

Artificial Intelligence – A Boon to the Human Being: A Survey on the it Employees in Kerala, India

Ryda Simon, Anusree Kanakalil Sanil

Faculty of Computer Science School of Computing, British Applied College, Umm Al Quwain, UAE

ABSTRACT: The study of AI, or the emulation of intelligent behaviour in machines, is the most sought-after subfield of computer science. With the use of computing, AI researchers want to explain every aspect of human intellect. It can make judgments independently of human input and interact with its surroundings via sensors. Simply put, AI is artificial intelligence. In this article an attempt has been made to find out the usefulness of AI for human beings. It also tries to determine the difference of perceptions towards the use of AI on the basis of various subsamples. For this purpose the descriptive survey method is used. The population for the current study consists of the Persons working in the IT sector in Kollam district of Kerala, India. The researcher has selected 54 participants randomly from the population. A self structured questionnaire has been used for collecting the primary data. The questionnaire consisted of 21 statements with the response of Strongly Agree, Agree, Disagree and Strongly Disagree. Collected data were analyzed with descriptive statistics and t test in the SPSS 20. Version. The findings of the study indicate that the usefulness of AI is very high for the human beings.

KEYWORD: Computer Science, Human Being, It Employees, Artificial Intelligence.

Introduction:

The field of study known as artificial intelligence aims to develop robots with capabilities on par with human brains. This may be connected to the goal of giving computers the ability to reason independently and grasp human concepts. However, it is not confined to only physiologically detectable means. Alan Turing was the first to publicly propose the possibility of artificial intelligence on par with that of humans. However, progress towards creating AI at parity with human intellect has proven challenging and is proceeding at a snail's pace. Learning how the human brain functions is essential to the advancement of artificial intelligence. The study and creation of computer applications that can perform tasks normally associated with human intellect is known as artificial intelligence or AI for short. It's the process of giving robots human-like intelligence. (S. Finlay, 2017) Like humans, these robots will be able to learn independently and make judgments based on their own logic, observation, and communication.

History of Artificial Intelligence:

In this quick overview, we will explore the philosophical, fictional, and imaginative roots of artificial intelligence. Many industries, including electronics, engineering, and others, have contributed to the development of AI. The demonstration programmes in language understanding, translation, theorem proving, associative memory, and knowledge-based systems that were developed as part of Ai do's problem-solving

and fundamental work in learning, knowledge representation, and inference have become one of the field's most recognizable landmarks. Artificial intelligence (AI) as a technological concept is having a significant influence across many fields. Increased processing capacity has enabled more sophisticated methods for applying AI in a wide variety of contexts, and this is in part responsible for the rapid development of these areas. These AI solutions are expected to increase output, decrease overhead, and make sense of the vast volumes of data already at our disposal. Artificial intelligence (AI) is facilitating a paradigm shift in the medical field by facilitating clinical assistance, decision support, enhanced management, and accelerated scientific discovery (Albert Christopher 2019).

REVIEW OF LITERATURE:

Jharna Soni (2022) In today's cutthroat business environment, human capital is no more a luxury but a need for every company that wants to succeed. In order to stand out from the competition and boost productivity, businesses must implement cutting-edge HR practises. Human resource management (HRM) will soon use cutting-edge technologies like as automation, augmented intelligence, robots, and artificial intelligence (AI) to replace the outdated methods of the past.

The benefits of AI to human existence have been shown. Artificial intelligence (AI) has the potential to radically alter our way of life and work in many ways, from the automation of routine and time-consuming jobs to the enhancement and amplification of human skills. For human resources, this is not only a chance, but an imperative to change and improve. Human resources experts in the modern day are more focused on improving the workplace by integrating human and automated processes. They'll have ample time to implement the necessary changes that will result in improved productivity.

The key problem for companies that want to compete with AI and sophisticated machines is how they will teach and change their staff to comprehend AI and to collaborate and cooperate with AI and robots.

Dr. Varsha Agarwal (2019), In the modern day, AI is exploding with ground-breaking new developments. Anything from improving easy and flexible abilities like driving a vehicle to improving tiny portable gadgets for easy activities like face recognition. At one point in history, the difficulty of performing routine tasks that required physical exertion prompted people to develop new technologies and inventions; later, AI was developed with the lofty aim of creating a human-like intelligence in machines. The primary goal of artificial intelligence is the development of intelligent computer systems capable of performing human-like tasks. Our understanding of how to build intelligent computers that function and think like humans has been greatly expanded by the principles, trends, applications, and advances discussed in this review article. This literature review illustrates the psychological and physiological effects of AI on humans.

Aishath Murshida A, et al. (2019), the goal of artificial intelligence research is to replicate human intellect in machines. For the last two decades, this has been employed as a development tool across industries including forecasting, healthcare, and security; it has also greatly enhanced the performance of production and service systems. Users struggle to comprehend and grasp the ideas and lack the skills necessary to work with this technology since AI and its functioning rely on vast quantity of data, an algorithm, and data science. Software and hardware failures in AI systems are notoriously difficult to trace back to human error since they are managed by computers and algorithms. Large sums of money are needed to launch the system. However, there are a few aspects that lend credence to the introduction of AI. These include the availability of ready-to-use software libraries and data, as well as the scalability of processing capacity on the cloud. The alterations allowed individuals to create their own algorithms.

Significance of the Study:

There are benefits and drawbacks of using AI that have been felt by users of all ages. Artificial intelligence (AI) is a kind of intelligence since it was created by humans. In the context of the digital age, it will carry out

37	ISSN 2690-9626 (online), Published by "Global Research Network LLC" under Volume: 4 Issue: 8 in Aug-2023 https://globalresearchnetwork.us/index.php/ajshr
	Copyright (c) 2023 Author (s). This is an open-access article distributed under the terms of Creative Commons Attribution License (CC BY).To view a copy of this license, visit https://creativecommons.org/licenses/by/4.0/

our skeletal labour, reducing the need for human involvement. When given challenging problems, AI always finds novel solutions. There are connections between AI and every major discipline in the humanities and the sciences. Artificial intelligence has been around for a long time now. In the present day, AI has extended its wings and is now involved in every aspect of a user's life (S. Das, A. Dey, A. Pal, and N. Roy, 2015). Artificial intelligence has had a far-reaching influence on the country's economy and society, fostering rapid expansion and improvement. Due to its emphasis on AI's use and its effort to gauge IT workers' attitudes regarding AI's application, the current research carries sufficient weight in this respect.

Objectives: The current study has been undertaken with the following objectives-

- To find out the usefulness of AI
- To find out the perception of IT employees towards AI

Hypothesis:

Hp1-Usefulness of Artificial Intelligence is very high for the human beings

Hp2-There is significant difference between male and female in their perception towards the use of AI

Hp3-There is significant difference between the employees below 5 years experience and employees above 5 years experience in their perception towards the use of AI

Method:

For the current study descriptive survey method is used.

Population: The population for the current study consists of the Persons working in the IT sector in Kollam district of Kerala

Sample: The researcher has selected 54 participants randomly from the population.

Tools & Techniques: A self structured questionnaire has been used for collecting the primary data. The questionnaire consisted of 21 statements with the response of Strongly Agree, Agree, Disagree and Strongly Disagree. Collected data were analyzed with descriptive statistics and t test in the SPSS 20. Version.

DATA ANALYSIS:

Table1-Descriptive Statistics of the Usefulness of AI

Parameters	Values
N	54
Minimum	25
Maximum	78
Mean	46.6851
Median	44.5
SD	14.6864
SEM	1.9985
Skewness	0.6120
Kurtosis	2.6652

From the above table it is clearly shown that the mean value for the usefulness of AI is 46.6851 with the minimum score 25 and maximum score 78. The obtained SD value is 14.6864 with the median of 44.5. The Standard Error means score is 1.9985 with the kurtosis value of 2.6652. It is clear that the mean score is higher than the mid value. Hence it can be concluded that the usefulness of AI is very high for the human beings.

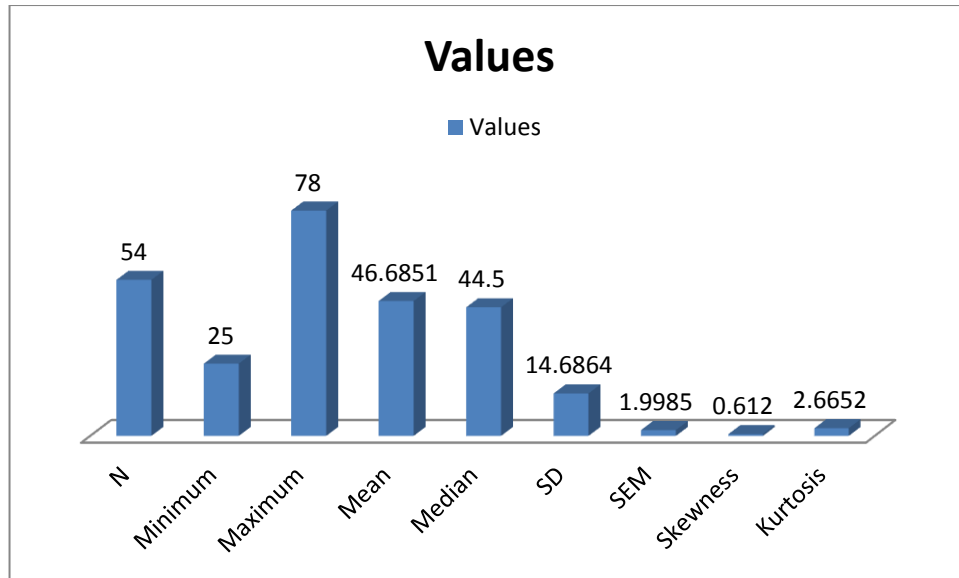


Fig.: Showing the descriptive statistics of the usefulness of AI

Table2-Difference in the Perception towards the use of AI between male and female

Group	N	Mean	SD	SEM	df	t
Male	32	46.9687	14.2658	2.521861	52	0.1695
Female	22	46.2727	15.6088	3.327807		

The above table shows that the mean score of the male employees on the perception towards the use of AI is 46.9687 and the SD is 14.2658. On the other hand the mean score of the female employees on the perception towards the use of AI is 46.2727 and SD is 15.6088. The calculated t value is 0.1695 which much less than the table value 1.99 at 0.05 level of significant. By conventional criteria, this difference is considered to be not statistically significant. Therefore the formulated hypothesis “There is significant difference between male and female in their perception towards the use of AI” is rejected which means the difference is not significant.

Table3- Difference in the Perception towards the use of AI between employees below 5 years Experience and above 5 years experience

Group	N	Mean	SD	SEM	df	t
Below 5 yrs Experience	31	46.4516	15.0307	2.699593	52	0.1344
Above 5yrs experience	23	47	14.5383	3.031445		

The above table shows that the mean score of the employees below 5 years experience on the perception towards the use of AI is 46.4516 and the SD is 15.0307. On the other hand the mean score of the employees above 5years experience on the perception towards the use of AI is 47 and SD is 14.5383. The calculated t value is 0.1344 which much less than the table value 1.99 at 0.05 level of significant. By conventional criteria, this difference is considered to be not statistically significant. Therefore the formulated hypothesis “

There is significant difference between the employees below 5 years experience and employees above 5 years experience in their perception towards the use of AI” is rejected which means the difference is not significant.

Findings: The major findings of the study are as follows-

- AI is very useful for the human being
- There is no significant difference in the perception towards the use of AI between male and female.
- There is no significant difference in the perception towards the use of AI between employees below 5 years experience and employees above 5 years experience.

Conclusion:

We can get a lot done with the aid of the AI. The use of artificial intelligence (AI) has benefited several sectors, including classrooms, factories, hospitals, and police and security operations. They improve our lives and our prospects for the future. It's a sign of intelligence in action. (Z. Hong, 2011) Artificial intelligence (AI) systems are developed to lessen reliance on human ingenuity. In the workplace, we are able to do more thanks to AI. Apps that incorporate AI are ubiquitous, from ride-sharing services to 3D photographers to personal assistants to spam blockers to media curators. And therefore, AI is a computer that can pick up new skills and form new ideas.

References

1. Agarwal,V. (2019), *Impact of Artificial Intelligence on Humans: A Survey*, *JETIR* March 2019, Volume 6, Issue 3.
2. Vatsa,P. and Gullamjji .K. (August, 2019), *To Study the Impact of Artificial Intelligence on Human Resource Management*.
3. Jennifer Johansson and Senja Herranen (May, 2019), *The Application of Artificial Intelligence in Human Resource Management*.
4. Albert Christopher (September, 2019), *Use of Artificial Intelligence in Human Resource Management*.
5. S. Das, A. Dey, A. Pal, and N. Roy, (2015) “*Applications of Artificial Intelligence in Machine Learning: Review and Prospect*,” *Int. J. Comput. Appl.*, vol. 115, no. 9, pp. 31–41, , doi: 10.5120/20182-2402.
6. *Soni,J. (2022) a study on the impact of artificial intelligence on human resource management, 2022 IJRAR April 2022, Volume 9, Issue 2.*
7. *S. Finlay, (2017) “Artificial Intelligence and Machine Learning for Business. A No-Nonsense Guide to Data Driven Technologies,” no. May,p. 15.,*
8. *T. Nitin, S. Apoorva, S. Himanshi, and T. Krishna, (2017)Diagnosingdengue: A faster, artificial intelligence based hack,|| International Journal Of Engineering And Computer Science, vol. 6, no. 7, pp. 21895–21 915, 2017.*
9. *R. Sathya, M. Pavithra, and G. Girubaa, (2017)Artificial intelligence forspeech recognition,|| International Journal of Computer Science &Engineering Technology (IJCSET), ISSN, pp. 2229–3345, 2017.*
10. *Z. Hong, (2011) A preliminary study on artificial neural network,|| in 20116th IEEE Joint International Information Technology and Artificial Intelligence Conference, vol. 2. IEEE, 2011, pp. 336–338.*

Appendix:

Questionnaire

Sl. No	Statements	Strongly Agree	Agree	Disagree	Strongly Disagree
1	AI holds the potential to address socioeconomic concerns such as stimulating economic growth, improving global health and education and helping enhance the quality of life for humans.				
2	AI applications hold the potential to automate a number of repetitive tasks such as entering timesheet hours and routine communication such as emails and paperwork				
3	AI, when integrated into businesses, is expected to bring about higher productivity, efficiency and growth.				
4	AI managers at the workplace can improve fairness and transparency in conducting appraisals and giving promotions and raises at the workplace.				
5	AI is applied in wide range of areas like engineering, manufacturing, security and surveillance, medicine and variety of other applications which involves prediction, control and decision-making applications.				
6	AI provides permanency by preventing the datas from being lost				
7	AI can do any complex works that a human finds difficult to do or cannot do.				
8	Tasks can be completed faster compared to a human				
9	It is reliable because it can simulate the human intelligence into reasoning processes.				
10	AI based problem solving method often doesn't provide the true insight of problem and solution.				
11	Machine can only perform task according to which they are programmed. They might crash or provide wrong output when asked to do anything else				

12	AI sometimes fails to identify the absence of solutions for particular problems.				
13	Machines with artificial intelligence, unlike humans, do not require rest, eliminating the fundamental disadvantage of human fatigue.				
14	AI provides the possibility to attain more accuracy by reducing the number of human mistakes				
15	The industrial sector benefits from sophisticated technology because it lowers labour costs and reduces reliance on low-skilled labour				
16	AI provides value added manufacturing through acceleration of integrating communication technologies and computing				
17	It has reduced the work of human being				
18	AI became a deciding factor for establishing effective competition among various organizations				
19	The AI powered machines can only perform the predefined intended tasks and are not capable of handling exceptions.				
20	Almost all industries including education uses AI for improving themselves.				
21	Proper use of AI technology in various fields for the betterment of human life will definitely be advantageous.				