iJRASET
International Journal For Research in Applied Science and Engineering Technology

INTERNATIONAL JOURNAL FOR RESEARCH

IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY

Volume: 9 **Issue:** V **Month of publication:** May 2021

DOI: https://doi.org/10.22214/ijraset.2021.34036

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International Journal for Research in Applied Science & Engineering Technology (IJRASET)
ISSN: 2321-9653; IC Value: 45.98; SJ Impact Factor: 7.429
Volume 9 Issue V May 2021- Available at www.ijraset.com

Artificial Intelligence: The Technology that Changes Business

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Abstract: ***In this modern technological era Artificial intelligence (AI) is rapidly acquiring tech industry. AI takes a leading role in conferences and demonstrates the potential for a good type of industry, including manufacturing and marketing. New gadgets are embedded with visual assistants, while interviews answer people's questions on everything from an online office provider site to a web hosting service support page. For the enterprises, functional AI applications can display all sorts of informed methods of calculation for organizational needs, therefore the business understanding is derived from the information that is collected. Most of the enterprises use AI for everything from mining social data to drive insights in Customer Relationship Management (CRM) and used to improve efficiency tracking and managing assets. In this paper a brief study of how AI changes the business is presented by considering some practices of AI in Businesses, followed by few applications of AI, benefits of AI and lastly the future challenges to be faced by AI.***

Keywords: Artificial intelligence, business management, multinational corporations, technological advancements.

I. INTRODUCTION

Artificial Intelligence (AI) is the complex technology. There are several definitions and many more concepts of what includes AI. The emerging technology in the world like Internet of Things (IOT), data analytics, big data, cloud networking, block chain and AI are changing the way life, work and entertainment by adopting AI. Essentially, AI development is increasingly growing, wherein it has improved performance than all other technologies and is emerging in Industry 4.0. These technological advances, as AI claims, could aid in human-machine communication, change the mind set of business models, and change the way a person lives and values. The adoption of AI leads to a clever and creative world. Few examples of AI technology that simplifies our lives are route and street maps, price predictor by Uber, friend's tag suggestions on Facebook, spam filters in our email, online shopping recommendations and cancer detection. The incredible speed of AI entering all sectors and is forcing all the companies to enter the race in this technological evolution, and make their company an AI company. This also suggests businesses, strategists, pioneers, entrepreneurs and researchers to use AI to build new strategies and create new business value resources.

In this dynamic development of Artificial Intelligence (AI) technology, companies from emerging markets have begun to accept AI systems to grow their product and also found the ways to grow their business. Developing nations such as china see a high trend in the use of AI. This dynamic development of Machine Learning (ML) and deep learning has produced significant steps in using computer textual analysis and Natural Language Processing (NLP), laying the foundations for business AI applications. AI is ready to reconstruct many aspects of emerging markets; For example, finance, human resource management, marketing, marketing, business strategy, procurement management, services, marketing, and information systems. As businesses adopt AI solutions, new challenges have arisen in corporate adoption, implementation, integration and implementation of AI in emerging markets. Several psychological studies have addressed AI challenges in services. Technological environments in developing countries are very different from those in developed countries, creating challenges for AI business applications. Let's take look at emerging markets that has adapted AI in this era. This paper is organized as follows, the section 2 briefs about companies using AI in practice, section 3 explains about different applications of AI in business, section 3 tells the benefits of AI in business and finally it is concluded.

II. COMPANIES USING ARTIFICIAL INTELLIGENCE IN PRACTICE

Let's take a look at some of best known Multinational companies using AI in practice:

A. Starbucks

Deep Brew is the AI program for the company, and is about "personality development," at Starbucks. At Starbucks, AI will be surpassing the data which are already in areas such as planning, innovation, and the restaurant route. It will do the planning and installation of things in a straightforward manner, and will be done for each restaurant. Planning and setting up needed jobs, but it's confusing and inconsistent, which is why Starbucks wants to free employees from focusing on them. In a nutshell, Deep Brew is not just about advanced technology, but about Starbucks that brings a better feeling - or "personal enhancement".

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B. Apple

Apple is the largest information technology company in terms of revenue. A California company designs, develops and sells technology products like iPhone, iPad, Mac, Apple Watch, Apple TV, and related software and services. Apple Artificial Intelligence (AI) strategy focuses on their devices, and also in recent years the company has established itself as a pioneer of in-driven AI technology, citing its high security and ability to create unique, user-friendly experiences.

Apple's vision for the future is for powerful portable devices that can use their own learning machine in data sets collected from multiple sensors.

C. Netflix

Netflix is a very successful business right now as most of the world is fighting to be shut down with Netflix viewing shows. The company has added a large number of subscribers, and now has around 195 million worldwide, and puts AI and data at the core of their business plan.

Netflix uses AI and Big Data for it's streaming, so when customer stay's in home, then their broadband speed varies with the Netflix and the customer don't know exactly is that they lose quality.

So, when there is no predictive speed at various times and this will be automatically used by their machine learning algorithms to find out which movies people might want to watch and want to download from the regional server to make it faster to download to your house or not.

One of the coolest sites Netflix currently uses for AI, is in their pre-production, especially to find a movie shooting location, for example, therefore artificial intelligence tools will look at things like the characters in their availability.

D. Harley Davidson

In Harley-Davidson's case, the AI tool, Albert, drove cars to the shops by making roads, described as customers expressing interest in talking to a dealer by filling out a form on the merchant's website.

Harley-Davidson provided with visuals, as well as key performance objectives, Albert began by analysing existing customer data from Jacob's Customer Relationship Management (CRM) system to distinguish high-level customer characteristics and behaviours: those who may have completed the purchase, would add an item online shopping, viewing website content, or within 25% of the time spent on a website. AI can determine how much, and where, a business should spend, to produce the best results.

E. BMW

Thanks to Artificial Intelligence (AI), data analytics, and other cutting-edge technology BMW is able to build modern cars while at the same time contemplating and completing future cars.

These AI-cars of the near future will drive them, rather than relying on human drivers. All the major car manufacturers are holding their claim to a non-driving future, but BMW has done it with more confidence than most. It has stated that its goal is for its vehicles to gain full independence at level 5 by 2021.

III. APPLICATIONS OF AI IN BUSINESS

Artificial Intelligence (AI) can be used in business in the following ways:

A. *Improves People Services*: Like use visual support interfaces to provide all time help to customers.
B. *Change Workload*: Like collecting and analysing dataset from sensors by using machine learning algorithms to separate works, automated router applications, etc.
C. *Improve Asset Performance*: Like using AI-enabled visualization tools to inspect and improve the infrastructure, route planning, etc.
D. *Increases Productivity and Efficiency*: Like automatic productive line by using mechanical robots in the course of the work and teaching them to perform tasks that require more or more labour.
E. *Block Out:* Like using unobtrusive inspection techniques to detect patterns that may disrupt your business, such as the end of IT. Some AI software can also help you detect and prevent security intrusion.
F. *Guess the Character:* Like using Machine Learning algorithms to analyse online behaviour of pattern, for example, product supply, and detection of credit card fraud or targeting relevant ads.

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IV. BENEFITS OF AI

Here are some of the main benefits of AI in businesses:

A. Improved Customer Communication And Cost Savings

AI will surpass other customer service platforms by 2021. AI-driven interviews allow companies to provide 24/7 customer support by automating customer communication, making the experience more personal. Recent advances in NLP allows bots to take on nuances of conversation and better mimic human speech. As per study conducted, the discussion enhances the customer travel, leading to increased people satisfaction and profits. Banks have taken advantage of negotiations have seen decrease in wage and profit by improving the efficiency of offices. For small enterprises with no budget or HR have dedicated a CRM team, AI controlled chat can fill client gaps.

B. Branding Loyalty Is Strengthened By Personalization

More than 60 percent of costumers expect the personalized feeling. This is a challenging task for many enterprises, basically for small ones is that customization takes more time, effort, and money. To bring a customized experience, enterprises usually need to outline individual customer journeys and predict times, also offers will increase engagement and drive sales. Customization requires the ability to anticipate the needs of all customers. This is a big job - one that can be accomplished by artificial intelligence. Products use dataset, like as discussed from previous purchases and communication services, to predict the type of products customers can purchase. This information allows the company to send relevant content and messages to customers. The AI can be used to fully automate this process, like by identifying decision making patterns and creating patterns based on this, and driving AI-trained content is very effective for every individual.

C. Streamlines The Process Of Hiring

Artificial Intelligence can be used to increase efficiency in hiring process. Through the use of automated test analysis systems for candidate applications, like AI increases the election review processes, it also eliminates the human chaos in the first test which is good news for diversity in the workplace. In highly competitive sectors with little ponds of talent, this AI technology reduces the time to fill vacant positions, analysing nominee applicants at the faster rate than people. While PepsiCo needs to complete 250 tasks in two months, they used Robot Vera to make initial interviews. Robot Vera was able to negotiate with 1,500 candidates in nine hours. And it would have taken human workers nine weeks to work on same task.

D. Forecasting Accuracy Has Been Increased

The most common important benefit of AI is the decreasing human caused error. It is one time consumption process that tends to be human error but, it is crucial for business success to predict the cash flows. AI technology also helps an automated businesses to predict the purpose without human intervention. This gives companies greater visibility of their future investments, empowers them to make better decisions and takes steps to achieve targets.

E. AI Unlocks Opportunities

According reports given by the McKinsey, companies using AI is going to increase revenue more than 120% by the year 2030. It is already known that AI is going to increase value for customer service, helps generate revenue and decrease costs. Additional requirements for business development technology seems to be never ending, but it is limited only by people imagination. People need to start with a solid foundation for business foundations for testing management skills, design, staffing or marketing, taking advantage of new AI innovations. EU Business School courses integrate theory and practices, teaching students the skills to use in emerging technologies to continuously improve how business is done.

V. FUTURE OF AI

With the rise in futuristic technologies, AI has become a great solution for businesses which wish to leverage the potential of Artificial Intelligence technology. AI solutions though seem productive and promising, may fail to give return on investment if not implemented appropriately. Before opting for AI app development and seeing its broader picture, the company's need to take a look at the scope of the project and the particular need it fulfils or the problem it caters. The AI should readily integrate with the company's business processes as well. The cost of implementing AI is generally higher than developing regular software and mobile app solutions. Therefore company should hire a team of skilled AI developers, ML experts, and data scientists, which would be a good amount of investment.

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VI. CONCLUSIONS

This research papers suggests that AI has always perform better in various sectors of companies. These AI technologies are great at replacing repetitive tasks in the businesses but also achieves the dynamic improvements when human beings and machines both work together**.** There is a potential for AI to substitute the way that business operates. All that is taken to start is an open minded attitude and willingness to embrace new opportunities wherever and whenever possible. However, as AI is a newly emerging technology, it is changing at a fast pace and may present some unexpected challenges.

REFERENCES

[1] S. Archana Bai, "Artificial intelligence technologies in business and engineering," International Conference on Sustainable Energy and Intelligent Systems (SEISCON 2011), 2011, pp. 856-859, doi: 10.1049/cp.2011.0486.
[2] E. Rich and Kevin Knight. "Artificial intelligence",New Delhi: McGraw-Hill, 1991.
[3] "A Call to Action for Businesses Using AI - Ethically Aligned Design for Business," in A Call to Action for Businesses Using AI - Ethically Aligned Design for Business , vol., no., pp.1-20, 6 April 2020.
[4] V. Muthusamy, A. Slominski and V. Ishakian, "Towards Enterprise-Ready AI Deployments Minimizing the Risk of Consuming AI Models in Business Applications," 2018 First International Conference on Artificial Intelligence for Industries (AI4I), 2018, pp. 108-109, doi: 10.1109/AI4I.2018.8665685.
[5] C. Hahn, T. Traunecker, M. Niever and G. N. Basedow, "Exploring AI-Driven Business Models: Conceptualization and Expectations in the Machinery Industry," 2020 IEEE International Conference on Industrial Engineering and Engineering Management (IEEM), 2020, pp. 567-570, doi: 10.1109/IEEM45057.2020.9309824.
[6] J. Kiruthika and S. Khaddaj, "Impact and Challenges of Using of Virtual Reality & Artificial Intelligence in Businesses," 2017 16th International Symposium on Distributed Computing and Applications to Business, Engineering and Science (DCABES), 2017, pp. 165-168, doi: 10.1109/DCABES.2017.43.
[7] S. R. Hedberg, "AI tools for business-process modeling," in IEEE Expert, vol. 11, no. 4, pp. 13-15, Aug. 1996, doi:10.1109/64.511772.
[8] S. Pereira and D. Karia, "AI Use Cases in Operational Support System and Business Support System," 2018 3rd International Conference on Communication and Electronics Systems (ICCES), 2018, pp. 15-20, doi: 10.1109/CESYS.2018.8724092.
[9] V. Zamudio, P. Zheng and V. Callaghan, "Intelligent Business Process Engineering: An Agent Based Model for Understanding and Managing Business Change," 2012 Eighth International Conference on Intelligent Environments, 2012, pp. 141-148, doi: 10.1109/IE.2012.59.
[10] J. Lu, "Artificial Intelligence and Business Innovation," 2020 International Conference on E-Commerce and Internet Technology (ECIT), 2020, pp. 237-240, doi: 10.1109/ECIT50008.2020.00061.
[11] EU business school, 13 March 2020, <https://www.euruni.edu/blog/benefits-ai-business/>.
[12] About Artificial Intelligence, <https://www.emeraldgrouppublishing.com/>.

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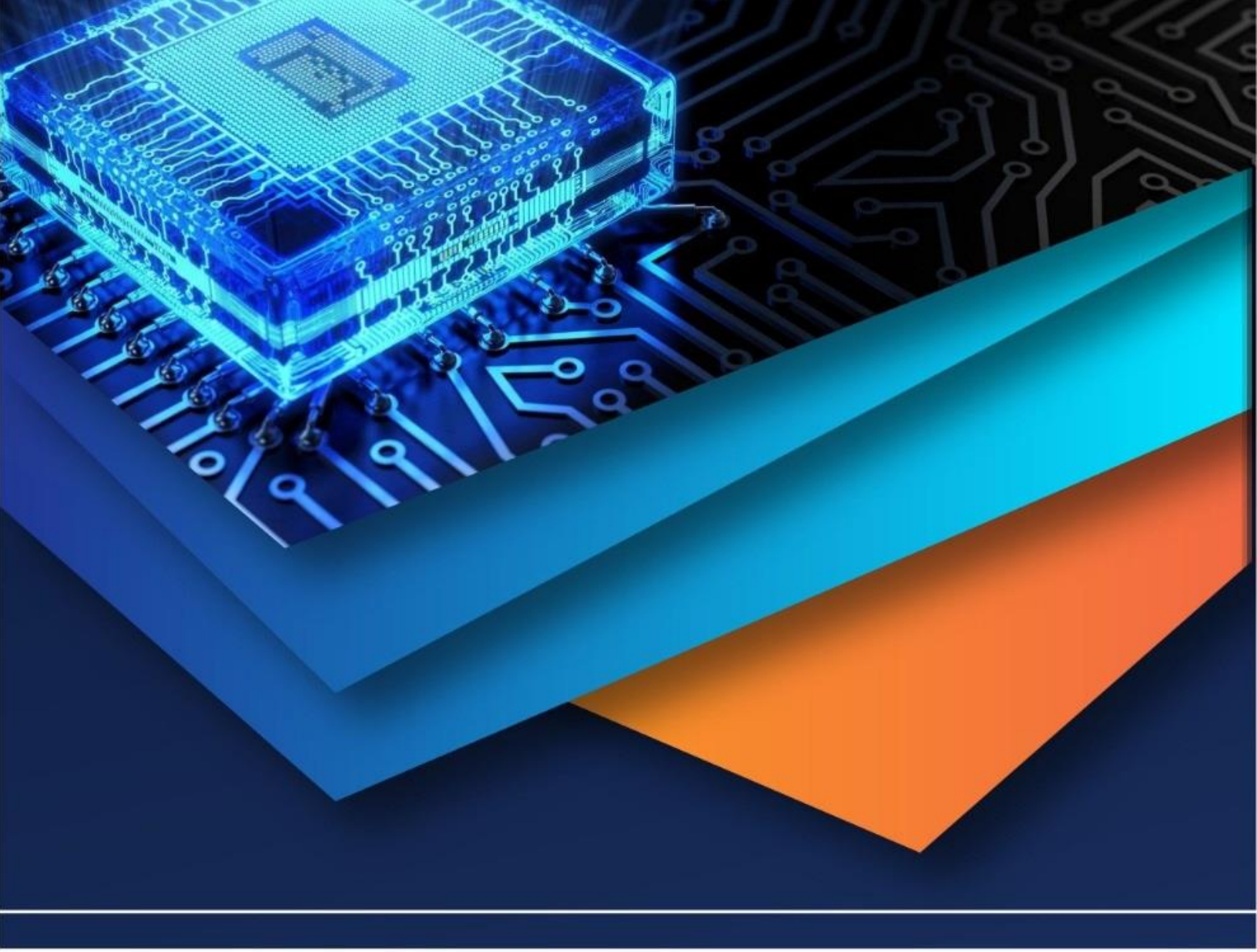

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