" Role of AI in Employee Retention and Well Being "

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Abstract:

This paper serches into the multifarious impact of artificial intelligence (AI) on employee retention and well-being at the organizations.AI is used by the companies to facilitate the work efficiently and more accurately at domestic and across the borders.AI can be significantly used for more

accurate and analyzed data pertaining to the employees work performance ,attitude, emotions and behavior therein. Indepth research data analysis helps AI technologies to influence retention rates, job satisfaction, and overall well-being of employees This study investigates the positive and negative impact AI and it's harmful perspective at the workplace. AI plays important role in transforming the working scenario. The current study investigates the impact of artificial intelligence on productivity and wellbeing of employees. Through a extensive review, this paper aims to contribute to the understanding of the intricacies between AI and employee dynamics, in turn guiding organizations to foster a supportive and sustainable work environment.

Keywords: Artificial intelligence, employee retention, well-being, workforce dynamics, organizational strategies.

Introduction

Artificial intelligence (AI) is a stream of computer science engaged in developing systems that can perform tasks ordinarily requiring human intelligence.The human intellect engaged in analytical reasoning, trouble shooting, learning, language comprehension, and rational decision-making. AI systems are designed to assume human cognitive abilities, enabling them to data analysis, adapt to new inputs, and perform tasks on their own .

AI techniques can be broadly categorized into two types:

1. **Narrow AI (Weak AI)**: This AI system is specifically designed for a specific task or set of tasks. Narrow AI is prevalent in applications like virtual office assistants, solution provider systems, image recognition, and translation of language.These task are usually routine in nature that AI can do with utmost accuracy There is an absence of general intelligence and they cannot perform tasks outside their confined purview.

2. **General AI (Strong AI)**: This AI systems has it's own intelligence capable of understanding, learning , and applying knowledge across wide spectrum, similar to human intellect.It is the subject of continuous research and development within the spectrum of AI.

AI technologies are being executed at various industries, including health, finance, automobile industries, manufacturing, retail sector ,entertainment and others. Some common applications of AI include:

AI is utilized in various forms across organizations, including:

1. **Data Analysis and Interpretation** : AI is useful in analyzing large spreadsheets within no time and present important insights for decision-making.

2. **Customer Service provider:** AI-powered chatbots and digital aide can handle customer queries and support, providing immediate responses and help.

3. **Predictive Data**: AI algorithms helps us to investigate future trends, customer behaviors, and past data analysis, facilitating in strategic planning and forecast.

4. **Automated Routine work**: Repetitive tasks are efficiently done by AI , channelizing workflows and enhancing efficiency across various departments.

5. **Customization** : AI algorithms customizes user experiences by their personal data analysis regarding product preferences and buying behavior contributing to delightful buying spree of the customers .

6. **Cybersecurity**: AI systems are very sensitive regarding data theft and invasion and responds to such activities with utmost urgency.

7. **Natural Language Processing (NLP):** AI enabled NLP helps in emotion analysis and interpretation, and content development, enhanced communication and buying experience.

8**. Image analysis**: AI analyze images, pictures and videos to infer useful information, such as object identification, facial recognition , and inconsistency detection, used in areas like observation ,scrutiny ,medical sciences, and quality assurance.

9. **Supply Chain management**: AI boosts supply chain activities by anticipating demand, managing inventory and logistics.

10. **Healthcare** : AI helps in diagnosis of critical and cronic ailment by analyzing the data of the patient, medical reports , and genetic data.AI with support of clinical examination helps in treatment planning.

The importance of Artificial Intelligence (AI) in the wellbeing of employees has acquired increasing attention in the present day times.The features associated with AIare as follows :-

1.Enhancing Efficiency and Productivity:A number of studies have been conducted inferring the positive effects of AI on the efficiency and productivity of employees. It may lead to reduced workload and increase in the job satisfaction level. Automation powered by AI tools s channelizes routine tasks, giving employees more time to focus on other important tasks .

2. Flexibility and Quality of Work Life: According to some studies conducted, AI has to improved the quality of work life of employees and their work-life balance. Employees may enjoy more flexibility at work and can cut down on stress associated with rigid working hours and commuting as in the Hybrid work system.

3.Psychological Health: AI-driven tools have a major contribution in the field of Mental health providing employees with customized resources and support. Chatbots that are powered by emotional intelligence can help in promoting mental health awareness and flexibility.

4.Professional enhancement : There are learning platforms supported by AI that help employees gain new skills and have an updated perspective in their respective fields. This not only increases job satisfaction but also facilitates in career development and wellbeing

5.Informed Decision making : AI helps in more efficient data analysis, leading more accurate decision-making processes

6.Ethical challenges : Some studies focus on the potential negative influence of AI on employee wellbeing. The worry revolves around job displacement, automation leading to redundancy , and concerns pertaining to data privacy .This causes stress in employees.

7.Social Integration and Team affinity: There are communication tools supported by AI to boost social connectivity of remote and virtual teams. It leads to reduced feeling of segregation amongst employees.

8.Employee Engagement and involvement : When employees perceive AI as a work partner supporting in their work and not as a threat to their job , the engagement levels tend to rise.

However, they also raise ethical, social, and economic concerns, including issues related to privacy, bias, job displacement, and the impact on society as a whole.

Literature Review:

Yanan, L. I. (2023) this research paper studied the important implications for luxury hotel management. First, hotel employees' perceptions of artificial intelligence are dual. Second, luxury hotel managers should consider perceived orga-nizational support to be a key variable. Managemen-tarily, when facing the threats of artificial intelligence to employees, hotel managers should emphasize organizational support, especially in finance, career, and adjustment.

Budhwar, P., Malik, A., De Silva, M. T., & Thevisuthan, P. (2022)This paper explained that knowledge base should be developed for the drivers and consequences of the adoption of AI and AI-based intelligent technologies in international HRM and inform the research audience on the growing potentiality for further research. This research area is relatively emerging yet timely needed to be further explored through robust conceptual and empirical research keeping up with dynamic changes of technological advancement and changing business environmentZhu, Y. Q., Corbett, J. U., & Chiu, Y. T. (2020) AI has become a necessity for organizations hoping to elevate their performance and create a competi-

tive advantage. The rapid rollout of AI applications is creat-ing new stress for employees and how they respond —whether employees lead or flee — will influence the success of AI implementation projects

Cao, G., Duan, Y., Edwards, J. S., & Dwivedi, Y. K. (2021)This research paper highlighted the practical implications of using AI for organizational decision-making, importance of developing favorable facilitating conditions, having an effective mechanism to alleviate managers 'personal concerns, and having a balanced consideration of both the benefits and the dark side associated with using AI..

Potgieter, I. L., Ferreira, N., & Coetzee, M. (Eds.). (2019). This paper suggested avenues for further research addressing identified research gaps: conceptual refinement, inves-tigating facilitators of CSM at different action stages, broadening the scope of investigated career wellbeing outcomes of CSM, conducting theory-based inter-vention studies to systematically promote CSM, and examining contextual influ-ences emerging in Industry 4.0 work-life spaces.

Theoretical model development : Companies these days are implementing various polices and practices to retain employees in their organization .There are many factors that contribute to the retention of the employees and after an indepth literature review we have focused on four main

factors namely work life balance,ease of doing work,career progression and growth and work environment .It can also be inferred that AI tools used in the organizations in different sectors have an impact on these identified factors .Hence the paper tries to find out the extent to which AI may help retention of the employees.
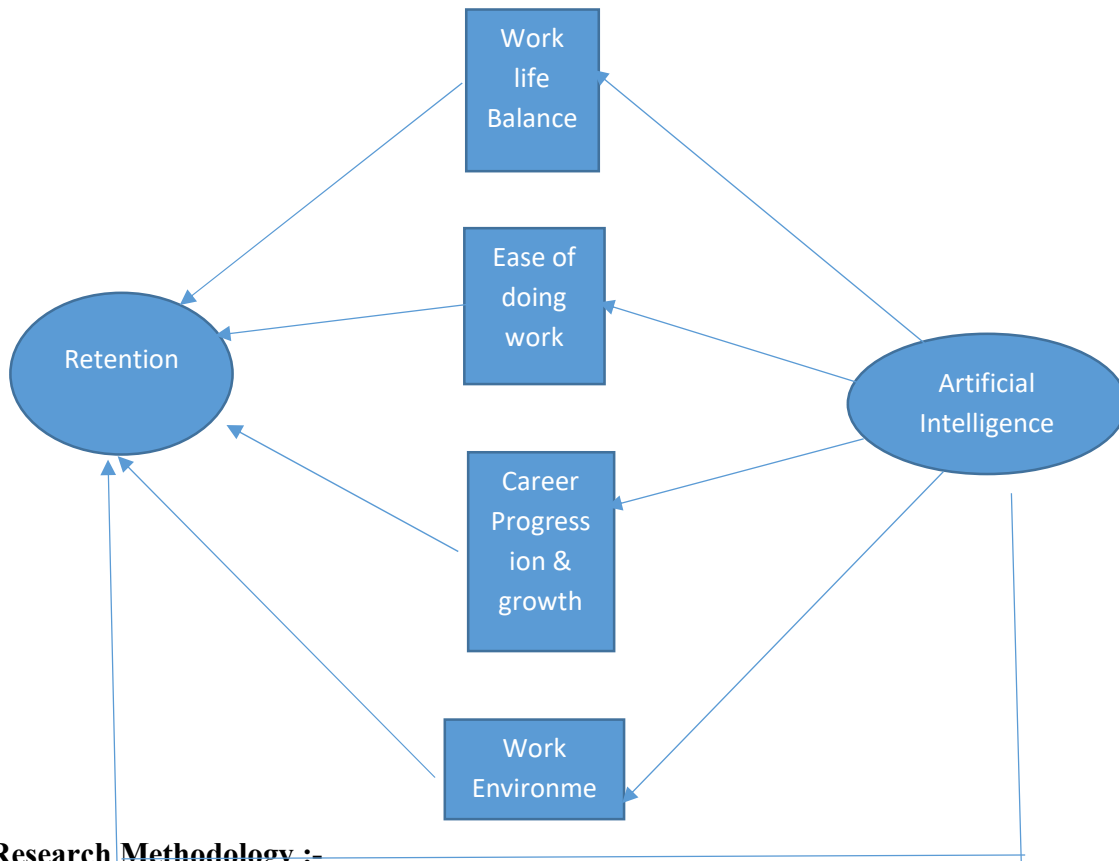
Research Methodology :-

Type of Research :- The research conducted was exploratory and analytical in it's kind .

Type of data:-Both secondary and primary data wascollected for the study .

Sample unit:-Data has been collected from respondents from all over India working in different sectors like production, manufacturing,Education etc

Sample size:-There were 125 respondents for the above study

Tools used :-For the data analysis correlation and ANNOVA tests were conducted and data was interpreted accordingly .

Type of Sampling :-Convenience and snowball sampling techniques were used to collect data

Hypothesis Testing

Ha1:-There is a correlation between the sector in which one is working and ease of doing work through AI.

The above hypothesis has been tested through correlation. The variables considered in this hypothesis are sector in which one is working and ease of doing work through AI.

Table

Inter-Item Correlation Matrix				
	In which Sector are you working in ?	Do you think AI has facilitated the work ?	Do you think that AI can improve the work output ?	Do you feel the joy of working ?
In which Sector are you working in ?	1.000	.102	.068	.023
Do you think AI has facilitated the work ?	.102	1.000	.141	.035
Do you think that AI can improve the work output ?	.068	.141	1.000	.027
Do you feel the joy of working ?	.023	.035	.027	1.000

The above table indicates inter-item correlation matrix. Different questions were asked from the employees based on sector in which one is working and the response of the employees towards this question has been considered as one variable and the other variable representing ease of doing work through AI like thinking of employees about whether AI has facilitated the work, whether AI could improve the work output and joy while working.

ANOVA						
		Sum of Squares	df	Mean Square	F	Sig
Between People		150.348	124	1.212		
Within People	Between Items	106.128	3	35.376	36.517	.000
	Residual	360.372	372	.969		
	Total	466.500	375	1.244		
Total		616.848	499	1.236		
Grand Mean = 1.95						

Based on the above ANOVA table, the significant value is 0.000 which is less than 0.05 (based on 5% level of significance), indicates that the null hypothesis has been rejected i.e. H_{01}:-There is no

correlation between the sector in which one is working and ease of doing work through AI and the alternate hypothesis i.e. Ha1:-There is a correlation between the sector in which one is working and ease of doing work through AI has been accepted.

Ha2: There is a correlation between the sector in which one is working and job security threat posed by AI

The above hypothesis has been tested through correlation. The variables considered in this hypothesis are sector in which one is working and threats of AI as job security and increase in stress level.

Table

Inter-Item Correlation Matrix			
	In which Sector are you working in ?	Do you feel that AI implementation has adversely affected the job security of the employees?	Do you think AI has contributed to the increase in the stress level at work place?
In which Sector are you working in ?	1.000	.047	.400
Do you feel that AI implementation has adversely affected the job security of the employees?	.047	1.000	.342
Do you think AI has contributed to the increase in the stress level at work place?	.400	.342	1.000

The above table indicates inter-item correlation matrix. Questions were asked from the employees based on sector in which they were working and the response of the employees towards this question has been considered as one variable and the other variable representing the threat posed by AI as increase in the stress level an disuse of job security .

ANOVA						
		Sum of Squares	df	Mean Square	F	Sig
Between People		229.296	124	1.849		
Within People	Between Items	27.237	2	13.619	14.428	.000
	Residual	234.096	248	.944		

	Total	261.333	250	1.045		
Total		490.629	374	1.312		
Grand Mean = 2.55						

Based on the above ANOVA table, the significant value is 0.000 which is less than 0.05 (based on 5% level of significance), indicates that the null hypothesis has been rejected i.e. H_{02}:- There is no correlation between the sector in which one is working and job security threat posed by AI is rejected and alternative hypothesis i.e. Ha2:- There is a correlation between the sector in which one is working and job security threat posed by AI has been accepted.

Ha3.There is a correlation between increased use of AI and stress level of employees pertaining to their career progression .

The above hypothesis has been tested through correlation. The variables considered in this hypothesis are sector in which one is working and threat to their career progression of employees Table

Inter-Item Correlation Matrix

	Do you think AI has contributed to the increase in the stress level at work place?	Do you feel that AI implementation has adversely affected the job security of the employees?	Do you think AI is a threat to the career progression of employees?
Do you think AI has contributed to the increase in the stress level at work place?	1.000	.342	.409
Do you feel that AI implementation has adversely affected the job security of the employees?	.342	1.000	.622
Do you think AI is a threat to the career progression of employees?	.409	.622	1.000

The above table indicates inter-item correlation matrix. Responses from people working in different sectors was taken as one variable and threat to their career progression due to increase use of AI was taken as second as second variable .

ANOVA

		Sum of Squares	df	Mean Square	F	Sig
Between People		215.456	124	1.738		
Within People	Between Items	28.624	2	14.312	28.769	.000
	Residual	123.376	248	.497		
	Total	152.000	250	.608		
Total		367.456	374	.983		
Grand Mean = 2.53						

Based on the above ANOVA table, the significant value is 0.000 which is less than 0.05 (based on 5% level of significance), indicates that the null hypothesis has been rejected i.e. H_{03}:- .There is no correlation between increased use of AI and stress level of employees pertaining to their career progression is rejected and alternative hypothesis i.e. Ha3:- .There is a correlation between increased use of AI and stress level of employees pertaining to their career progression has been accepted.

Ha4: There is a correlation between technical support given for the usage of AI and the joy of working of employees.

The above hypothesis has been tested through correlation. The variables considered in this hypothesis are the technical support given by the seniors and the joy of working .

Table

Inter-Item Correlation Matrix		
	Do you feel that your seniors provide you adequate professional support when needed?	Do you feel the joy of working ?
Do you feel that your seniors provide you adequate professional support when needed?	1.000	.079
Do you feel the joy of working ?	.079	1.000

The above table indicates inter-item correlation matrix. Different questions were asked from the employees based on sector and the technical support given to them for the use of AI has been considered as one variable and the other variable the joy of working in the scenario of AI intervention .

ANOVA						
		Sum of Squares	df	Mean Square	F	Sig
Between People		78.504	124	.633		
Within People	Between Items	59.536	1	59.536	109.428	.000
	Residual	67.464	124	.544		
	Total	127.000	125	1.016		
Total		205.504	249	.825		
Grand Mean = 1.73						

Based on the above ANOVA table, the significant value is 0.000 which is less than 0.05 (based on 5% level of significance), indicates that the null hypothesis has been rejected i.e. H_{05}:- There is no correlation between technical support given for the usage of AI and the joy of working of employees and the alternate hypothesis i.e. Ha5:-There is a correlation between the sector in which one is working and ease of doing work through AI has been accepted.

Ha5:There is a correlation between the use of AI and the perception that AI may improve the work output .

Table

Inter-Item Correlation Matrix		
	Do you think AI has facilitated the work ?	Do you think that AI can improve the work output ?
Do you think AI has facilitated the work ?	1.000	.141
Do you think that AI can improve the work output ?	.141	1.000

The above table indicates inter-item correlation matrix.Questions were asked from the employees about their perception about AI improving work output has been considered as one variable and the other variable representing their perception of AI facilitating the work .

ANOVA					
	Sum of Squares	df	Mean Square	F	Sig

Between People		116.304	124	.938		
Within People	Between Items	2.116	1	2.116	2.903	.091
	Residual	90.384	124	.729		
	Total	92.500	125	.740		
Total		208.804	249	.839		
Grand Mean = 2.03						

Based on the above ANOVA table, the significant value is 0.000 which is less than 0.05 (based on 5% level of significance), indicates that the null hypothesis has been rejected i.e. H_{05}:- There is no correlation between the use of AI and the perception that AI may improve the work and the alternate hypothesis i.e. Ha5:- There is a correlation between the use of AI and the perception that AI may improve the work has been accepted.

Limitation:-

1.The above study was conducted on the employees of different sectors as Education,IT,production ect but still many sectors could not be included.

2.The number of respondents can be increased for further studies.

Conclusions and recommendations :-

From the above data interpretation we may conclude that the ease of doing work with the use of AI differes in different sectors and the ease is not all pervasive so the employers should see for the best fit for the AI intervention .The employees are worried about their job security as AI poses a threat .The employers should focus on upskilling of their employees and having a mechanism of their coexistence with the technology .The data interpretation also suggests that the employer sare gloomy about their career progression because of the advancement of AI .They should be counseled properly and shown their niche areas so that they may put in their best efforts towards their goals for future.It is also seen that if proper technical support is given to the employees in form of training and development their joy of working would increase and they will be able to work more stress free.

In the changing times the role of employers should be reinvention of their workforce with skill upgradation and coexistence with the Artificial Intelligence.

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