



Artificial Intelligence and Organizational Business Productivity: A Qualitative Study

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Abstract

This study is focused on Artificial intelligence and productivity in the workplace. The main objective of this research work is to unveil the significance of Artificial Intelligence in aiding business productivity and it will serve as an eye opener to other ignorant business organizations that are yet to tune into the use of this human-like machine. The qualitative methodology was employed to this work and this involved an online interview of over ten different staff members and one among them representing each of these companies that make use of this technology in their day to day work activities. Information obtained were analyzed and displayed in a narrative way for easy comprehension. The findings from the interviewees showed greater level of productivity in those business firms where the services of this software was employed. It also revealed that the software works accurately without getting tired and that it can perform routine functions adding that it is far better than human efforts. The paper recommends an outright application and enthronement of the system in every business outfit in the world for greater level of success.

Keywords: Artificial intelligence, Productivity, Effectiveness, Performance, Information

1. Introduction

Artificial intelligence is the science and the art of creating technology in the form of robots that performs tasks and think like humans. It is the process of designing a technology that enables a system to function in an intelligent form without being influenced by human being. To the surprise of many, it can perform every task in all fields of human endeavors. Information technology has now become so crucial in many professional business activities. Through the use of this software, productivity has dramatically increased in all firms such as Amazon Web Service, Cloudera, Nvidia, Google, Microsoft and many others who have blossomed in productivity in recent times. Organizational decisions, advertising, product packaging, automations, data processing, distribution of goods and services, machine learning, creating businesses. Algorithm, problem interpretation to mention but a few have been made even more perfect (Sapna, *et al.*, 2019). The digital transformation has driven hyper - connected organization.



Thieu and Uyem (2020) carried out a research work on the benefits and applications of this software, they devised the empirical methodology type of research and from their findings, it was discovered that this new application has brought about tremendous productivity compared to human efforts. They concluded in their discoveries that this new development has the efficacy to drive up business organizations towards effective productivity levels. They opined that the application has arrived with notable and unequal results in organizational productivity. In fact, the connection between information technology and that this software is like one that was made in Heaven. This new discovery is an offshoot of information technology. This technology has found her way in almost all the sectors of business organizations and with significant success. What motivated the study in working on this research area is that it is a device that can replace human efforts in the work place. It is a new area of discovery and most research works are going that way. It also pleases he study so much to find out that this system carries out work effectively more than the efforts of human beings. The system helps to personalize the process of marketing and sales by organizing marketing research, increased customers experience. Through the act of data processing, the system carries out product packaging, effective price system, and good means of product distributions. It aids decisions making and other managerial activities in the firm. These are aided through machine learning activities, data processing, the use of chat boards and problem solving algorithms. Thus, information technology has given birth to the emergence of this wonderful software. It ensures effective advertising of the products and good quality manufacturing. Sapna *et. al.* (2019) emphasis that the system increase the efficiency of operations in firms, quality maintenance in operations and optimize and improve customer experience, improve products and services with new products and services with new features as well as item recommended process, and supply chain operations.

However this system enhances the recruitment of effective staff through the aid of data, It maximizes the production of good quality products knowing fully well the needs of the customers. The software ensures better decisions making and good market forecasting by obtaining information concerning the market trends and situations through market Interdependence and research. The machine handles repetitive responsibilities and timely operations. It helps save time and money by minimizing operational costs of running the entire firm. The software assists in ensuring good product innovations and quality procurement of materials. In fact the use of the software in modern day business is a real deal as it enhances productivity with ease as quality control is assured. The main objective of this work is that it will be an eye opener to many ignorant business organizations that are yet to venture into the services of this wonderful device. The work piece will disclose how the services provided by the software will drastically enhance productivity. It's roles in personalizing and optimizing the marketing and sales activities, and it's assistance in recruitment and selection process and more importantly management process. This work piece will express the usefulness of the application to business successes. The paper will serve as a mirror as it will explain its usefulness in effective manufacturing of good quality



products, better decisions making, and handling repetitive responsibilities, carrying out business forecasting, new product innovations and maintenance of good quality control. The work will show how the application can do all these through the aid of machine learning, deep learning, the use of chatbots, digital assistants, data processing, neural networks. To unveil the usefulness of this software as stated above so that the ignorant business firms will be lured to venturing into it immediately is the main objective of this study.

2. Literature Review

Based on the illustrious work of Sapna *et.al.* (2019), an extensive work was carried out on the relevance of this computer device in replacing human efforts in the work place and at the end of the work discoveries, the study states that "we are today in the industrial revolution in which Artificial Intelligence has arrived with a bang. It further emphasized in the findings that the success which accompanies the application is actually amazing. We are in a revolutionalized world of crazy technological advancement as echoed! As important as specific application of the machine may be, we argue that the more important economic effects of the software, machine learning and associated new technologies stem from the fact that they embody the characteristics of general purpose technologies. Erick (2017) after doing a great work on the usefulness of this all important technology, emphasized that it carries out its efficient functions through the aid of machine learning in optimizing productivity. Interestingly, the software application can be applied in every field of human endeavors. Artificial intelligence is the best example of science and technology aiding the organizational productivity in a non-intrusive way. (Sapna *et.al.*, 2018). The application brings about increase in sales and marketing, better decisions making, better means of production and innovations. Through the aid of deep learning, digital virtual assistant and data processing, the software can perform repetitive responsibilities and ensures better quality control. It increases the rate of manufacturing of good quality products. It drives organizational business success. Raj *et.al.* (2019) in their diligent work on this device adopted the empirical method and he made some interesting findings and one of them is that Artificial Intelligence influences the way businesses are done today and it brings about general security of the firm, It eliminates fraud, financial theft, data leakage and general security of the firm the study concluded. Cyber security has become a major concern in the digital era (Bhatele *et. al.*, 2019).

Furthermore, the application has brought about new ways of handling tasks productively. It has brought new ways of business forecasting by doing it accurately, timely operations and effective recruitment and selection process. It ensures adequate customers experience and maximum utility. It solves complex business problems through iterative process algorithms. The system brings into existence good customer support and relationship management between the buyers and the firm. This it can do through the aid of chat bots in its operations. We are now in a modern era of Industrial revolution. Artificial Intelligence has come to improve many global economies through a dramatic improvements in Economic growth of nations (Oscar, 2021).



The software accelerates marketing and sales in the most productive way. It provides the best customer experience and maximum utility. Priyia (2021) Artificial Intelligence in marketing is now one of the most prominent examples. It is helping marketers predict what their customers want and as a key contributor to now seamless customers experience "Through the aid of machine learning, predictive models, the application can market products with ease to the desired customers. It can send emails and communicates with individual buyers through social media posts and advertise those products to the end users. The system can carry out predictive Analysis through deep learning technology. It can forecast market trends and fresh sales opportunities. It guides sales activities by using predictive sale models to analyze future sales and current sales. It can study the behavior and demands of individual customers by going through their respective data and studying their needs and aspirations. It makes use of statistical algorithms to predict the markets and sales of products. Sales analytics, business automations with the aid of data gathering and processing. It can predict market future gains or profits. With all this increased productivity is assured.

The software is also very important in manufacturing of goods and services. It performs great quality tasks in production of goods. It predicts perfectly about product innovations. Good quality goods are produced excellently which will be the pride of the buyers. The application makes use of the best raw materials in their right mix. Good products are manufactured through good measures such as good quality management and safety precautions. The system monitors all the machines used for production so that they don't breakdown. It forecasts accurate delivery times so as to meet deadlines. Before production machinery breaks down, it will detect and fix it. All forms of inefficiencies are completely eliminated, Kim (2021) came up with his findings that Artificial intelligence has become increasingly pervasive in the context of industrial manufacturing and that it has been considered the forth industrial revolution" It overhauls all manufacturing activities by ensuring a one hundred percent increase in productivity. He concluded that this device has the potential for good quality manufacturing of products and maximizes productivity.

The system helps in making quick and good decisions in every department of the business organization. One major advantage is that it makes accurate decisions. Those good quality decisions are made through the aid of machine learning, deep learning, digits software assistants and the aid given by the stored data. It generates new quality ideas which moves the business organization forward dramatically. The system brings about good insights with the aid of real time interactive dashboards and from there consistent good decisions are made accurately. Good management decisions are made and this ensures good quality control and enhanced productivity. Machine learning enables the software to make good and fast decisions which concerns all the units in the firm. Hitches and headaches in decisions making on the part of the management are eliminated by this software as ideas are generated quickly and correctly. Gualdi and Cordella (2020) were also exceptional in their work on this application and they arrived with a result and their finding that effective decisions which results in an enhanced productivity of goods and services are made by the



software at a faster rate. It ensures adequate productivity they said. Recently a new set of digital tools commonly known as Artificial intelligence has come to aid decisions making and other managerial activities in the organizations (Ernst 2022).

Without mincing words, the application provides the best security network to the business organization. It recognizes any external threat and internal threat ahead of time even before they occur. This software carries out security checks on the entire organisation perfectly Oscar, (2021). The system studies patterns of security movements through the aid of machine learning, deep learning, security automations and data to provide adequate security for the entire organization. It tracks down historic events by checking past events and provide effective security for the firm. Through the aid of deep learning and CCTV cameras, the system is able to safeguard all the parts of the business organization. Cyber security has become a major concern in the digital era (Bhatele, 2019).

The software assists in performing routine repetitive responsibilities in all areas of the firm. In the area of recruitment of managers and other employees the application can trace the details of all the applicants by short listing the best possible names that suits the job. Artificial intelligence is used for various business processes including hiring of employees and managers (Mirji, 2021). This it can do with the aid of the chatbots and the virtual digital assistants built into the software's for enhanced productivity. Good and harmonious relationship is assured between the customers and the business firm through this discovery. It helps to minimize the cost of business operations by saving money and overhead costs for the firm. The system carries out market forecasting by predicting future trends accurately. It helps to procure quality materials and ensures good quality control. The process of machine learning, deep learning, data processing, chatbots, automations and iterative algorithms in problem solving helps the application carries out its tasks in a more effective way which brings about increased productivity.

3. Methodology

This research piece was carried out by the use of the qualitative method of research. About 10 Artificial Intelligence sites were consulted through an online interviews of at least a staff from each of the company and some of them were the IBM, AWS (Amazon Web Service), Cloudera, Nvidia, Conversica, Alibaba cloud, Anduril, Microsoft, Google and Amazon. The participants were chosen through the use of the purposive method of sampling. This sampling method was used due to the critical importance and subject the study was based. Therefore 10 persons were randomly selected. Interviews were carried out in the form of questions and answers between the interviewer and the interviewees regarding artificial intelligence and productivity in their various firms. Each of these people chosen were interviewed for a time duration of only 15 minutes. It was also carried out based on the convenient time of each interviewee concerned and the question asked the interviewee were actually based on the research objectives. The questions and answers were done in English language. Information obtained were displayed in a narrative manner.



This was followed by the analysis of the data obtained and hence this gave rise to the findings and results in alignment with the aims of the study.

4. Findings

This particular area displays and interprets the information (responses) obtained from those ten various staff members of the firms under this study. The data gotten were shown in a narrative form and it was also hinged on the study aims and research questions. The interviews the researcher had with those interviewees were shown in a narrative way for easy understanding of the findings on the use of this software, it is compared to human efforts, the productivity levels obtained and the general progress of their firms as regards the application. Thus Mr Packer Smith, a staff of Amazon Web Service, was asked on the functionality of Artificial Intelligence on productivity, and in response he said:

The software is so amazing .it can carry out different kinds of functions at an amazing speed. In fact it is a sure bet on productivity

The answer given by Mr. Packer Smith aligns with that of Thieu and Uyem (2020) in which they emphasized in their findings that this technology works more perfectly than human efforts and at a greater speed. Thieu and Uyem (2000) concluded in their research work that this application is the current answer to enhanced productivity in the workplace. A 44 years old Tim scotts, an interviewee from Cloudera company based in the United states said:

This software works at an amazing speed and with better accuracy when compared to human efforts .It carries out different functions in the workplace perfectly.

This response from Tim scotts is in conformity with the findings made by Sapna *et al.* (2019) that this technology carries out routine functions and at an amazing speed thereby bringing about an increase in productivity in the workplace. A 52 Years Interviewee From Microsoft Company in the United States explained:

The use of Robots have become the current source of better productivity. But the application works on programmed data with the aid of machine learning and other enabled solutions .But my fears are that in the nearest future, it will totally replace human efforts in the business organizations.

This revelation is in accordance with the findings of Gualdi and Cordella (2021) in their research in which they opined that the application works with the aid of a programmed data, machine learning and other enabled solutions. A 60 years old Patman Robbins, an interviewee from Google company replied the interviewer this way:

The use of Roborts is applicable currently in almost all areas of human endeavors. It is the source of perfect increase in output in every



venture. But it is a programmed software. It works on the basis of data programming and delivers accurately.

This finding tallies with the work findings of Ernst (2022) that the application is applicable to every area of human and business activities in all organizations.

The same response is gotten from six other interviewees who are also staff members in the other firms such as Nivida, Anduril, Alibaba Cloud, Conversica and IBM .The answers gotten from this other six interviewees is in line with the findings made by Raj *et.al.* (2019), in which they discovered that this technology can help perform many range of functions including managerial decisions making, quality innovations, maintenance and many others. This six other interviewees emphasized that the robots can perform more effectively than human efforts based on the evidence recorded in their various firms.

The findings that Artificial Intelligence increases productivity, and it is accurate and faster than human efforts. The software works without getting tired hence a larger output of results in the workplace, and it helps to personally accelerate the marketing processes. From the findings carried out by Giacomo *et.al.* (2021), Artificial intelligence has brought about a significant increase in productivity. It has catapulted many business organizations into ultimate success. The software helps in quick decision making. From the findings made by Gualdi and Cordella (2021), this application helps in quality decision making for management of an organization and it performs other routine functions better than human efforts. It accelerates the act of productions and innovations. The usefulness of the application can be sensitized globally to increase awareness so that every business firm could tune in to the use of the service. It was found that productivity was drastically enhanced through the use of the application from the discoveries made from the sites and other works consulted. Finally it was found that the software can perform many business activities without getting tired hence the need for its service to be employed to enhance firm's performance.

5. Conclusion and Recommendations

In a nutshell, the service provided by this wonderful device should be embraced by all organizations. It comes with total efficiency So many firms have come to understand the importance and the need to venture into it. It drives success and opens the doors to unequalled success. It goes with many advantages in every sector where it is applied.

The importance of this discovery have become so clear to firms. It has become the real deal. This research work have arrived with better recommendations. The work piece has recommended that the enthronement of this services in all business firms world-wide: The firms that have ventured into the use of the software can testify boldly of its immense benefits. Therefore this research piece is hereby advocating that the application should be introduced to all business firms for an accelerated service and productivity. It should be made readily available and within reach of all. It should come with low cost so that many firms can have access to it. Once it is within the reach of many firms world-wide, it will



help build the world's economy. It will help improve productivity and profitability as it save money and cost of running the company. There should be a sensitization and orientation about this technology in the form of conferences and workshops .This will enable the business owners to have the awareness.

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