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GENERATIVE AI AS A CATALYST FOR HRM PRACTICES: MEDIATING EFFECTS OF TRUST

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ABSTRACT

This research looked at the effects that generative artificial intelligence technologies have on the management practices of human resources. Additionally, the authors explored the function that trust plays as a mediator in the connection between user perception of AI technologies and staff performance. In order to obtain data from personnel working in the information technology business, a structured questionnaire was used. The purpose of this questionnaire was to test six different insightful constructs: optimism, innovativeness, ease of use, trust, organisational commitment, as well as employee performance.

Considering that the data demonstrated that each of the four associations was significant, it can be concluded that the premise of the research was validated. In the first stage, it was established that the direct impact was the most noteworthy, with a β-Value of 0.71 along with a p-value of 0.000. According to the second phase, it was found that the indirect impact was likewise significant, with a β-Value of 0.53, and the p-value was 0.000. In addition, the findings of the hierarchical regression analysis with mediator indicated that the overall impact was also determined to be noteworthy, with a beta coefficient of 1.24 and a p-value of 0.000.

Key words: Artificial Intelligence, knowledge sharing, organizational performance.

INTRODUCTION

Organisations in a variety of disciplines have been able to undergo substantial transformations as a result of technological developments and inventions in certain IT sectors, such as AI, machine learning, along with related subjects. Information technology is not an exception to this rule. As a result of the incorporation of a wide range of technology tools and apps, the working styles of workers have undergone a substantial transformation, shifting from laborious work to intelligent work.

OpenAI ChatGPT, Google Gemini along with Copilot and Bing AI commencing Microsoft are examples of generative artificial intelligence tools that are frequently used by (IT), IT-enabled companies, banking, along with company progression outsourcing business employees. These tools are supports on huge language models and are the mainly regularly worn generative AI tools in a variety of domains across the globe.

Rapid solutions have been revolutionised as a upshot of the combination of different forms of AI technologies and applications. Business schools all throughout the world, including those in India, make frequent use of the artificial intelligence tool known as ChatGPT for a variety of purposes, including article authoring, text production, copy assessment, as well as document preparation (Ratten and Jones, 2023). A tool that is powered by artificial intelligence and functions as a virtual assistant, ChaptGPT, is able to present instantaneous solutions to questions along with enlightenment along with contented that has been requested. According to Mijwil et al. 2023, ChatGPT has the potential to improve performance while also increasing accessibility, commitment, and engagement.

On the other hand, the impacts of new and unique technical tools are well known (Acemoglu, Johnson, 2023). This Generative artificial intelligence technology has an impact on transformer technology. According to Wijayati et al. 2022, these artificial intelligence technologies have an impact on employee engagement, productivity, and dedication, and they also improve employee performance.

According to Gatzioufa and Saprikis (2022), the users of artificial intelligence tools as well as chatbots are impacted by a number of characteristics of their regularly performed job whenever it is feasible. Furthermore, according to Pillai et al. 2023, these artificial intelligence technologies encompass continuing effects on worker engagement, organisational commitment, along with professional performance. Generative artificial intelligence technologies provide a number of advantages, including the capability to automate some particular operations, the capacity to complete repetitive jobs with increased speed and accuracy, and the ability to easily acquire information from a variety of sources (Chui et al. 2023)

REVIEW OF LITERATURE

The majority of workers' typical duties might be automated with the help of generative artificial intelligence technology, which would result in better performance and productivity. According to Kuhail et al. 2023, these technologies have the ability to give individualized help by analyzing previously collected data and to provide fast feedback that is comparable to traditional human communication. According to Pereira et al. 2023, artificial intelligence technologies have the potential to reduce labour expenditures, increase performance, and strengthen the connection between computers and humans in the workplace. According to Babina et al. 2024, there is abundant evidence that artificial intelligence technologies have a favourable influence on the performance of organisations, the engagement of their employees, the commitment of the organisation, market values, and greater growth.

According to Foroughi et al. 2023, the distinctive characteristics of chatbots make it possible for workers to finish their task on time. On the other hand, a number of organisations consider generative AI technologies to be relatively new. On the other hand, there is a dearth of study and knowledge about the goals related to the use of these new technologies.

On the other hand, there are some individuals who are worried about the potential dangers that artificial intelligence technologies may pose, including issues of ownership and privacy, the possibility of job losses, the optimisation of productivity, and the performance. According to Bankins et al. 2024, these repercussions might cause workers to have unconstructive adaptive intents as well as mindsets, which in turn affect their rendezvous, assurance, along with intentions to leave their current position. In addition, the existing body of research does not have a model that is both complete and trustworthy, which would clarify the factors that impact the employ as well as acceptance intents of generative artificial intelligence for the purpose of resolving problems pertaining to agenda have been merged by a number of studies in order to get an understanding of how workers are using generative artificial intelligence.

According to Gupta et al. 2023, the UTAU3 model is a forceful agenda that takes into consideration a range of aspects that impact the acquisition and utilisation of generative artificial intelligence or other technologies of a similar kind. According to Foroughi et al. (2023), the Technology Acceptance Model has been used in a number of different sectors in regulate to inspect the espousal intentions of innovative technologies. As a result of the fact that generative AI tools encompass the potential to completely transform the customs of the workplace, a number of academics have been motivated to do more study (Reddy et al. 2023). Tools powered by generative artificial intelligence are able to realise and take part in conversations in human languages, therefore producing contented in rejoinder to user contribution. According to Kasneci et al. 2023, generative artificial intelligence systems have the potential to improve

employee performance, increase employee engagement and commitment, and have a favourable impact on the industry.

The (TAM) analyses the connection between consumers' attitudes towards new technology and their actual use of the technology. This model is related to the idea of reasoned action. An individual's faith in expertise for its embracing along with continued use in the workplace is another essential aspect that promotes organisational commitment and employee engagement. This trust is a direct result of the individual's belief in the technology. When it comes to using generative AI technologies, employees in the workplace are primarily concerned with obtaining outcomes that can be relied upon. The level of confidence that an employee has in these AI tools will rise if they feel that the outcomes are valuable and if they believe that these tools are capable of performing properly. As a result, trust is an essential component in the use and application of generative artificial intelligence systems. Employers are able to have faith in generative artificial intelligence tools for continuous use, favourable perceptions, if they perceive these technologies to be dependable and helpful (Gkinko and Elbanna, 2023).

According to Chen et al. 2023, the quality of the findings and how they are used have an impact on the confidence that users have in technologies creating loyalty to the use of AI tools. The way in which the utilize of generative AI technologies might impact the level of job rendezvous among people is another consideration. The use of generative AI technologies has a favourable impact on the level of engagement that people have in their job when these tools are helpful and trustworthy. AMO and P-O fit theories, which stand for ability-motivation-opportunity and person-organization, respectively, Jia and Hou (2024) conducted research to study the connections as stated by the authors, increases employee engagement, which in turn leads to an increase in production. An attitude of conscientiousness was shown to moderate the relationship amid AI-driven sustainable human resource administration and worker commitment.

Within the context of organisational performance, Mishra et al. (2024) demeanor investigates to appraise the linkage amid artificial intelligence and employee engagement. It was observed by the authors that the implementation of software that is based on artificial intelligence may be of great assistance to management in the sense that it can increase employee engagement in their job, which in turn can boost employee performance. According to Wang et al. (2023), artificial intelligence has the potential to influence the attitudes of healthcare practitioners towards AI, their pleasure with AI, and their plans to use AI. The authors indicate that there was a beneficial influence on the level of involvement that healthcare personnel had in their employment.

The objectives:

- To establish as well as authenticate the user perceptions that control the employ of generative AI tools in the place of work
- Does trust participates a mediating part in the association between user AI practices and employees performance?

H01: There is positive significance between generative AI catalyst mix strategies and employee performance mediating Trust.

RESEARCH MODEL

Research framework was drawn from many researches and many theories.

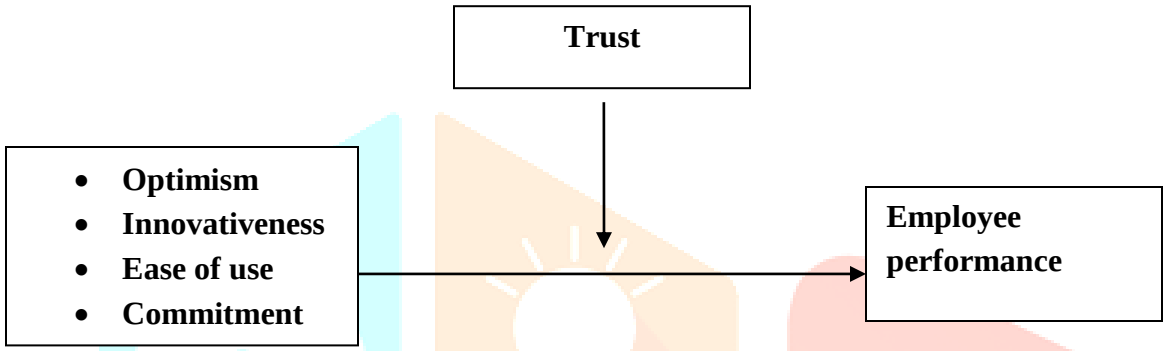

Figure-1 Proposed Research Model

MEASURE

This study evaluates the mediating effect of trust on AI catalyst mix strategies and employee performance in light of the research methodology and provided hypotheses. Information was gathered through the use of a standardised questionnaire. Items used to gauge progress in the Structured Questionnaire were culled from several researches from HR professionals at Hyderabad city. For the reason of estimating the reliability of the items used to evaluate the inner consistency of the constructs, the measuring items are reported in Table 1 below. When Cronbach's alpha is above 0.70, you know you can trust the results (Cronbach, 1970).

Table 1. Constructs used in the model Cronbach,s alpha test

Constructs	Cronbach Alpha 0.832	Item to total correlation
Optimism		.805
Innovativeness		.790
Ease of use		.813
Commitment		.801
Employee performance		.809
Trust		.809

METHODOLOGY

The present study **"**Generative AI as a catalyst for HRM practices: mediating effects of trust**"** was a survey to find out the mediating effect of trust among Generative AI users perception and employee performance. The study was descriptive in nature and it was designed to gather descriptive information. The study is conducted in Hyderabad of Telangana State. The study uses both primary and secondary data. The secondary sources are collected from various journal articles, records, websites and magazines. Primary data were collected through Judgement, non probability sampling method from 100 HR professionals from service industry. A structured questionnaire was prepared and scales were tested for the reliability and validity prior to its application in the study. Hierarchical regression analysis with mediator using AMOS 24.0 was done to analyze the mediating effect.

ANALYSIS AND RESULTS

Hypothesis Testing- Hierarchical Regression Analysis with Mediator

The approach of Baron and Kenny (1986) was used to conduct a mediation analysis. In the first step, the direct effect of path analysis was investigated, such as the effect of the independent variables user perception on AI generative catalyst on the reliant variable employee performance. In the course of the mediator trust, the second phase examined the indirect impact of the autonomous variable on the dependent variable. Ultimately, the impact of combining the independent and dependent variables with a mediator was examined.

Figure 2: Direct relation

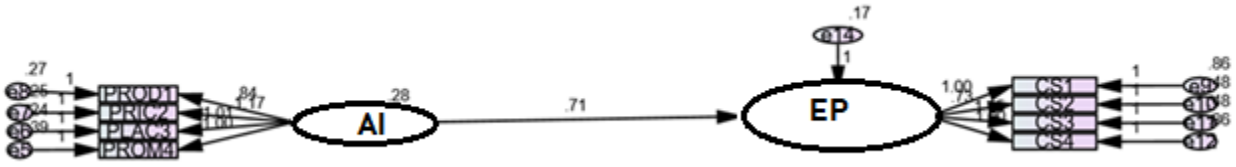

Figure 1 shows how the independent variables directly affect the dependent variable. The intermediary variable, which would have shown the direct relationship between the independent and dependent variables, is absent from this diagram.Figure 4.3 interpretation for the direct effect is as follows: user perception on AI strategies direct effect towards employee performance B= 0.71, total effect of 0.0.99, and p-value = 0.000.

Figure 3: Indirect Relation

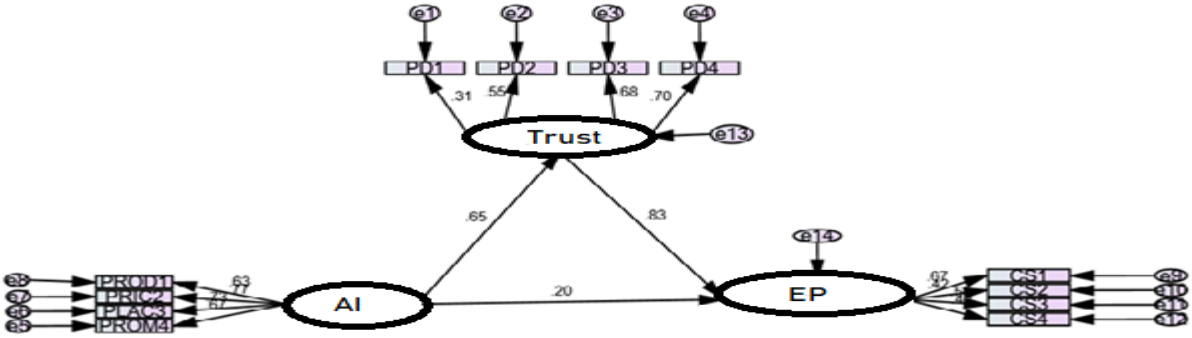

Table 2: Hierarchical Regression Analysis with Mediator

Hypothesis	Exogenous variables	Intervening variables	Endogenous variables	Standardized B-Value	p-Value	Result
Direct Effect	AI	→	Employee Performance	0.71	0.000	Accepted
Indirect Effect	AI	Trust	Employee Performance	0.53	0.001	Accepted
Total Effect	AI	Trust	Employee Performance	1.24	0.000	Accepted

Direct path: AI – Employee Performance = 0.71

Indirect Effect: AI – Trust- Employee Performance = 0.53

Total Path = Direct path + Indirect path= 0.71+ 0.53 = 1.24

The consequences of hypothesis H0 are detailed and comprehensively revealed in Table 2 above. Direct and indirect path relationships are 0.71and 0.53. The total effect (both direct and indirect) are 1.24 Bootstrapping (1,000 subsamples) was used to compute the standard error with T and P-values along with the implication of the path coefficient. As shown in Table 2, the structural model analysis using AMOS 23.0

outcome gives you an idea about the pathway coefficients along with their significance levels. The conclusion established that all four relationships were significant, implying that the study hypothesis was accepted. The first step stipulated that direct effect were the noteworthy with β- Value of 0.71, p = 0.000. the second step indicate that indirect effect were also significant with β- Value of 0.53, p = 0.000. the results of hierarchical regression analysis with mediator also showed that total effect were also found significant with β =1.24, p=0.000).

CONCLUSIONS

The use of generative artificial intelligence technologies has the probable to significantly improve employee engagement along with performance in the workplace, therefore bringing about a transformation. Trust and user perception, on the other hand, play critical roles in the acceptance and utilisation of these artificial intelligence products. The purpose of this research was to determine the elements that people working in the information technology industry consider to be important when making adoption decisions. Employers in the information technology industry who were well-versed in technology and who routinely deployed and used generative artificial intelligence systems for their normal work operations were the focus of the research, which utilized convenience sampling. A total of nine different constructs were integrated into the research project. Among them, the conceptions of ease of use and utility, which are modeled as superior user perceptions, as well as vigour and devotion, which are modeled as staff engagement, create a further advanced construct.

The model fits of equally models among lower-order and higher-order constructs were evaluated, and it was discovered that both models had a good fit because of their respective constructions. Therefore, an evaluation of the structural model was carried out. Through the use of SEM analysis and the IBM AMOS version 28 software, path analysis as well as hypothesis testing was accepted out. Based on the findings, it was discovered that the substantial effect of user perception on trust, organisational commitment, and organisational commitment has a considerable impact on employee engagement. In turn, employee engagement has a favourable blow on employee performance among workers working in information technology. Through the use of generative artificial intelligence techniques, the suggested model, which incorporates the TRISOR-TAM paradigm, provides organisations and programs for human resource management with significant insights on their operations. It is important to take into account user perceptions in order to ensure the successful installation and acceptance of general artificial intelligence solutions. However, adoption intentions differ from employee to employee.

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