

IMPACT OF TECHNOLOGY WITH REFERENCE TO ARTIFICIAL INTELLIGENCE AND LEADERSHIP STYLES ON EMPLOYEE ENGAGEMENT AS A HUMAN RESOURCE PRACTICE.

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Abstract

In the era of today, the conventional ways of conducting business are being challenged. Thus, AI has been widely studied in various areas. The paper is based on the technology (artificial intelligence) and leadership styles and its impact on employee engagement. The research aims at finding the best suitable leadership style in the era of technology that keeps the employees engaged and committed to the organization's goals and values. The study is conducted among 74 professionals in the IT industry in Delhi/NCR. Regression method was used to test the hypothesis and investigated the positive relation between factors establishing about the increased use of AI at work leads to better employee engagement and for actively engaging the employees. Democratic leadership style is most suitable. The study focuses to discover the feature of one of the latest technologies.

Keywords: Artificial Intelligence, actively engaged, actively dis-engaged, Democratic, Authoritative and Delegative leadership style.

INTRODUCTION

Competition is no longer constraint to local –firms, but businesses now have to compete continuously at a world-wide level as a latest technology is making the world-smaller (Erixon, F.2018). This shows that for an organization to stay updated and maintain a competitive edge, implementation of these new technical advancements is main.

Artificial intelligence (AI) is challenging the foundations of companies and changing the ways people work globally (Murray, 2015).It influences jobs and undertakings while expanding organisational proficiency. A few appearances of AI effectively being used in the present business world incorporate AI and chatbots (Holzinger et al., 2018).With such advancement in technology, growth of AI is expected to reach to \$47 billion by 2020 (Montes & Goertzel, 2019).

HRM revolves around various aspects like recruitment, relations of the employees, training the employees and the growth of the organization (Wall & Wood, 2005). Humans work basis of knowledge and experience gained which each organization must emphasize on. That’s why engaging these sorts of employees plays an important role in a healthy organisation. The adaption of AI in HRM can also be said as the “the new age of HR”, since AI transforms the industry by substituting daily tasks that have been conducted by human resources (Upadhyay & Khandelwal, 2018).

Tecuci (2012) stated that AI as an arena is huge and multi-disciplinary field, which both linguistics and philosophy and computing disciplines can exploit. Various forms can be taken by AI such as bots, robots or software (Tecuci, 2012). THE conception of AI is one of the most crucial arenas with regards to science and engineering and this is studied from the time of Second World War. In the year 1956 the name of Artificial intelligence was confirmed by (Stuart & Norvig, 2016). Salin and Winston (1992) defined AI as a set of technologies that permits computers to complete the tasks that would then need the reasoning skills that human intelligence brings about. According to Nilsson (2005) machines should be enable to do majority of the tasks that are demanded by human intelligence, which he refers to as human-level AI.

Employee engagement is referred as “the level to which employees dedicate to something in the organization and how they work hard and the way they stay as a result of that dedication.” Corporate Leadership Council. (2004). There are three sorts of employees in terms of engagement namely, Actively Dis-engaged , Actively Engaged , Not engaged .The paper further describes impact of technologies like AI on employee engagement and which leadership style is best suitable to the organisation for employee engagement .Employee engagement is the emotional commitment that we have to our organisation and the organisation’s goals.

LITERATURE REVIEW

As indicated by new study,38% of organisations are as of now utilizing AI at work environment and 62% endeavours are hoping to begin utilizing AI very soon. Deloitte report shows 33% representatives want that their working environment will get incorporated by AI in the coming future. On the off chance that tedious undertakings can be help by computerized framework and mechanized programming it would make simpler for employees to give additional time on advancements (“AI and Automation in HR: Impact, Adoption and Future Workforce,” 2019, p. 1).Artificial Intelligence is growing day by day and covering every aspect. This paper focuses on the employee engagement which is supported by the leadership style that helps employees to be at ease in the times of changing technology. A leader management style can have a crucial impact on employee engagement. Managers who are not able to involve their employees by creating a healthy relationship may lead to loss of the skilled employees, this means that the actions of an employee’s supervisor can increase or decrease the employee’s engagement. In the event that representatives see that their leader is excessively controlling or micromanages their work, they are significantly more liable to withdraw. However, by encouraging a style that is more participative and facilitative, administrators enable their representatives to “continue ahead with the work” instead of impeding them with an excess of heading. As per a 25-year concentrate by the Gallup association, the relationship with a supervisor generally decides the length of a worker’s will stay. In addition, roughly 50-70% of an employee’s perception of their environment can be traced to the actions of one person: their leader. The leaders are solely responsible in creating the best conditions at work (Mike Kappel;2018). There has been an immense change in the format of work as earlier employees were considered as mere people who work but now all the needs and requirements are

taken care of so that they feel secure and consider the organisation as their own and contribute maximum to the organisation. (Adler, 2001; Cho, Cho, & McLean, 2009). Employees today have a higher expectation and wants to participate in the decision making and other such activities in the organisation (Burke & Ng, 2006). In consideration of the behaviour of employees the leaders are trying to understand their employees level of engagement as a dimension for shaping the future of the organisation as traditional perspectives has expired (Maccoby, 2007). Research has indicated that the qualities of democratic leadership result in lowers turnover and leads to increased productivity that also results in actively engaged employees (Macey & Schneider, 2008, Shuck, Rocco, et al., 2011; Walumbwa & Hartnell, 2011). This shows that democratic style of leadership might be appropriate in creating the employees actively engaged in the organisation.

OBJECTIVE OF THE STUDY

1. To identify and analyse the most suitable leadership style in employee engagement.
2. To analyse the degree of employee engagement in organisation after the adoption of technology (Artificial Intelligence)

ARTIFICIAL INTELLIGENCE IN EMPLOYEE ENGAGEMENT

Innovation has consistently been a big facilitator for change and improvement in the corporate sector. Artificial Intelligence has supported the extent of employees engagement through cutting edge sentiment Analysis. Controlled by regular language handling text investigation and other partnered AI advancements, innovation is making it simpler to accumulate bits of knowledge into employee conduct. Through more profound examination of email discussion, biometric information, organizations are thinking that its simpler to advance a feeling of having a place, distinguish warnings and establishing engaging climate around. (Vadakkanmarveetil, 2018, p. 1). HR professionals relationship with its employees is restricted to the performance audits and other cycle related questions. It is just through these negligible communications that they figure out that what is making an employee disengaged. Nonetheless, in the meantime, disengaged employees issues and negative perspectives are now influencing the organisation unfavourably. Obviously at that point, gathering employees commitment information irregularly doesn't fill a valuable need,

and HR needs to figure out how to address this issue progressively. In such a situation, artificial intelligence (AI) can fill in as the profitable device HR needs to genuinely adapt the capacity and keep its employees engaged in their work and organisation (Pooja Lalwani ,2019,p.1)

Chatbots are a simple example of AI that enables HR to know its employees better and that knowledge can be used to increase employee engagement in the organisation.

According to a study by McKinsey Global Institute, worldwide the organisations have put around USD 40 billion in Artificial Intelligence innovation in 2016. While a significant piece of this venture went into innovative work, about 10% was pushed towards the usage of AI advancements towards improving activities and encouraging employee engagement.

Employee engagement is crucial to the well-being and efficiency of an organization, yet it is a incredible challenge faced by organizations globally. Recent research by Gallup Management Journal reveals that 29% of employees are actively engaged, 54% are not engaged, and 17% are disengaged (Rao, 2017). In light of these issues compounded by the introduction and integration of new technologies such as AI into the workplace, focusing on best practices and tools that enable employees to bring a full range of cognitive, emotional, and physical energies into their work roles is of critical importance (Shuck, Adelson, & Reio, 2017) .

ARTIFICIAL INTELLIGENCE IN LEADERSHIP

Extensive access of artificial intelligence technologies is increasing digital transformation, a path that is as much about people, processes and leadership as it is about technology. AI seeps in more organizations and more parts within organizations, the very fundamentals of leadership need to be reconsidered, from overall strategy to customer experience, to how best to use the technology and human capital. Leaders not only have to evolve quickly in this new and dynamic environment, but they also need to ace the change throughout the organization to fill the gap between old and new realities.

Leadership is a process by which a leader influences the thoughts, attitudes, and behaviours of others. The idea of democratic leadership was at first presented by James MacGregor Burns

(1978). It is a cycle where a leader connects with supporters by spurring them through strengthening, learning, trust, and correspondence. Democratic leaders empower cooperative methodology by which the leaders and their subordinates share vision for the present and the eventual fate of the organisation. Democratic leadership style helps in motivating the employees (Yukl, 2002) to invest additional energy (Harter, Schmidt, and Hayes, 2002) that helps in employee engagement particularly for additional efforts for the organisation (Bass, 1990; Gill, 2006; Howell, 1993; Northouse, 2010). Democratic leadership is decidedly associated with supporter work fulfilment, devotee inspiration and authoritative responsibility. Democratic leadership style is a style where leaders work with employees and ignore their self-interest. This leads to establishing a fault free climate and building trust in leaders to empower employee engagement (Khan, Jessica and Helena, 2011). Other Leadership styles that are Authoritative and Delegative leadership styles does not encourage the employee engagement as too much of pressure and orders makes an employees feel unsatisfied and unhappy, that leads to loss of interest in the organisation which brings the employee in the category of no engagement or actively disengagement and further introduction of new technologies like AI employees also starts to resist change due to fear and that makes employees lie in actively disengaged or no engagement position.

RESEARCH METHODOLOGY

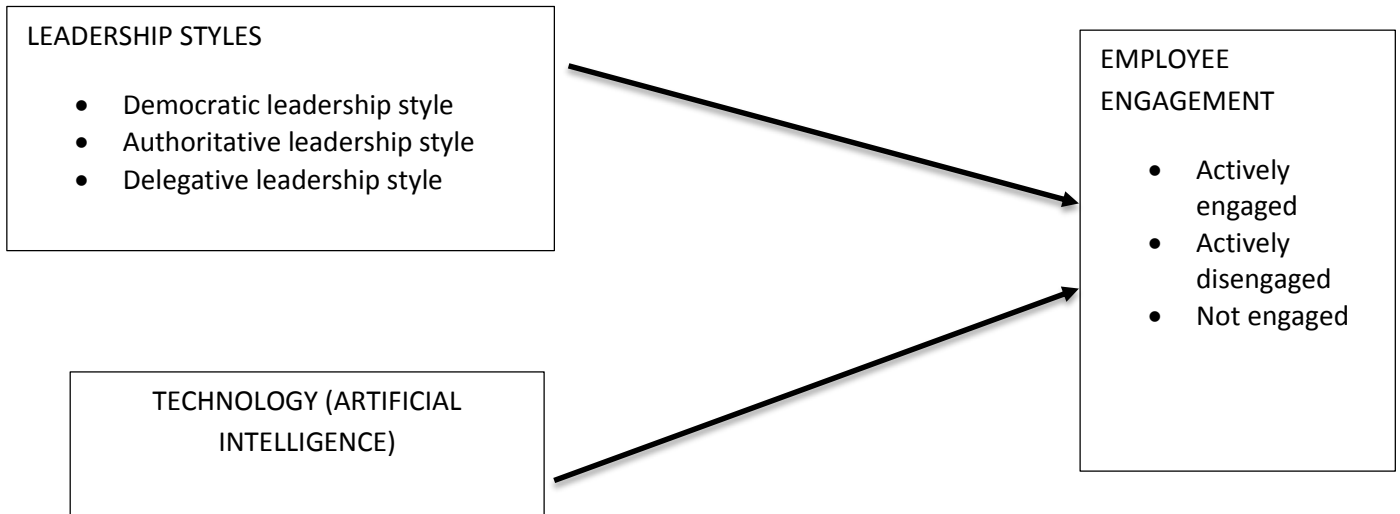
Purpose of the research.

The main objective of the study is to find out the best suitable style of leadership in the era of new technology to assess Employee's engagement, as AI becoming one of the biggest technology changes in HR management. This nature of this research is descriptive; however, method of surveying was used in this study to find the current status of AI adoption in the employee in IT organizations and using the collected data to understand the link between leadership styles in moulding employees.

Research and Methods of collection of Data:

Method of surveying was used to get data from employees of IT Industry with good knowledge of AI and HR functions to analyse the employee engagement and their intention to adopt AI with HR function in their organizations. This research is a quantitative type of research depending on three important factors: First Is Artificial Intelligence, second is employee engagement and third is leadership styles. This research used the secondary data to accomplish the findings of the research. A questionnaire was used to measure the above factors from the view point of employees who are working in this domain. We have circulated the questionnaire to 100 employees in various IT industries. Out of 100, we have received 93 feedbacks filled back, so we used 74 responses for the purpose of data analysis. We have introduced the multiple regression in order to find out bonding and its effects on the employee engagement on adoption of Artificial Intelligence in organisation as a moderating role.

HYPOTHESIS DEVELOPMENT AND RESEARCH MODEL



HYPOTHESIS	DESCRIPTION
H1	Democratic leadership style has positive impact on employee engagement.
H2	Authoritative leadership style has negative impact on employee engagement.
H3	Delegative leadership has a negative impact on employee engagement.
H4	Adoption of technology (AI) has a positive impact on employee engagement

RESULTS IN DESCRIPTIVE STATISTICS

Below Tables , presents the descriptive statistics and multiple regression of Artificial intelligence, Leadership styles and employee engagement .

H1:Regression

Variables Entered/Removed^a

Model	Variables Entered	Variables Removed	Method
1	Leadership style suits best in actively engaging employees - Democratic leadership style ^b		Enter

a. Dependent Variable: effect on employee engagement

b. All requested variables entered.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.783 ^a	.613	.607	.55001

a. Predictors: (Constant), leadership style suits best in actively engaging employees - Democratic leadership style

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	34.436	1	34.436	113.833	.000 ^b
	Residual	21.781	72	.303		
	Total	56.216	73			

a. Dependent Variable: affect on employee engagement

b. Predictors: (Constant), leadership style suits best in actively engaging employees - Democratic leadership style

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.458	.131		3.497	.001
	Leadership style suits best in actively engaging employees - Democratic leadership style	.867	.081	.783	10.669	.000

a. Dependent Variable: positive effect on employee engagement

H2:Regression

Variables Entered/Removed^a

Model	Variables Entered	Variables Removed	Method
1	Authoritative leadership style is not suitable in actively engaging the employees ^b		Enter

- a. Dependent Variable: effect on employee engagement
- b. All requested variables entered.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.809 ^a	.655	.650	.51880

- a. Predictors: (Constant), Authoritative leadership style is suitable in actively engaging the employees

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	36.837	1	36.837	136.866	.000 ^b
	Residual	19.379	72	.269		
	Total	56.216	73			

- a. Dependent Variable: affect on employee engagement
- b. Predictors: (Constant), Authoritative leadership style is suitable in actively engaging the employees

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.914	.229		-3.983	.000
	Authoritative leadership style is not suitable in actively engaging the employees	1.205	.103	.809	11.699	.000

a. Dependent Variable: effect on employee engagement

H3: Regression

Variables Entered/Removed^a

Model	Variables Entered	Variables Removed	Method
1	Delegative leadership style is not suitable in actively engaging the employees ^b		Enter

a. Dependent Variable: Impact on employee engagement

b. All requested variables entered.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.704 ^a	.496	.489	.58773

a. Predictors: (Constant), Delegative leadership style is not suitable in actively engaging the employees

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	24.481	1	24.481	70.872	.000 ^b
	Residual	24.871	72	.345		
	Total	49.351	73			

a. Dependent Variable: Impact on employee engagement

b. Predictors: (Constant), Delegative leadership style is not suitable in actively engaging the employees

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.078	.260		.301	.764
	Delegative leadership style is not suitable in actively engaging the employees	.982	.117	.704	8.419	.000

a. Dependent Variable: Impact on employee engagement

H4: Regression

Variables Entered/Removed^a

Model	Variables Entered	Variables Removed	Method
1	AI positive impact on employee engagement, Degree of engagement due to AI ^b		Enter

a. Dependent Variable: AI making actively disengaged employees perform better

b. All requested variables entered.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.801 ^a	.642	.632	.55461

a. Predictors: (Constant), AI positive impact on employee engagement, Degree of engagement due to AI

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	39.201	2	19.601	63.722	.000 ^b
	Residual	21.839	71	.308		
	Total	61.041	73			

a. Dependent Variable: AI making actively disengaged employees perform better

b. Predictors: (Constant), AI positive impact on employee engagement, Degree of engagement due to AI

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	
	B	Std. Error	Beta			
1	(Constant)	1.304	.278		4.686	.000
	Degree of engagement due to AI	1.696	.183	1.200	9.275	.000
	AI positive impact on employee engagement	-1.696	.402	-.547	-4.224	.000

a. Dependent Variable: AI making actively disengaged employees perform better

ANALYSIS AND DISCUSSION

H1 – $R^2 = 0.61$, Democratic Leadership style has a positive impact on employee engagement.

H2 – $R^2 = 0.65$, Authoritative Leadership style has a negative impact on employee engagement.

H3 – $R^2 = 0.49$, Delegative Leadership style has a negative impact on employee engagement.

H4 – $R^2 = 0.64$, Technology (AI) has a positive impact on employee engagement.

ANOVA TABLE

The test using $\alpha = 0.05$, where $R^2 > 0.50$.

H1 - $F(1,72) = 113.83$

$P < 0.001$, $R^2 = 0.61$

Overall the regression is statistically significant .

H2 – $F(1,72) = 136.87$

$p < 0.001$, $R^2 = 0.65$

Overall the regression is statistically significant .

H3 - $F(1,72) = 70.87$

$p < 0.001$, $R^2 = 0.49$

Overall the regression is statistically significant .

H4 - $F(2,71) = 63.72$

$p < 0.001$, $R^2 = 0.64$

Overall the regression is statistically significant .

CO-EFFICIENT TABLE

This table checks each predictor individually

Leadership style preferred in employee engagement is Democratic leadership style and has significance level is $p < 0.001$

Leadership style best suited in actively engaging employees has significance level $p < 0.001$

Introduction of technology (AI) has a positive impact on employee engagement and has a significance level of $p < 0.001$

These values reflect the account of independent variable is statistically significant.

So the leadership style which is the Democratic leadership style is resulting to be the best leadership style for and is perfectly correlated to the style that is most suitable in active employee engagement.

CONCLUSION

The test today isn't simply holding back employees , yet completely captivating them, catching their brains and hearts at each phase of their work lives Artificial Intelligence is used to manage employees through employee engagement. This occurs by motivating employees and controlling their actions by using the democratic leadership style so that both employers and employees have interest in the operation of the organisation and contribute maximum potential to achieve the goal of the organisation. However further studies can be conducted on variables like issues of trust,

perceived risk, and fairness that play a vital role in determining whether such systems will be effective at managing employees over the long run. In addition, AI-driven systems must be easy to use and be viewed as useful if companies hope to encourage their use. Recent study indicates that employee engagement is one of the major challenges HR faces globally, there isn't any time better to adopt AI into HR processes to bond with employees, get their feedback, and use this feedback to create a valuable employee engagement practices that will give benefits far into the future.

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