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AN IMPACT OF ARTIFICIAL INTELLIGENCE ON BUSINESS

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ABSTRACT

Innovations and technical advances in the modern age occur almost overnight, making this era one of the most exciting in human history. Artificial intelligence is the technology behind many recent innovations, including industrial robots, self-driving automobiles, fitness monitors, and online education. Artificial intelligence (AI) now permeates every aspect of our life, from personal relationships to professional endeavors. The advancements in artificial intelligence over the last several years have been astonishing, and now almost every company is rethinking its strategy and business models to include AI in every step of its operations. However, companies need to pay attention to the effect of this AI deployment since they are not yet aware of the repercussions. The goal of this study is to investigate corporate decision-makers and ordinary workers in organizations in the Indian state of Rajasthan to learn more about the effect that AI has on these organizations. In order to get information from the sample, an online survey tool is used. We used one-way ANOVA and a variety of frequency tables and graphs to examine the results. The research takes into account four distinct business characteristics to determine the impact of AI. The study presented here demonstrates that AI is already broadly acknowledged and offers several prospects and potential to revolutionise the workplace. The fast technology improvements in human life and business provide new difficulties, but AI will help firms prepare for them. Artificial intelligence has been shown to have a favourable effect on every facet of an organization, from marketing to accounting.

Key Words: Technologies, Robotics, AI, Business Models, Automation

INTRODUCTION

John McCarthy, who is sometimes called the "father of AI," previously described it as the The "science and engineering of making smart machines, particularly intelligent computer programmes."

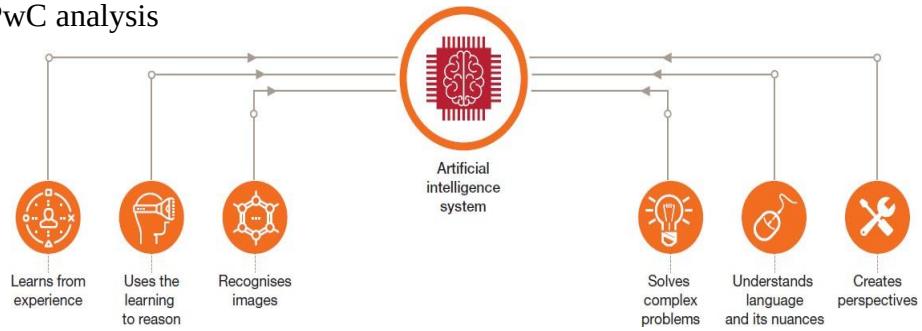
AI refers to computers that demonstrate intelligence. Computer scientists examine "intelligent agents" as part of their research of artificial intelligence (AI). When a computer imitates human-like cognitive capa cities, such as learning and critical thinking, the phrase "artificial intelligence" is often employed.

Over the last several years, a flood of software with built-in AI features has hit the market. Machine learning, NLP, image processing, and data mining are all areas of artificial intelligence that are now being prioritized by major tech companies. Machine learning is already in use in many online services, including predictive search bars, email spam filters, and Netflix recommendation systems. AIs like Siri and Google Voice employ NLP to understand spoken commands. Applications as varied as Google's self-driving vehicles and Facebook's face recognition technologies both need image processing. The phrase "Information Mining" has gained general use among programmers as a consequence of the regular mining of enormous data sets. Companies like Facebook and Google collect a plethora of metrics from customers on a regular basis and need a method to analyze this data. In today's high-tech environment, artificial intelligence has shown to be a significant advantage.

ARTIFICIAL INTELLIGENCE

The ability of computers and computer-enabled robotic devices to learn is commonly referred to as "artificial intelligence" (AI), make decisions, and solve problems in ways that mimic human reasoning. Furthermore, AI systems are created "to approach complex issues in a manner consistent with human logic and reasoning.

Source: - PwC analysis



LITERATURE REVIEW

Nilson claims that three major conferences The National Physical Laboratory sponsored a symposium on the mechanisation of thought processes in 1958, a summer artificial intelligence research project at Dartmouth College in 1956, and a Learning Machines session at the Western Joint Computer Conference in Los Angeles in 1955—helped establish AI as a distinct area of study.

Artificial intelligence (technological machinery) nowadays can mimic human intellect in many ways. It can solve problems, acquire new skills, make decisions, and more. Robots, computers, and similar frameworks get some rudimentary reasoning ability through AI software or projects that are built into them (Zhang et al., 2016).

It is possible that AI might mimic human behavior [Turan et al., 2017]. Moreover, AIs are currently developed in part without elaborate capabilities to learn independently; instead, they are given instructions to carry out. This is the ultimate destiny of AI when robots can understand human emotions and behavior and adjust their performance accordingly [Martnez and Fernández-Rodrguez, 2015].

Work, economics, letters, wars, protection, security, morality, social insurance, and pretty much every other aspect of human existence are all being rethought in light of the advent of artificial intelligence (AI). We have yet to see its long-term growth, though, and hence cannot say if It is guiding people to either make this planet a better or a more dangerous place to live. While there are advantages and disadvantages to any technology, the benefits must constantly outweigh the drawbacks for the technology to succeed in the marketplace. While the potential benefits of AI seem substantial, it is still unclear whether those benefits will outweigh any potential drawbacks in the long run. If this is not the case, we may be in a dangerous position. From one vantage point, we may seem to understand the transformation brought about by technological advancements like the "smart home," Smart healthcare, autonomous cars, and "Industry 4.0." However, we found ourselves berating the government on a regular basis for things like unemployment, fees, security, etc. Robots and other forms of autonomous software are increasingly being developed to do jobs that humans used to do. Despite the current state of affairs, things have a tendency to become quite interesting in the long run (Tyagi, 2016).

OBJECTIVE OF THE STUDY

Considering the speed with which AI is transforming corporate operations, the author has recommended the following goals for his research:

1. To learn how these AI shifts will most likely impact companies and our daily lives
2. Individuals' ease of use with artificial intelligence technology
3. how AI plays a part in and affects business structures and strategies

RESEARCH METHODOLOGY

The author surveyed fifty managers and ordinary workers from different companies in Rajasthan. An online poll is used to gather data on people's thoughts on AI and their knowledge of its present and potential future effects on society.

Consumers and companies were polled to see how they see the current and future role of AI in the workplace and in people's daily lives. Through an online survey, we also reached out to Indian businesses across sectors like finance, tech, and manufacturing to get their take on AI and its potential social impacts. Full-time, part-time, and self-employed persons working for potential organizations are surveyed.

Executives and managers at the highest levels of an organization were acknowledged as key decision-makers and influencers who made strategic decisions on the company's technology, service,s and other vital areas of operation. The poll looked at a variety of industries, including banking, IT, and manufacturing.

The author has chosen to analyze the effects of artificial intelligence on four distinct aspects of the business. Examining how AI affects these metrics can provide a clearer picture of how AI is changing business practices.

ANALYSIS AND INTERPRETATION:

On Statistics Reliability	
On the Cronbach's Alpha	**In Relation to Respondents**
.891	51

Source: Compilation by the author

Cronbach's alpha was calculated using data from 50 respondents (see table below), and the result was.899, indicating that the questionnaire could be relied upon. The data quality was confirmed to be 89% accurate, making the score of 899 an outstanding representation. This means the data is sufficiently solid for academic use.

Table: 1 Table of Gender Class Frequency

On Gender					
		As For Frequency	Regarding %	Valid Percentage On	Regarding Cumulative Percent
On Valid	Male	33	76	76	74
	Female	14	22	24	100
	Total	51	100	100	

Graph 1: Gender Class Frequency Graph

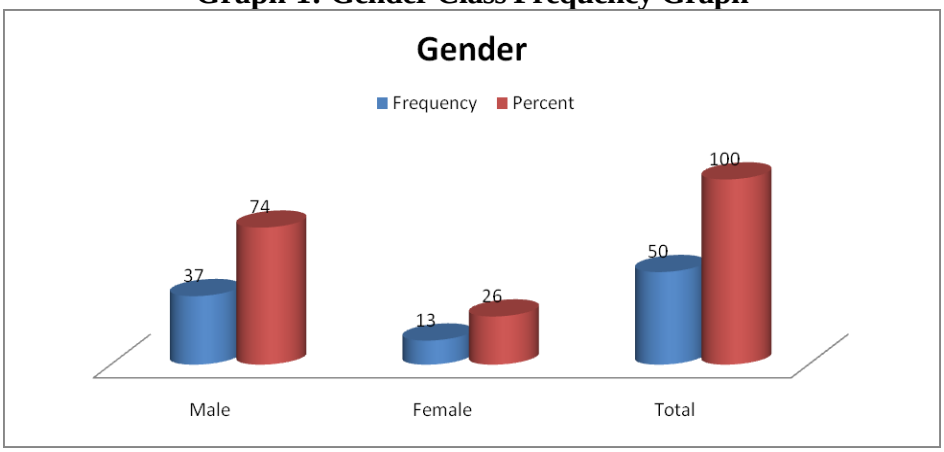
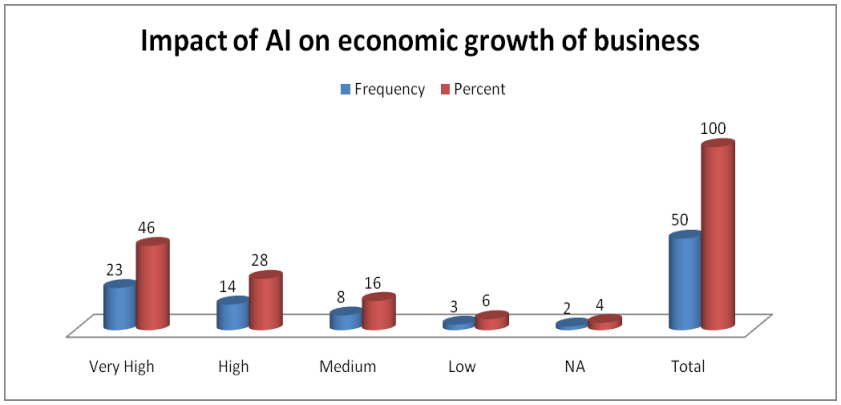


Table 1 and Graph 1 reveal that the gender question was asked before any others of significance. According to the chart indicating the frequency of gender, out of 50 respondents, 37 (or 74%) were men and 13 (or 26%) were women. It showed that there were a disproportionately large number of male workers compared to female ones.

Table 2: Repetition Time A Tabular Presentation of Artificial Intelligence's Effects on Business Growth

AI's effects on business economic growth					
		As For Frequency	Regarding %	Valid Percentage On	Regarding Cumulative Percent
On Valid	On Very High	22	44	44	44
	High	13	26	22	72
	Medium	7	20	15	92
	Low	5	5	4	94
	NA	1	2	3	100
	Total	51	100	100	

Graph 2: Impact of AI on Business Economic Growth Frequency Graph



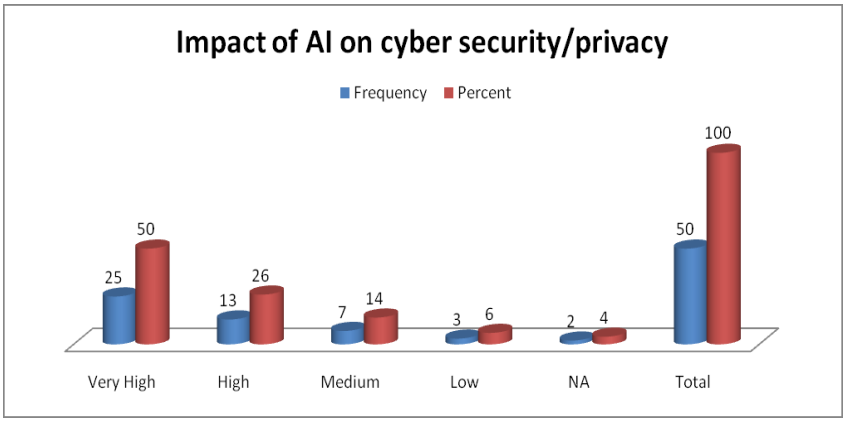
As can be seen in the table and graph above, 23 of the 50 respondents (46%) think AI would have a very high

effect on economic growth. Eight people (16%) think AI contributes little to economic progress, whereas fourteen people (28%) think it contributes a lot. Just 3% of respondents expressed concern about the extent of the effect, while the remaining 4% either did not reply or disagreed. As a result, most people think AI will significantly affect companies' economic development.

Table 3: Frequency Effects of AI on Online Privacy and Safety

Effects of AI on Privacy and cyber security					
		As For Frequency	Regarding %	Valid Percentage On	Regarding Cumulative Percent
On Valid	On Very High	22	51	51	52
	High	14	27	22	74
	Medium	8	13	13	96
	Low	2	7	3	97
	NA	1	5	1	100
	Total	52	100	100	

Graph 3: The Probability Distribution of AI's Effects on Online Privacy and Safety

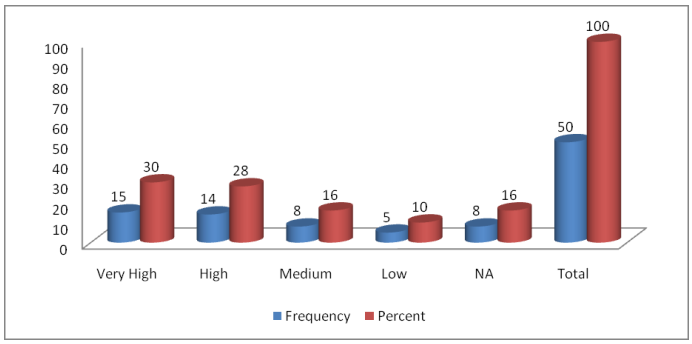


As evident from the table and graph above, individuals are still wary about sharing data for an improved user experience, even after being made aware of all the projected advantages of artificial intelligence. Although doing so could help provide some individualised knowledge about health, nearly all participants (90%) agree that they are wary about even sharing medical information because of privacy concerns.

Table 4: A tabular representation of the effects of AI on gender parity

AI's effect on gender equality					
		On Frequency	On Percent	On Valid Percent	On Cumulative Percent
On Valid	On Very High	11	31	31	32
	On High	13	23	22	54
	On Medium	5	12	13	73
	On Low	9	17	9	83
	On NA	7	13	13	100
	On Total	51	100	100	

Graph 4: AI's effect on gender equality: A Frequency Distribution

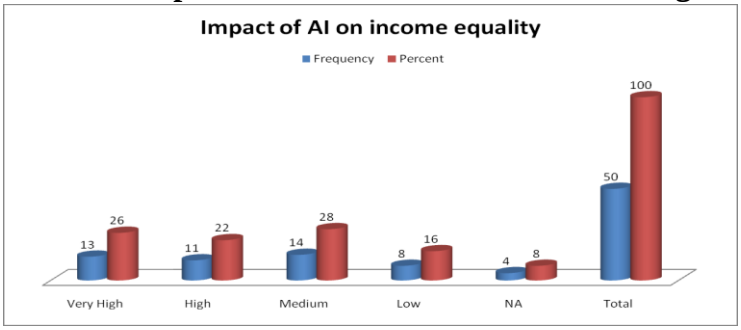


The data in the table and graph above shows that 58% of respondents believe AI will help advance gender parity in the workplace. However, 10% of respondents said they didn't believe it.

Table 5: Impact of AI on Wage Disparity: A Frequency Analysis

AI's Effects on income equality					
		On Frequency	On Percent	On Valid Percent	On Cumulative Percent
On Valid	On Very High	12	27	24	24
	On High	11	21	21	46
	On Medium	13	27	27	75
	On Low	7	14	15	91
	On NA	9	7	7	100
	On Total	51	100	100	

Graph 5: Distribution of Artificial Intelligence's Effect on Wage Disparity



According to the data shown in the preceding graph and table, over 48% of respondents agree that AI is crucial to the fight for economic equality. Yet 16% said AI does not affect wage disparity.

The following hypotheses have been tested in order to determine the extent to which AI has an effect on key business metrics:

Hypothesis

H01:- Artificial intelligence has had no appreciable effect on the company's bottom line.

H11:- Artificial intelligence has a major bearing on the expansion of companies' bottom lines.

H02:- Artificial intelligence has no appreciable effect on data privacy or security.

H22:- AI has far-reaching implications for both cyber security and privacy.

H03:- When it comes to promoting gender parity, AI has no appreciable effect.

H33:- The effects of AI on promoting gender parity are substantial.

H04:- The effect of AI on wage disparity is negligible.

H44:- The effects of AI on wage parity are substantial.

Table: ANOVA

On ANOVA						
		Total Squares	With df	With Mean Square	With F	Sig.
On Influence of AI on Enterprise Growth	Between Groups On	2.063	1	2.062	2.308	0.02
	Within Groups	47.937	48	0.894		
	Total	50	49			
On Impact of AI	Between Groups On	2.482	2	2.482	2.613	0.043
on cybersecurity/privacy.	On Within Groups	47.519	48	0.95		
	Total	50	49			
Impact of AI on gender equality.	Between Groups	2.182	1	2.182	3.554	0.062
	Within Groups	47.818	48	0.614		
	Total	50	49			
Impact of AI income equality.	Between Groups	1.984	1	1.984	3.386	0.037
	Within Groups	48.016	48	0.586		
	Total	50	49			

In the table, we can see the F value, the significance of F, the mean square deviation, the sum of squares, and the degrees of freedom for both within-group and between-group comparisons. The significance level (Sig.) determines whether or not the equal-population-means-null hypothesis must be disregarded. Comparing the averages of the two groups (2.063 and 0.894, 2.481 and 0.95, 2.182 and 614, and 1.984 and 586), the following table reveals a sizable difference; nevertheless, As determined by statistical tests (F = 2.308, Sig. = 0.02, 2.481,

and Sig. We accept the null hypothesis and reject the alternative hypothesis that AI will have no effect on business growth, that AI will have no effect on cyber security and privacy, and that AI will have no effect on income inequality, respectively, because these alternative hypotheses fail to meet the Sig. threshold of 0.05. Since H03's sig value is greater than.05, we reject its null hypothesis of AI having no meaningful influence on gender equality.

S. No.	On Theories	On Difference	On Status
1.	H01	On Important	Rejected on
2.	H02	On Important	Rejected on
3.	H03	On Non-Important	On Accepted
4.	H04	On Important	Rejected on

CONCLUSION

As we've seen, AI may use cutting-edge tech and scientific knowledge to completely revamp a company's operations. The effects of AI on governments, societies, economies, and individuals are profound. The automation and data analysis made possible by AI has been shown to boost productivity, decrease costs, decrease the likelihood of human mistakes, make quicker decisions, better predict client preferences, and increase sales. There are openings where AI-based solutions may fill the void left by the shortage of trained labor and so revolutionize the workplace. The general public tends to blame the creators and administrators of flawed AI systems rather than the systems themselves. This is necessary for AI applications where the system must run entirely on its own, where speed and response times are crucial, and where the degree of intelligence that AI systems are capable of operating at is limited by their instructions. As a result of our investigation, It's safe to say that AI will have far-reaching consequences for business growth, online safety and privacy, and the realization of pay parity. Therefore, AI has the potential to produce a more effective global business structure. Future developments in AI are expected to have far-reaching effects on the commercial world. People and corporations alike must thus embrace technological progress in order to meet the challenges of the future.

REFERENCES:-

- IJIMAI, volume 3, issue 5, pages 77–84, 2015. Articles like In The study, "Artificial Intelligence Applied to Project Success: A Literature Review," by D. M. Martinez and J. C. Fernandez-Rodrguez.
- The phrase "A deep learning-based fusion of magnetic localization information and rgb camera information for endoscopic capsule robots," article by M. Turan, J. Shabbir, H. Araujo, E. Konukoglu, and M. Sitti, published in the 2017 volume 1, number 4 of the International Journal of Intelligent Robotics and Applications, pages 442-450.
- In May of 1969, Nilson, N. J., wrote. Automation on mobile devices via the use of AI methods. Artificial Intelligence: Fifth International Joint Conference, Proceedings, p. 509.
- Amit Tyagi (2016). Writing Prompt: AI: Benefit or Threat? 10.2139/ssrn.2836438 SSRN Electronic Journal.