through the eyes of a living being in this way. This type of technology is most frequently linked to autonomous automobiles, because the car must be able to see its surroundings much like a traditional driver would.

4. Machine Learning

Using a variety of data and algorithms, this AI method creates an image of how a person might handle a job or circumstance. The programme may adjust and even learn more about how people think over time, which enhances its overall accuracy.

5. Generative AI

Generative artificial intelligence (AI) is the term for technology that can autonomously produce text, pictures, and other media in 2023. To develop something comparable, a user only needs to input the desired content, and the AI will utilise the input training to generate the desired result.

6. Recognition of Speech

One of the earliest examples of artificial intelligence, this technology can translate spoken words into text or audio after understanding and interpreting them. This type of technology is sometimes mistaken with voice recognition, which can only identify the user's voice and cannot translate what they say.

7. Robotic Process Automation (RPA)

Software known as RPA technology makes it simpler to design, implement, and oversee robots that mimic human communication. The robotic assistants can do a variety of duties digitally and faster than humans could ever hope to.

AI methods and models

AIs may exist in a wide variety of ways, and they can also learn, adapt, and change using a wide range of techniques. The productivity and output of a robotic assistant will be significantly impacted by the model or method employed in these situations.

1. Supervised instruction:

Since the data in this hands-on technique is manually entered into an AI software system, a human component is necessary. In order to determine whether the virtual assistant is successfully digesting and learning the data being input into the model, the output is cross-checked with previously collected data.

2. Unsupervised education:

On the other hand, this kind of learning approach enables AI to develop and make decisions on its own. Although this allows businesses more time to concentrate on their own work, there is a chance that AI will wander down a rabbit hole that wasn't intended.

3. Learning with semi-supervision

Small amounts of labelled data are used in conjunction with a larger sample of unlabelled data in semi-supervised learning. This enables an AI to learn primarily on its own with the help of a human inputter acting as a guide. This method is viewed by some as the ideal compromise between supervised and unsupervised learning.

4. Learning transfer

Pre-trained models are utilised once again and incorporated into a fresh approach to AI learning in these situations. It attempts to discover a solution by applying information from a prior work to a comparable but somewhat different assignment. For instance, knowing anything from activity A might come in helpful while doing job B.

What role does AI play in decision-making?

We'll go over a few examples of how people and businesses are already utilising AI to make decisions below. You'll discover how your management team may use AI techniques and solutions to improve decision-making as you think through these applications.

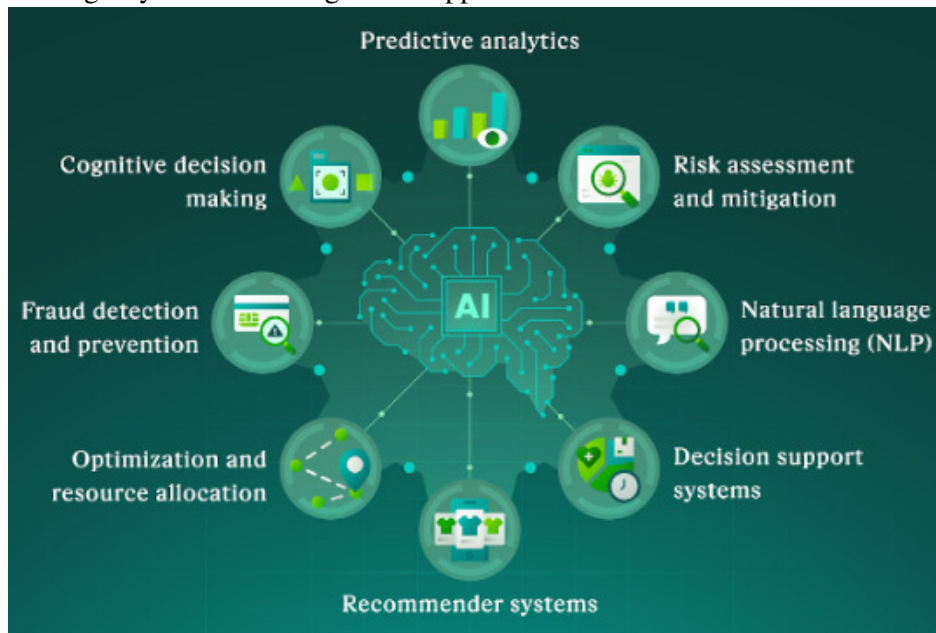


Fig 2: AI role in decision-making

1. Analytics that predict

Predictive analytics is a tool used by AI to examine past data, spot trends, and provide precise forecasts. Predictive analytics essentially assists in providing solutions to queries regarding potential future events. Businesses will have access to bigger data sets as big data platforms expand, which should improve the precision of predictive analytics. Decision-makers in a variety of fields, including demand planning and sales forecasting, may be proactive by using predictive analytics to foresee future events. Predictive analytics teaches you how to create predictive models, reprocess data, and identify the challenges and concerns that your business confronts more clearly.

Regression analysis is a widely used type of predictive analysis. The study of the connection between two or more variables is known as regression analysis. With this information; you may make predictions about what would happen if you alter a certain section or variable in the equation. There are several varieties of predictive analytics. Predictive analytics is useful not just for imagining what the future could hold, but also for understanding the past and the sequence of events that led to a certain outcome. Equipment maintenance management is one area where predictive analytics is used in a very real-world setting. Utilising real-time process measurements, operating schedules, and historical breakdown analysis, one may ascertain the most economical periods to stop equipment for required repair.

2. Evaluation and reduction of risks

To make sure a business is aware of and safeguarded against any dangers, risk assessment requires meticulous planning and a lot of work. Proper data analysis is essential to effective risk management; if inadequate or erroneous data is employed, problems may arise.

AI systems are capable of evaluating and analysing intricate risk aspects, such cybersecurity risks or credit risk. An AI-powered tool is a terrific approach to help businesses anticipate future dangers and prepare their reaction since it can swiftly analyse massive data sets and discover abnormalities.

Decision-makers may minimise any negative effects by using this data to evaluate risks, identify vulnerabilities, and develop efficient mitigation solutions. AI solutions may help risk managers and auditors make sure they are using more data than simply the proof they have independently found. Banks can avoid fraud by using risk AI assessment and mitigation. This strategy can be used by health care systems to avoid population epidemics or diseases unique to individual patients.

3. Natural language processing (NLP):

The capacity of a computer to automatically analyse and process words in a conversational fashion is known as natural language processing, or NLP. NLP is used by conversational chatbots, such ChatGPT, to interpret human inquiries and prompts and provide a logical answer. Artificial intelligence (AI) systems can now analyse human language more easily thanks to natural language processing (NLP) techniques. Examples of these applications include sentiment analysis, contract assessment, and customer feedback analysis.

The following are some of the primary ways that NLP may support decision-making:

- **Sentiment evaluation:** Not only can natural language processing (NLP) analyse the content being provided, but it may also shed light on the sentiment, or emotional tone, of textual documents and data.

- **Text categorization:** Text may be sorted using NLP into predetermined classes or labels. This can assist you in classifying a lot of data into pre-established categories, which will make the data easier to use and comprehend.
- **Information gathering:** When making decisions, you may more effectively spot trends and patterns by extracting pertinent information.
- **Summarization:** NLP can assist you in distilling lengthy papers into concise summaries so you can obtain the pertinent details without having to read the entire thing.
- **Responding to inquiries:** NLP systems may be used to swiftly locate answers by answering inquiries about a variety of texts and datasets.

This strategy is already being used by marketing companies to manage campaigns across channels and maximise income. These generative AI tools may be used by people to make a variety of decisions, including choosing who to vote for, organising vacations, and even putting together dinners using the items that are on hand.

4. Systems for supporting decisions:

AI-driven decision support systems help decision makers in a variety of fields, such as supply chain management, logistics, and healthcare, by giving them timely access to pertinent information, data analysis, and insights. To get insights and access real-time information, these systems leverage operational data and machine learning algorithms. Systems must be able to analyse and process data fast and reliably since this requires continuous data processing.

But as was already noted, in order to make sure that the data being used is reliable and correct, critical thinking is required. Verify that you are OK with the system's data collection methods and its utilisation of all relevant data to validate results.

5. Systems that recommend:

To provide individualised suggestions, recommender systems powered by artificial intelligence examine contextual data, past behaviour, and user preferences. These systems employ big data analysis to examine pertinent data, including demographics, historical purchasing history and other elements that assist businesses in understanding their clientele's preferences.

This method is advantageous as it provides information that businesses would not have discovered on their own. Decision-makers in fields like content recommendations, product recommendations, and personalised marketing campaigns may utilise the data to better target their campaigns and ads to the individual preferences of their target audience. Currently, Netflix's algorithm incorporates a recommender system. The website makes predictions about what could interest you in the future based on the watching habits of users who are similar to you. This technique is designed to save you time and hassle while you're trying to decide what to watch next.

6. Allocation of resources and optimisation:

AI optimisation algorithms help decision makers tackle difficult optimisation issues and distribute resources and processes more effectively. This can be useful for planning routes, optimising the supply chain, and scheduling workers. Teams may more effectively manage their resources by using AI to swiftly analyse performance, utilisation, and availability. You may use

this data to spot any bottlenecks and make sure everyone in the team is focusing on the most crucial tasks.

AI is being used by a lot of supply chain managers to enhance route optimisation. By entering a list of stops, they may automatically generate the routes that will be the most efficient for their drivers. The algorithm will decide which routes would be the most economical and efficient by taking into account variables like traffic and customer demand.

7. Identification and prevention of fraud:

Large data sets may be analysed by AI algorithms, which can also identify trends and abnormalities linked to fraudulent activity. The results can help decision-makers prevent and detect fraud, minimising losses and safeguarding customers and companies.

American Express is one example of a company that is now using AI to create a system that can analyse billions of transactions in real time and spot patterns of fraudulent activity. This technology uses big data analytics and machine learning algorithms to efficiently identify any fraudulent transactions.

8. Making decisions with thought:

Artificial intelligence (AI) technologies, such machine learning and cognitive computing, can help with decision-making by analysing large volumes of data, identifying trends, and suggesting the best course of action. In difficult situations, like medical diagnosis or strategic planning, this can assist decision makers.

Recall that rather than completely replacing human decision-making, this information should be utilised to inform it. Although AI-generated data can be useful, it occasionally contains mistakes or fallacies. The results generated by AI should be assessed by human judgement to make sure there are no potential mistakes or inaccuracies.

AI in Pharma Industry

The function of artificial intelligence (AI) in the pharmaceutical industry is crucial because of its extensive applicability at different stages of the process. It is clear that artificial intelligence has an impact on every phase of the pharmaceutical product lifecycle, from medication development to product management. AI-based quantitative structure–activity relationship (QSRL) technologies, QSLRML, virtual screening (VS), support vector machines (SVMs), deep virtual screening, deep neural networks (DNNs), recurrent neural networks (RNNs), machine learning (ML), deep learning, and so on are some of the algorithms used in drug discovery. Artificial intelligence (AI) neural networks are inspired by biological neural networks, which analyse input data and provide an output after processing it. Artificial neural networks (ANN) process information by connecting several units.

1. AI in manufacturing decision making

Perhaps the first industry that springs to mind when discussing AI and process control is manufacturing. AI may assist with streamlining procedures that need several personnel, such as quality control and maintenance specialists.

Artificial intelligence (AI) technologies can handle the most complex functions, maximising output. It guarantees that work will be completed with extreme precision. In addition to producing excellent work, it may assess the procedures, identify their weak points, enhance decision-making, and identify possibilities for process simplification.

2. AI in Drug Development and Discovery decision making

For any pharmaceutical business, medication research and development is a costly and competitive process. It is heavily reliant on large-scale scientific and research databases as well as data science. New compound discovery in the pharmaceutical industry is accelerated by machine learning. AI is capable of doing research and cross-referencing existing scientific information with other sources, such as clinical trial findings, in order to create new successful treatment approaches for uncommon diseases and produce novel medications.

In the process of finding new drugs, pharmaceutical companies have to perform research and drug trials since any new medication needs to be licenced before it can be consumed. Artificial intelligence is being used in the pharmaceutical sector to assure high standards in the drug development process and value chain by performing and automating the QA process.

3. Help with Diagnosis and Tailored Care Decision Making

Artificial intelligence is becoming an indispensable tool in biotech and pharmaceutical industries for illness diagnosis. It allows these industries to handle large amounts of sensitive patient data, use a data-driven strategy, and provide individualised treatment plans based on the most precise calculations and analysis. It is particularly crucial for the diagnosis of uncommon disorders. Physicians now have many more options to provide patients precision treatment and quick, accurate findings from complex medical exams, all thanks to artificial intelligence in pharmacy and healthcare. Tencent, a major Chinese tech company, is another excellent example. They collaborated with the British healthcare company Medopad to develop AI software that cuts the 30-minute diagnosing process for Parkinson's disease in half.

Modern AI systems are capable of managing the organisation and storage of healthcare data in addition to collecting and analysing extremely sensitive information. Sensitive patient data and treatment records are stored in electronic medical records (EMRs), which may be managed and kept safe by a specially trained neural network.

4. Decision Making in Clinical Investigations

Clinical trial design is one of the most important areas that AI impacts. Clinical studies are invariably associated with substantial quantities of diverse data. Every year, clinical trial data gets more complex, making manual data processing more difficult and increasing the possibility of human mistake. This is where AI excels at managing massive data arrays.

A lot of pharmaceutical companies depend on AI to help them choose the best candidate for clinical trials. In order to represent the appropriate testing population and carry out a successful medication trial, the system may gather and process data such as current diseases of the targeted audience, demographic details, rate of infection, and other overlapping characteristics. It greatly enhances repurposing possibilities and medication adherence.

5. Decision Making in Operations for Content

Large-scale content management in the pharmaceutical and biological sciences has been revolutionised by artificial intelligence. In order to optimise all aspect of content operations—including creation, administration, editing, planning, localization, search, and delivery—companies of all sizes, ranging from tiny agencies to large corporations, are now investigating and using AI in the pharmaceutical sector.

At Viseven, we've combined a number of pharmaceutical machine learning capabilities with the eWizard content experience platform to assist clients in optimising their content production processes and cutting down on the resources required for extensive content marketing across several global marketplaces. Businesses can swiftly locate the necessary material in massive

databases, turn audio into text, translate text immediately, and provide personalised content to the appropriate consumer on the right platform at the right time using eWizard.

Conclusion:

Artificial intelligence is revolutionising the way corporations make choices. By using AI systems' capacity to analyse large amounts of data and produce predictions and recommendations based on that data, businesses may be able to make better decisions. In the end, artificial intelligence (AI) has the potential to completely transform business decision-making by providing faster and more accurate insights that can inform both tactical and strategic decisions. Companies must ensure AI is used ethically and transparently to reduce unintended consequences and maintain customer confidence. Without a doubt, the future of decision-making for consumers and companies will involve the usage of AI. Technology provides a plethora of possibilities and an easy way to make business decisions. AI is a really intelligent device. It uses big data and data mining to help it make judgements. The paper argues that AI is a very dynamic tool that is useful for decision-making, rejecting the notion that it would eventually replace humans.

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