

# A Study on Artificial Intelligence Interaction with Organizational Performance

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**Abstract:** Over the past few years Artificial Intelligence has started changing the dynamics of the business world. Significantly the interactions of Artificial intelligence with the Organizations performance is expected to improve the level of global competency for the company. AI is expected to help the organization understand its employees, customer, target audience or potential target audience. AI could make life better by making things more convenient and personalized, organizations will have the ability to personalize and do things at an upper scale, in a way that is currently limited by humans-only. Organizations have a series of requirements and challenges everyday on; what to do, How to do, When to do, Whom should do, The cost that is involved, The time that is involved, The resources that are required, The current market trend, The current state of the economy, The change in the preference of consumers etc. All these are expected to be analyzed by Humans based on past data, with a constrained duration of time it could be challenging and difficult for both the organization and the employees. Each of these situations is an instance for where artificial intelligence could be applied. AI could be implied in every department of an Organization. The research design followed is descriptive in nature. The target sample size on which the study was conducted and analyzed is 100. Bar graphs and pie-charts were used as research tool to present the findings. The key players involved in this study were Organization Employees.

**Keywords:** Artificial intelligence, Organization performance, Organization challenge, Employees, Online Data.

## 1. Introduction

Artificial intelligence can possibly improve profitability, productivity and exactness over an organization when implemented. Many dread that the ascent of AI will prompt machines and robots, suppressing human specialists, many also view this upgraded innovation as a risk opposed as an instrument to better ourselves. The principal organizations utilizing AI frameworks in all their departments will increase an upper hand, lessen the cost of tasks and projects, expel the excess head counts and create imaginative advancements. AI will positively affect our economy by making employments that require the range of abilities to execute new frameworks.

## 2. Benefits of using artificial intelligence

Artificial intelligence is said has a lot of benefits and contribution, they can be categorized on the following bases;

### A. AI's Benefits towards the Economy, Business and Industries

Artificial intelligence contributes to the society through the evolution of work. AI and robots will help individuals and businesses enhance their tasks and performances and not take away their jobs. The combination of man and machine is very contributing and is unstoppable in the near future. With the help of machine learning and deep learning artificial intelligence will evolve over the period of time, thereby increasing the efficiencies of businesses, industrial and organizational sectors. Artificial intelligence will reduce the probability of human errors in the future but studying historical data, this would also cut down on many costs that many organizations currently shelling out their money on. Facial recognition, pattern identification and digital content have become more common and functional. Academic research companies, health science companies and tech companies are also benefited through AI technology.

### B. AI'S benefits toward humanity and society

Artificial intelligence helps people create new opportunities by creating new streams to generate more revenue, increase savings and create job opportunities. AI technology enhances a user's lifestyle and choices by using the search algorithm that the users have provided; this in return provides targeted information. Mundane tasks such as data entry and generating automated Emails are performed with the help of AI technology. AI can enable homes to become smart, where it can automatically cut down on energy and electricity and also provide better security. AI technology can expand human creativity and ingenuity by handling various and tedious tasks; this will in return give people more time to learn experiment and explore new fields. And in terms of medical and health care AI provides image based diagnoses which helps doctors treat their patients better.

## 3. Review of literature

1. Neha Soni, Enakshi Khular Sharm, Narotam Singh and Amita Kapoor, "Impact Artificial Intelligence of on Businesses: from Research, Innovation, and Market. Deployment to Future Shifts in Business Models" focused on the overall impact of AI on businesses - from research, innovation, market deployment to future shifts in business models. To access this overall impact, we design a three

dimensional research model, based upon the Neo-Schumpeterian economics and its three forces viz. innovation, knowledge, and entrepreneurship. The first dimension deals with research and innovation in AI. In the second dimension, we explore the influence of AI on the global market and the strategic objectives of the businesses and finally the third dimension examines how AI is shaping business contexts.

2. Yin Yang and Keng L. Siau, “A Qualitative Research on Marketing and Sales in the Artificial Intelligence Age” This research is of value to both academics and practitioners as it aims to provide a detailed analysis and documentation of the changes in marketing and sales functionalities and job markets as AI technology advances. As conclusion they stated that, AI is undoubtedly revolutionizing marketing and sales performance. As a pioneering effort to understand the impact of AI on the field, the results of this research will inform academics about the organization changes impacted by AI. The research will also enable us to study the impact of AI on marketing and sales personnel as their jobs are displaced and replaced by AI.
3. Jarek, K., Mazurek. G (june 2019), “Marketing and Artificial Intelligence”: The aim of the paper is to research how deeply AI is applied in marketing and what implications there are for marketing practitioners. The paper delivers implications for business, especially ideas about implementing AI into marketing, designing innovations and the ideas on how to incorporate new skills into marketing team required by the new technology. The analysis of the collected examples shows that AI offers a new quality to a consumer’s life 24/7 customer service, hyper-personalized solutions, more convenient shopping, or the possibility to avoid making the wrong choice.

#### 4. Research gap

Research on the performance of Artificial intelligence has been conducted but there aren’t many studies/ research that associate implementing Artificial intelligence for the betterment of the organizations performance in India. This study is been carried out to understand how the organization could perform when AI concepts are implemented into all its departments. It also focuses on what employees think would be considered as challenges or threat-full when it comes to implementing Artificial intelligence in the organization and its management.

#### 5. Statement of the problem

The concept of Artificial Intelligence has been existential for quiet sometime. Adopting artificial intelligence for better organizational performance automatically upgrades the company among its competitors on a global platform. The company comes across consequences and challenges when adopting artificial intelligence in terms of organizational performance that interrupts their operations. The ethical aspects

and usage of artificial intelligence in various department of the organization has not been highlighted.

#### 6. Scope of the study

Organizational performance is considered to be one of the core aspects for a successful business. This research shows how adopting artificial intelligence will create an impact in the near future, transforming the landscape of a business itself for the company. Performance measurement is the link between the organization’s goals and the decisions that are taken. AI can help the organization take better and accurate decisions, which in return improves the overall performance of the organization itself.

#### 7. Objectives of the study

1. To study the relationship between artificial intelligence and the performance of the organization.
2. To analyze the challenges that is considered threat-full when artificial intelligence is associated with the organization.

#### 8. Research methodology

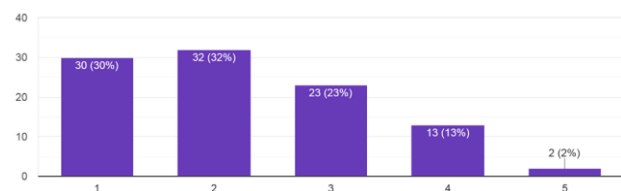
The research design of the paper is descriptive in nature. Primary and secondary data were both collected in order to conduct this research. The primary data was collected through questionnaires which was in the form of convenience sampling method, which were sent as Google form to working employees along with which a semi-structured interview was carried forward which each of them to get personal opinions. Secondary data was collected from published research papers and articles related to the field of study. The data and responses that were gathered was analyzed and processed based on which the findings and suggestions were structured. The total target sample was 100 working employees.

#### 9. Limitations of the study

1. Subjective and biased responses from respondents.
2. Lack of available and reliable secondary data.

#### 10. Analysis and interpretation

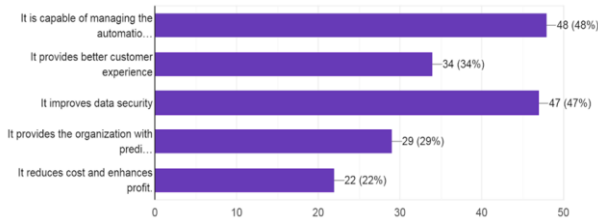
A. *Possibility for artificial intelligence to draft the future of an Organization*



The Bar graph illustrates the level of acceptance from the employees on the possibility for Artificial intelligence to draft the future of the organization. Where, 32% of the respondents followed by 30% of respondents who were employees strongly

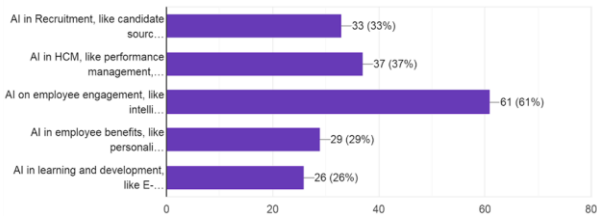
agreed that Artificial intelligence will be the future of the upcoming organizations. It is expected to draft and increase the standard living for both the people and economy for our nation.

**B. Reasons for using AI in the organization**



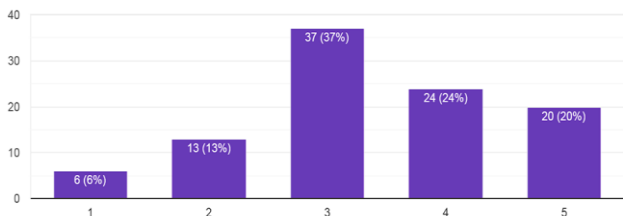
The Bar graph states the total percentage of reason that was stated towards implementing Artificial intelligence into the management of an organization. Where, 48% of the total agreed that AI is capable of managing automation in terms of both production operation and service delivery. Followed by the next best where 47% agreed that it could improve the security and protection of company data.

**C. Crucial areas in human resource department that AI could Transform**



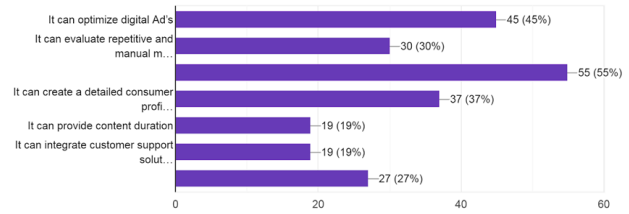
The Bar graph states the percentages on where Artificial intelligence could transform the crucial areas of the HR department in an organization. Where, 61% of the total agreed that AI could transform employee engagement by ways of conducting intelligent surveys, Rewards & Recognition, Personalized messages and universal communication.

**D. Increase in sales and sales forecast during AI is implementation**



The Bar graph illustrates the level of performance increase in the management of an organization with regard to sales and sales forecasting. Where, 37% of the total respondents said that, the performance with regard to sales and sales forecast of the organization would be average. As in, no major profit or loss would occur.

**E. AI'S contribution towards the world of marketing:**



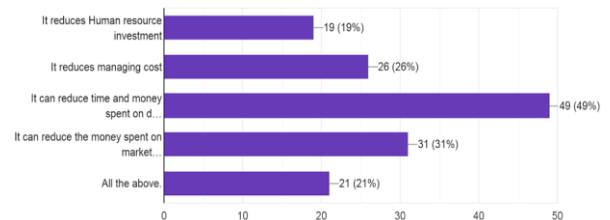
The Bar graph illustrates the ways and means in which artificial intelligence could contribute to the world of marketing. Where, 55% of the total respondents said that it could assess upcoming opportunities from the pasta data and big data that are available on the internet. It could predict the possible market conditions and the organization could come up with ideas and strategies accordingly.

**F. Ways in which the cognitive CSR process of an organization Could be improved using AI**



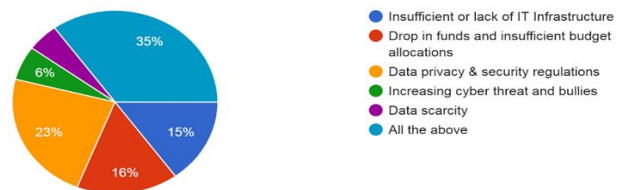
The pie – chart illustrates the ways in which the process of CSR can be improvised by using Artificial intelligence. Where, 41% of the total has said that Artificial intelligence technology could be used to measure the performance of the organization by dynamically monitoring and tracking global changes, both in terms of customers and competitors.

**G. Costs that the company can cut down when AI comes into action**



The Bar graph states the percentage of on where Artificial intelligence can cut down cost and reduce expenditure for the organization. Where, 49% of the total respondents said that Artificial intelligence technology can reduce the time, money, resources and manpower that are spent on decision making process.

**H. Major challenges that the organization faces during AI Implementation**



The pie – chart illustrates the challenges or threats that the organization might face when Artificial intelligence is implemented. Where, 35% of the total stated that all the given options would be considered as threats or challenge. That is, insufficient or lack of IT structure, insufficient budget allocation, Data privacy, Data scarcity and Cyber threats. Out of which 27% alone stated the challenge of protecting both the company and customer Data along with security regulations.

### 11. Findings of the study

- 1) Artificial intelligence is definitely paving way for the future industries and organization, the possibility is for sure.
- 2) Though there are many reasons for which AI could be implemented, people prefer something that would reduce the cost of operational production and service without any compromise on the quality delivered.
- 3) People are ready to experiment the performance of the organization by implementing AI into its Sales, Marketing, HR and CSR activities.
- 4) Organization main goal is to reduce expense and increase profit that does not affecting the goodwill earned by the company and are therefore ready to adopt AI as a testing element.
- 5) As of now, Challenges in terms of cyber security, protecting customer data, insufficient budgets are the main hindrances that the organizations are facing.

### 12. Suggestions to the study

- 1) Since it is very obvious and predictable that Artificial intelligence is the future, the government should start allocating funds and establish schemes that would benefit the smaller industries or organization to implement Artificial intelligence at a cheaper cost.
- 2) Organization should start experimenting with artificial intelligence in terms of management activities. They could come up small concepts such as Chatbot or voice recognition. Software's that could detect administrative slacks and take faster data driven decisions.
- 3) Training and awareness sessions could be conducted to educate the employees in the organization who are not aware

on how Artificial intelligence works. This could motivate them work smarter and not toiled in long labor hours.

### 13. Conclusion

Artificial intelligence is implemented to make work easier and smarter. Developers should make sure that the man-made technology is not too far ahead or advanced than its time. This could in return become dangerous or be imposed as a threat of taking away employment opportunities as how people think it would be. India ranks 6th among the top 15 countries with the most advanced technology in the world. Having this factor as an advantage, Indian industries and software companies could start developing programs that could simplify the management tasks and activities of an organization. Indian being a developing country with majority of the MNC's having back offices in India where paper or data work is piled up, AI could give in a hand to make work simpler and productive. Artificial intelligence provides an impressive range of applications that cover a wide range of the Organization's management activities and performance. Artificial intelligence as a whole help to sharpen the understanding capacity of human reasoning and the nature of intelligence.

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