Impact of Artificial Intelligence Techniques on Employee Well-being for Employee Retention

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Abstract - Retaining talents serve to be the greatest dare across the industry globally. Organisations are continuously trying to figure out various strategies and methods to retain its employees. This function primarily lies in the hands of the human resource professional. It's a challenge for each HR professional to retain their employees in the organisation in this competitive environment. HR's try to combat this challenge by implementing various strategies in the organisation. One of the strategies used today globally by most of the organisations iseffective practice of employee well-being. The authors have conducted this study among 240 IT employees. This paper tries to substantiate the importance of employee well-being practices to retain its talents.This paper also highlights the impact of using artificial intelligence techniques to enhance employee wellbeing practice and thus gaining momentum on employee retention. The authors have used correlational & hierarchical regression analysis to confirm the proposed relationship.

Keywords - Employee Engagement, Artificial Intelligence, Organisational Growth

1. INTRODUCTION

Organisations find robust challenges today to sustain in competitive environment. Out of these challenges retaining employee talents is the primary one. In order to oppose this problem of attrition, business organizations are inventing policies with regards to recruitment, selection, induction, training and development, compensation and benefits, designing job, evaluation of job and wage standards etc., which in turn helps the organisations to retain the employees in the long run. A research study stated that HRM practices like effective leadership, communication, value profiles must be integrate with strategic goal that can drives good financial condition of employee which leads to retention of employees[1].

According to 2018 retention report conducted by Work Institute, among the 50 reasons to quit jobs include compensation and benefits, manager behaviour and general well-being. On context to the later, the authors have chosen employee well-being practices as one of the measure to retain employees. Employee well-being is the concept by which an employee is taken care of by the organisation. It's a sense of feeling secured in the organisation. Through technological advancements like artificial intelligence, retaining of talents can be done at ease. This paper highlights the importance of employee well-being practices in the organisation and its impact on employee retention.

2. RELATED WORK

2.1 Employee Well-Being

Employee Well-being is becoming the axiom of global confront 2020. It is being esteemed and is gaining momentum in all organisations to promote organisational growth.British Psychological Society in the year 2010 has well recognized the importance of psychological well-being of employees & how it impacts the organisational success [2]. Simply, workplace well-being is a sense of pleasure that an employee senses when he/she is at work. It is a state of mental & physical feeling that an employee is protected to work at.

Organisations are now marching their search in endorsing employee well-being practices [3]. Research studies by [4]find that there is no definite definition for employee wellbeing but researchers can remark the meaning of this term. Few research studies have proven that employee wellbeing cause to high job performance, organizational citizenship behaviour, and flexible effort and reduce employee turnover and absenteeism [5]. Crucialaspects leading to organizational and personal wellbeing involves open communication, team working and co-operation, flexibility, support, and a balance between work and personal life[6].Concerning employee health, research studies perceived that the endowment of training and development opportunities, decentralized job design, information-sharing,

employment security, and sickness absence policies were associated with employee well-being [7] [8] [9] [10].

Employee Retention

Research studies proved that retention is a process by which an employer takes accurate actions to prevent the job switching of their prominent employees [11]. A study defines that retention is an effort taken by an employer to make some good procedures to retain their talents toaccomplish the organization goals and success [12]. Another study concluded that talented work force has extraordinary worth to the organizations due their proficiency over the knowledge, their skills & experience [13]. A study stated that organization treats employees as important assets. Most of the previous studies agreed upon that good retention strategies leads to greater time span in the organization and also motivates them to do their job dedicatedly [14]. Based on the above literature the authors have proposed employee well-being as one of the efficient strategy to promote employee retention.

H1   Employee well-being has a constructive effect on employee retention.

2.3 Artificial Intelligence

Successful Organisations are trying to invest new practices and procedures to enhance employee well-being as it is identified as a crucial aspect for organisational growth.Hence to outfit the inconsistent needs of today's era in 21st century, HRM will have to shift from traditional to a strategic approach [15]. John McCarthy in 1950 in his published book titled "Computing Machinery & Intelligence" coined the term "Artificial Intelligence". Though it was introduced long back it's gaining its proximity in recent years. [16],illuminatesthis technological innovation as "Synthesis & analysis of computational agents". AI techniques like RPA, chatbots have started to give its potential in almost all industry and globally organisations are trying to rope in AI in human resource function.

AI invokes concepts of machines controlling us and our behaviour. In fact, AI increasingly helps employers retain talent and avoid employee turnover. The strategy to effective use of AI for retention is a combination of big data and machine learning with the human touch. AI is being used in human resource department where turnover predictions are done by neural networks, selection criteria through decision tree, recruitment, engagement through interactive voice response, HR sentiment analysis and a lot more. It depends on the organisations to choose from available AI techniques to bring in results. On context to the above, the following hypothesis was framed.

H2Artificial Intelligence techniques employee well-being and has a constructive effect on employee retention.

3. METHODS

3.1 Problem Statement

Researchstudies have proven that there is a positive effect of employee well-being on employee retention. But the gap lies in how this concept of well-being can be spontaneous with technological transformations. On the above context, the authors have taken this research in hand. To be more specific, the following research questions needs to be addressed.

What would be the relationship between Employee well-being &Employee Retention?

What is the effect of applying an AI technique in Employee well-being practices to gain employee retention?

3.2 Methodology

Table 1: Cronbach's Alpha Reliability test

Instruments	Cronbach's Alpha	No.of Items
Employee well-being	0.812	5
Artificial Intelligence technique	0.845	7
Employee Retention	0.797	5

The data for the research was collected from 240 samples using a structure questionnaire. All samples were employees from IT/TES industrywith select cities in South India. Statistical correlational analysis was facilitated using IBM SPSS 23. The data collected, was exposed to reliability test utilizing Cronbach's Alpha which was above 0.80 for all the items. The results of reliability test are exhibited in Table 1.

3.3 Conceptual Model

[17] in their research paperfocuses on the changes in HRM practices like talent acquisition & retention, training & development with the development of Artificial Intelligenceand its assumed that this role is more substantial in future. Research studies by D.Wilfred (2018)have experimented that artificial intelligence delivers

other benefits in the screening, engagement of the candidate, re-building relationship, and post job offer letter, on-boarding activities, and these activities sharpen the recruitment process more effective and efficient, which creates an operative employer brand.

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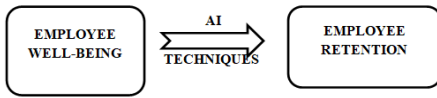With the above aspect taken into consideration, it can be better illustrated in figure 1.

Figure1: Conceptual Model

T ANALYSIS

To know the frequency and percentage of respondent's descriptive analysis were conducted. The results of the analysis are displayed in Table 2. From the table it is observed that 56 % of the respondents are male and 43% of respondents are female.

Table 2: Descriptive Analysis

Items	Description	Frequency	Percentage
Age	20-30	150	62.5
	30-40	90	37.5
Gender	Male	135	56.2
	Female	105	43.8
Qualification	Undergraduate	88	36.6
	Postgraduate	152	63.3
City	Chennai	148	61.7
	Coimbatore	52	21.7
	Bangalore	40	16.7

Correlational analysis on the relationship between Employee Well-Being &Employee Retention.

The first hypothesis was tested with correlational analysis. The authors have chosen correlational analysis as it is outstandinganalysis in identifying the connection between two variables. The first hypothesis was to identify the relationship between employee well-beingand employee retention. The results of the analysis are displayed in Table 3. The results prove that there is a positive effect between employee well-being and employee retention. The study proved to have the variables significantly correlated (p value = 0.000, p<0.01). On this context it is evident that organisations need to implement strategies which provide a strongemployee well-being practicesto retain their employees.With the technological innovations organisations need to identify newer techniques to enhance the well-being of employees.

Table 3: Correlational Analysis

Correlations		Employee Well-Being	Employee Retention
Employee Well-Being	Pearson Correlation	1	.626**
	Sig. (2-tailed)		.000
	N	240	240
Employee Retention	Pearson Correlation	.626**	1
	Sig. (2-tailed)	.000	
	N	240	240

**. Correlation is significant at the 0.01 level (2-tailed).*

Hierarchical regression analysis of Artificial Intelligence on the interaction between Employee Well-being&Employee Retention.

The results of hierarchical analysis are interpreted as per Field 2009 in Table 4 [14]. The regression results showed that there is a main effect between Employee Well-Being, Employee Retention and Artificial Intelligence Techniques. The first model is .329 which means that there is 32% variance in Employee Well-being. However for the final model, the value increases to 0.407 or 40% of variance in Employee Well-being. Therefore the variable Artificial Intelligence techniques accounts for an extra 8% of variance in the score.

In Model 2, the R2 change is tried with the F change. It can be seen that F change is significant (p=.000). A substantial F change indicates that there is noteworthy improvement in the estimate by the moderating variable. The model is found to be fit for both the main effect and the moderating effect model. Also the Durbin-Watson score from the analysis is 1.761 which is close to 2 that the assumption has almost certainly been met, also referred in Table 4.

The next part of the analysis ANOVA tests whether the model is significantly better at estimating that outcome is displayed as F Change in Table 4. If the improvement due to fitting the regression model is much greater than the inaccuracy within the model then the value of F will be greater than 1. For the initial model the F ratio is 59.289, which is unlikely to have happened by chance (p<0.001). For the second model the F ratio is 14.396 which is also highly significant (p<0.001). It is evident that the final model significantly improves the ability to predict the outcome variable. Thus, an artificial intelligent technique enhances employee well-being practices among employees in an organisation.

Table 4: Results of Regression Analysis

Models	Independent Variables	R^2	Adjusted R^2	R^2 Change	F Change	Sig F Change	Beta Value	Durbin-Watson
Model 1	Employee Retention Employee Well-Being	.334	.329	.334	59.289	0.000	0.578	
Model 2	Artificial Intelligence Employee Retention Employee Well-Being	.407	.397	.073	14.396	0.000	.362*** .346***	1.761

*** p<0.00

The standardized beta values exhibit the number of standard deviations that the outcome will change as a result of one standard deviation change in the predictor. The standardized beta values provide a better insight into the importance of the predictor in a model.

The standardized beta values for Artificial Intelligent techniques are 0.362 and for organizational culture is 0.346. This interprets that AI techniques has slightly more impact in the model.

6 CONCLUSION

Management of talents is a robust challenge and to retain the finest employees, appropriate framing of policies and practices is highly indispensable. At this crisis, it is necessary that the proposed strategies must be associated with HR practices like employee well-being. It is evidenced from the research study that organizations can frame employee well-being as an effective practice to retain its employees. Application of artificial intelligent techniques like chatbots on well-being practices will definitely enhance the results of retaining emloyees. This HR practice along with digitization analysed in the study suggested and recommended for bettercompetitiveedge for the organizations to sustain in the competitive environment. This study equips way for further research in strategically aligning HR practices for employee retention.

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