

# Transforming the Indian Hospitality Industry: The study of Technology on Employee Engagement, Organizational Culture, and Performance Management

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## Abstract

*In a dynamic and unstable external environment that disrupts internal organizational resources, there arises a challenge for the hospitality industry to initiate the adoption of the latest technological advancements. The purpose of the study is to analyse the effect of technology adoption on several human resource practices (HRP) like employee engagement, organisational culture and performance management in the hotel industry. Through an extension of the technology fit theory, quantitative research has been conducted by Cronbach's alpha and confirmatory factor analysis using R studio with the assistance of a questionnaire that was distributed among 8 different hotel executives to understand the impact of technology implementation in hotel industry. The research demonstrates that technology serves as a valuable asset for assessing and enhancing employee engagement, organisational culture and performance management within the departments of Indian hotels. The outcomes related to employee engagement, organisational culture and performance management exhibit variations based on factors such as age, gender, educational qualifications, and the presence of a self-learning attitude. It's also important to note that training and development play a significant role in elevating employee productivity. Furthermore, technological advancements offer benefits on both financial and non-financial fronts, such as lowering implementation costs related to labour and maintenance, as well as non-financial such as, improvements in employee engagement, organisational culture, customer satisfaction, and performance enhancement within the hospitality industry.*

**KEYWORD:** Employee engagement, Employee motivation, organisational culture, Performance management, Technology adoption, Human Resource Practices, Hotel Industry.

## 1. INTRODUCTION

In the world full of systems and believes, there are some of the very important systems like social and ecological system that creates a links between humans and non-humans and how their surroundings influence them in a different manner(Farrell & Twining-Ward, 2005). It is widely acknowledged that the business environment exhibits a high degree of dynamism and instability due to the current tumultuous societal and political landscape. This is further compounded by the growing implications of global economic interdependence, which underscores the critical importance of promoting an organizational culture that nurtures the well-being, engagement, and performance of employees, as pointed out by (Pawinee

Petchsawang & Gary N. McLean, 2017). After implementation of economic liberalization policy, India witnessed significant growth in its economy leading to become the rapid growing largest economy in the world. This had a direct impact on the country's hospitality industry which is Contributing over 16 per cent to the GDP and 35 per cent to direct employment within the state as per the IBEF Report 2022, the domino effect of the sector on indirect job creation is unrivalled(*Why the Centre Must Categorise the Hospitality Industry as 'Infrastructure'* | *The Indian Express*, n.d.). Considered to be a sunrise industry, the hospitality sector is expected to touch \$460 billion by 2028. Moreover, India has witnessed considerable growth in establishment of premier hotel chains that in turn has enhanced foreign visitors to the country and tourism sector in general since the year 2000. In 2021, the travel and tourism industry in India contributed around 178 billion U.S. dollars to the country's GDP. The growth now a days in Indian Services Sector has become a unique example of leap-frogging technique which is a traditional model of economic growth. **Leap-frogging** occurs when a nation bypasses or **traditional** stages of development either jump directly to the latest technologies by skipping stages or explore an alternative path of technological development involving latest technologies with new benefits and new opportunities for the creation of path (Silva et al., 2023). Some of the service sector like banking & finance and hospitality has the uppermost employment elasticity among other sectors in India. Thus, it has the huge growth potential as well as the power to deliver extremely productive careers – which ultimately leads to the generation of revenue. To encounter the challenge of job creation, the Skill India program aims to achieve its target of skilling/ up - skilling 400 million people by 2022. The main aims of doing this is to foster private sector initiatives in skill development programs, and by providing them with the necessary funding (Remya Lakshmanan, 2019). In the era of intense market competition, similar to other industries, the hospitality sector strives to enhance its products and services to better align with guest preferences(Afaq et al., n.d.). One of the competitive strategies employed involves the adoption and more effective implementation of advanced technologies, as discussed by (Tavitiyaman et al., 2022).The utilization of technology aids in defining the most suitable work patterns and behavioural attributes necessary to effectively transform limited resources into meaningful output, benefiting both the organization and society(Y. H. Kim et al., 2014). It is, therefore, accurate to assert that there exists no better meeting point for human and machine-based intelligence than our human resources department, as highlighted by (Sekhon, 2021).

Technology adoption is perceived as a holistic concept encompassing the revolution of business operations, business processes, and structures to leverage the advantages of new technology. Information technology systems (ITS), artificial intelligence (AI), machine learning (ML), and the Internet of Things (IoT) are instrumental in shaping the operational strategies of businesses within the service sector. Companies operating in the service industry are increasingly focusing on positioning themselves as part of the knowledge economy. This entails the ability to outperform competitors by comprehending the desires and needs of target customers and operating in a manner that swiftly and cost-effectively fulfills those requirements.

While there have been numerous studies investigating the significance of technology adoption in the hospitality industry, a wide research gap persists. Existing research has primarily focused on assessing the efficacy of technology adoption from the perspective of consumers in the hotel industry, as seen in studies conducted by (Bilgihan et al., 2016), (M. Kim & Qu, 2014), and (Nam et al., 2021). However, there is a scarcity of studies that address this issue from the viewpoint of hotel executives/employees, particularly concerning human resource practices (HRP) such as Employee engagement, organisational culture and performance management, as emphasized by (Tavitiyaman et al., 2022). Despite these advancements, challenges persist

in optimizing employee productivity and achieving organizational goals, primarily due to the nature of tasks and work, such as those in the housekeeping and front office departments, as well as the specific circumstances surrounding hotel employees, including their demographic profiles and levels of engagement. The lack of employee engagement and a positive attitude toward embracing innovative technological solutions can potentially hinder employee retention and bring out the better organisational culture which will positively impact the performance management within hotel organizations and, consequently, impact the broader hospitality industry, as discussed by (Li et al., 2019).

## **2. THEORETICAL BACKGROUND AND HYPOTHESIS DEVELOPMENT**

This review of literature provides a descriptive summary, and a critical assessment on work, related to the problem of research and also adds to overall knowledge in the topic as well as demonstrates how my research investigation will fit within this field of study.

While going through the literatures some of the research shows that digitalization in the hotel industry needs innovative management practices and procedures, demanding for substantial deviations in organizational structure and its culture. (Endres et al., 2022; Pelletier & Cloutier, 2019; Rha & Lee, 2022; Sklyar et al., 2019).

### **2.1 Technology adoption**

The present literatures on technology adoption majorly focus on three concepts which is modelling methodologies to understand the decision, micro level studies and examining the learning and social network process(Doss, n.d.2005). The substantial technological transformations and the heightened utilization of artificial intelligence and machine learning within the hospitality industry have led to an elevation in the role of employers in establishing an improved work environment and enhancing long-term productivity, as noted by (Yassin Alzyoud, 2022).

The contemporary era and the ever-evolving technological landscape compel all organizational units to undergo digital transformation, as underscored by (Kitsios et al., 2021). The constant development of technology has a great impact in improving operational efficiency of hotel industry(Buhalis & Leung, 2018).

Presently, organizations should give due consideration to the interconnections between social goals, economic objectives, and environmental objectives to attain a mutually beneficial scenario of economic and environmental preservation and sustainable development, as articulated by (Stahl et al., 2020).

An approach grounded in best HR practices factors in the rights and dignity of workers while capitalizing on technological advancements to enhance an organization's service offerings. For instance, digital platforms utilize algorithms for the selection and recruitment of workers, as highlighted by (Köchling & Wehner, 2020). An increasing number of organizations have embraced digital technology and artificial intelligence (AI) to manage their operations, incorporating the use of sensors and biometric data (e.g., facial recognition, fingerprints, GPS tracking) to monitor the mobility and performance of their workforce, in accordance with (Moussa, 2015). Some organizations also employ digital technologies to monitor the real-time physical well-being of employees for health and safety purposes and also to keep a track on their work progress. However, it has been testified that the extensive use of algorithmic tracking to monitor performance is detrimental to the physical and mental health of workers, leading to calls for regulation through legal measures, as indicated in "Algorithmic Tracking Is 'Damaging Mental Health' of UK Workers" by The Guardian(Parker & Grote, 2020).

### **2.2 Employee's engagement and technology adoption:**

With the help of extent literature review, it has been analysed that increasing the level of employee engagement in an organisation will develop employee participation which will help in better communication, devotion, and better service delivery behaviours and later positively enhance customer satisfaction and improve overall productivity, performance and profitability (Tavitiyaman et al., 2022). Some of the researchers also indicated that employee engagement is a critical component, and transformational leadership can enhance affective organizational commitment and job performance when the level of employee engagement is high as the mediating construct (Park et al., 2022).

According to (Wang et al., 2021) “Accelerating AI adoption with responsible AI signals and engagement mechanisms in health care” digitalisation of technology controls the mediating effects of employee involvement on the association between AI behavioural and attitudinal outcomes. The results show that technological overload significantly modifies the effects of employee involvement as a mediator.

According to (van Dun & Kumar, 2023) “Social enablers of Industry 4.0 technology adoption: transformational leadership and emotional intelligence” the relationship between managers' attitudes toward employees' adoption of technology in Industry 4.0 is classified into four categories of transformational leadership behaviour—motivation, ideal influence, intellectual stimulation, and staff engagement which encourage managers to adopt or improve the use of technology.

According to (Wood et al., 2020) “The Relationship Between Work Engagement and Work–Life Balance in Organizations: A Review of the Empirical Research” there is a connection exist between work-life balance (WLB) and employee engagement (EE). It appears premature to say that one variable has a significant influence over another. WLB has been examined as an antecedent of job engagement rather than an outcome in about 16 studies.

According to (Kwon & Kim, 2020) “An integrative literature review of employee engagement and innovative behaviour Revisiting the JD-R model” there is a connection between employee engagement and innovative behaviour. It has been revealed that engaged workforce probably behave more innovative by managing strategies which deals with challenges, indicates that dealing with capacity work and employee engagement together in facilitates innovative behaviour

According to (Tavitiyaman et al., 2022). “How Task Technology Fits with Employee Engagement, Organizational Support, and Business Outcomes: Hotel Executives' Perspective” hotel executives make plans for the adoption of technology with the help of internal and external resources (such as organizational support and employee engagement). The advantages of technology boost staff efficiency by reducing the outdated style and giving employees more time to connect and provide top-notch services to hotel customers.

### **2.3 Performance management and technology adoption**

It is true to say that human intelligence, and machine intelligence, has a dominant influence on employees, particularly in a people-intensive industry (Prentice et al., 2019). Digital transformation plays a moderating role in the relationship between human intelligence and employee outcomes. Technology adoption cover the area of artificial intelligence (AI), machine learning (ML), internet of things (IOT), Cloud computing etc. as disruption in technology has its impact in best human resource practices, the conclusion says with the help of technology adoption the scale of performance management shows a positive effect which in turn helps the front office employee to increase their efficiency and productivity in their work (Zhang et al., 2019).

According to (Brown et al., 2019) “Performance Management a Scoping Review of the literature and an Agenda for future research” Performance Management (PM) will emphasize on the contribution done in the field of human resource development (HRD). The researches

in coming future will emphasize on the areas connected to justice particularly due to the changing demographic composition of the workforce including aging workforce.

According to (Wibisono & Hasan Basri, 2019) “Building a Model of Suitable Performance Management Framework” there should be a conceptual framework for performance management (PM) and a theoretical model which determines a suitable PM framework. performance measurement should includes goal setting and commitment within employees as part of PM.

According to (Richards et al., 2017) “Business Intelligence Effectiveness and Corporate Performance Management: An Empirical Analysis” there should be a framework for corporate performance management (CPM) based on the Consolidated model of information processing theory and technological business value. Implementation of effective Business Intelligence (IB) leads to effective CPM, related to better analytic practices and business planning.

According to (Ham et al., 2005) “Effect of information technology on performance in upscale hotels” there is a positive effect of technology applications on employee’s performance in operations department of hospitality industry. the department of hospitality industry should participate in technology adoption and also focus on specific areas for IT investment.

According to (de Bem Machado et al., 2022) “Knowledge management and digital transformation for Industry 4.0: a structured literature review” digital transformation (DT) and knowledge management (KM), should be considered as new research streams. Researchers can categorize a prosperous research field that has exposed formerly unidentified and inspiring link between DT and KM in the public sector.

#### **2.4 organisational culture and technology adoption**

In this the following theoretical background have discuss the subject from the perspective of employee satisfaction, efficacy, work like integration and flexible working as a part of organisation culture and its impact on technology adoption especially in hospitality industry.

With the help of extent literature review, it has been analysed that technology plays a vital role in assessing employee’s satisfaction and flexible working which is a part of organisational culture and assumed as a best HRP in the world of hospitality industry(Bavik, 2016; Sabuhari et al., 2020).

According to (Martínez-Caro et al., 2020) “Digital technologies and firm performance: The role of digital organisational culture”, digital organisational culture facilitates both the process of business digitisation and the productivity from digital tools, with the final goal of enhancing organisational performance. It has been revealed that digitisation can improve the progress of value activities and employee satisfaction but organisation will only release their potential if they incorporate a digital organisational culture.

According to (SAPTA et al., 2021) “The Role of Technology, Organizational Culture, and Job Satisfaction in Improving Employee Performance during the Covid-19 Pandemic” digitalisation, organizational culture, and job satisfaction in the service industry can be a motivation for enhancing performance amongst the workforce. It can be used for implementing such business strategies which improves satisfaction, well-being and efficacy among employees and results in increasing productivity of service industry.

According to (Limna, n.d.2022) “Artificial Intelligence (AI) in the Hospitality Industry: A Review Article” there are different article with objective of evaluating the literature on AI in the hospitality industry. It has been analysed that technologies have positive as well as negative impact on the employee’s job involvement and satisfaction while considering organisational culture in the area of hotel industry.

According to (Rha & Lee, 2022). “Research trends in digital transformation in the service sector: a review based on network text analysis” the increasing trends of digital transformation which will help an organisation to increase its productivity. Findings revealed that most

vigorously studied topics in relation to digitalisation were job satisfaction, Business Model, sustainability and Customer Experience.

According to (Heras et al., 2021) “Family-supportive organisational culture, work–family balance satisfaction and government effectiveness: Evidence from four countries” organisations should always account the role of supportive family environment in the organisational work culture keeping in mind the individual perceptions(Rofcanin et al., n.d.). societal context can shape the impact of HR activities, including flexible work practices(Peretz et al., 2018).

Based on literature review above the objectives are defined as follows:

To examine the existing Human Resource Practices of the select hotels with the lens of role of technology adoption.

To identify the experience captured during the technology adoption process under employee’s engagement, performance management and organisational culture of hotel employees to inductively classify human resource practices (HRP) for the Indian luxury hotels.

### **2.5 Hypothesis development:**

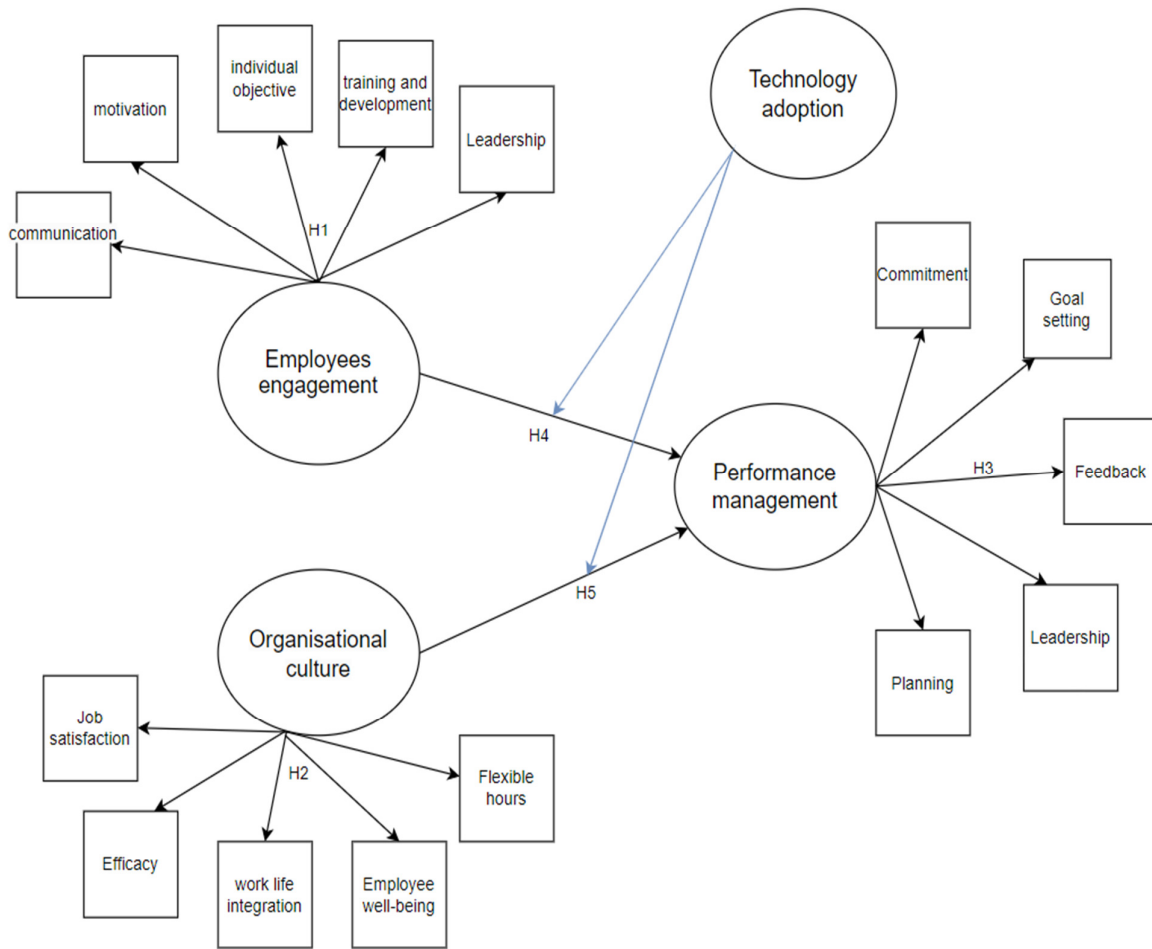
**H1:** Employee engagement has a positive and significant relationship with communication, motivation, individual objective, training & development and leadership.

**H2:** Organisational culture has a positive and significant relationship with job satisfaction, efficacy, work life integration, employee well-being and flexible hours.

**H3:** performance management has a positive and significant relationship with commitment, goal setting feedback, leadership and planning.

**H4:** Adoption of technology strengthens the positive and significant relation between employee engagement and performance management.

**H5:** Adoption of technology strengthens the positive and significant relation between organisational culture and performance management.



**Figure 1: Conceptual model**  
**Source: Prepared by author using draw.io**

**3. DATA ANALYSIS AND INTERPRETATION:**

**3.1 Methodology**

The methodology employed for this research on the "Transforming the Indian Hospitality Industry: The study of Technology on Employee Engagement, Organizational Culture, and Performance Management" comprised a comprehensive approach.

**Sample size:** 69 responses was collected using google form survey from the hotel industry of Delhi NCR.

**Type of data:** primary data has been collected by visiting difference hotels of Delhi NCR.

**Dependent variable:** employee engagement, organisational culture and performance management.

**Independent variable:** Communication, Motivation, Individual objective, Training and development, Leadership, Job satisfaction, Efficacy, Work life integration, Employees well-being, Flexible hours, Commitment, Goal setting, Feedback, Planning.

**Statistical tools:** Cronbach’s Coefficient Alpha was used to control the reliability of internal consistency items (Hair, 2009), confirmatory factor analysis (CFA) was done to test the significance level of the item and factor loading.

### 3.2 Research setting and data collection

The research initiated with an extensive literature review encompassing academic journals, books, industry reports, and online resources. This phase aimed to build a strong theoretical foundation by examining existing scholarly works related to technology's impact on employee engagement, performance management, and Organisational culture within the context of the Indian hotel industry. The review helped identify gaps and trends in the field.

Then, a structured Google Form survey was carefully crafted for the purpose of detailed data interpretation, guided by insights from the literature review. The survey consisted of a closed-ended questions aimed at collecting quantitative data. It was designed to explore the specific ways technology was utilized in front office departments, employee perceptions, and its implications for engagement, performance management, and satisfaction.

The main survey was then distributed electronically between more than 100 respondents for the purpose of convenience sampling between the employees of front office department across diverse hotels in India. Out of which 83 respondents filled the questionnaire correctly and for the authenticity of the survey each response has gone through a detailed assessment which proved that only 69 respondents were valid responses that can be taken into consideration for the purpose of research. Efforts were made to ensure geographical and hotel-type representation, as for this research 3 star & 5-star hotels were taken as sample. The survey was administered in a manner that protected the anonymity and confidentiality of respondents.

### 3.3 DATA ANALYSIS AND INTERPRETATION

*Responses were received from 69 legitimate respondents out of the survey's distribution to more than 100 respondents, and were then analysed.*

The questionnaire has been prepared over 3 parameters which is employee engagement (EE), Organisational culture (OC) and performance management (PM), each if these three parameters contain 5 sub constructs which has been discussed in detail with the help of table below, it describes each item present in the construct.

CONSTRUCT	SUB CONSTRUCT	DETAILS
Employee engagement	EE1	Communication
	EE2	Motivation
	EE3	Individual objective
	EE4	Training and development
	EE5	Leadership
Organisational culture	OC1	Job satisfaction
	OC2	Efficacy
	OC3	Work life integration
	OC4	Employees well being
	OC5	Flexible hours
Performance management	PM1	Commitment
	PM2	Goal setting
	PM3	Feedback
	PM4	Leadership
	PM5	Planning

**Table 1: Description of construct**

**Source: Author's interpretation**



<b>Variables</b>	<b>Sample (n= 69)</b>	<b>Percentage (%)</b>
<b>Gender</b>		
Male	45	65.22%
Female	24	34.78%
<b>Education</b>		
High school	21	30.43%
Graduated	36	52.17%
Post graduated	06	8.70%
PhD	06	8.70%
<b>Experience</b>		
Below 5 years	51	74%
5 - 10 years	09	13%
10 - 15 years	03	4%
Above 15 years	06	9%

**Table 2: Descriptive statistics****Source: Author's interpretation**

The demographic profile of the respondents is shown in table 2, the selected demographic stated used in this research paper has been chosen on the basis of the requirement for this study, the literature by (Braganza et al., 2021) supported the demographic stages used in this paper. The finding showed that there is a well-structured recruitment programme in hotels industry and the study of hotel management is increasingly gaining traction these days, as the highest rate of respondents are graduated in hotel management and well aware with the concept of technology adoption. The finding also showed that majority of the employees at front office department are female, which means that the hotel industry also focuses on women empowerment. It has also noticed that mostly the youth generation is increasingly taking part in hotel industry, as they find it one of the highest growing sectors.

### 3.4 Measurement, Validity, and Reliability

All the items in this research paper have been measured on 5-point Likert scale, the category of response is: 1- strongly disagree, 2- disagree, 3- neutral, 4- agree, 5- strongly agree. For the purpose of validity and reliability test R lavaan package and versatile set of tools and procedures has been used to fit and perform the confirmatory factor analysis (CFA)(Rosseel, 2012). The data used in this study came from 69 respondents of employees from hotel industry. Starting with the lavaan CFA syntax which is a very straightforward method, while proceeding with CFA researcher perform model fit statistics before going to interpret parameter estimates. The overall "fit" in this study specifies how well a model is able to reproduce the original polychoric correlation analysis matrix.

The scaled chi-square for our model was  $\chi^2(df) = 21.83(5)$  which is statistically significant at the  $p \leq .05$  level. In null hypothesis testing terms, we rejected the null hypothesis of no difference between the implied and actual polychoric correlation matrices and concluded there was a difference. While this conclusion is contrary to what we hoped would be accurately reproduced correlations, we know that chi-square is sensitive to sample size and that, given a large sample, even small departures will be significant.

Various interpretation RMSEA guidelines have been put forth, for this we used an RMSEA  $\leq .05$  as the cutoff for close fit; RMSEA = .05 – .08 as reasonable fit; RMSEA  $\geq .10$  as poor fit. Based on the obtained RMSEA point estimate = .077 we concluded that the model had an acceptable fit.

We used two additional popular fit measures the Comparative Fit Index (CFI) and the standardized root mean square residual (srmsr) to assess model adequacy. The CFI is a

member of a family of incremental fit indexes that compare your model to a restricted baseline model. As the name implies, the srmr is based on the actual differences (discrepancies) between the model-based correlations and the actual correlations. Various interpretation guidelines for these measures also have been put forth. We used CFI  $\geq$  .95 and srmr  $\leq$  .08 as our threshold values. Based on the thresholds, we concluded that the obtained CFI scaled value = .99 and srmr = .05 both offered further evidence that our model was plausible.

Latent factor/questions	Standardized factor loading	AVE and composite reliability
<b>Employees Engagement (EE)</b>		
X <sup>2</sup> = 21.83, df = 5, P-value = 0.001, CFI = 0.996, SRMR = 0.05, RMSEA = 0.223		
EE1	1.028	AVE = 0.83 $\alpha$ = 0.96
EE2	0.871	
EE3	0.928	
EE4	0.841	
EE5	0.937	
<b>Organisational culture (OC)</b>		
X <sup>2</sup> = 30.669, df = 5, P-value = 0.0, CFI = 0.995, SRMR = 0.075, RMSEA = 0.275		
OC1	0.814	AVE = 0.8 $\alpha$ = 0.96
OC2	0.839	
OC3	0.870	
OC4	0.990	
OC5	0.968	
<b>Performance Management</b>		
X <sup>2</sup> = 7.015, df = 5, P-value = 0.220, CFI = 0.999, SRMR = 0.032, RMSEA = 0.077		
PM1	0.904	AVE = 0.83 $\alpha$ = 0.96
PM2	0.920	
PM3	0.875	
PM4	0.935	
PM5	0.875	

**Table 3: Confirmatory factor analysis of latent variables in the tested model.**

**Source: authors interpretation.**

As shown in table 3 structure validity measurement for each factor has been shown with the help of standardised factor loading. Each item which is also an observed variable had large factor loading which is  $> 0.50$  (significance at  $p < 0.01$ , all with the t statistic at more than 3(Na-Nan et al., 2020)). Hence, all the items in the model holds significant relationship between them as support by the theoretical structure.

Average variance extracted (AVE) and Composite reliability (CR) has been calculated to check the construct reliability (Fornell & Larcker, 1981) of the scale and the structural model. As shown in table 3 total confidence of each latent variable was between 0.860 and 0.916 (i.e.,  $>0.7$ ), indicating a good level of confidence. Regarding AVE, all latent variables were higher than 0.50 (i.e.,  $>0.50$ ). Therefore, all theoretical constructs were acceptable.

## 4. RESULTS AND DISCUSSION

### 4.1 Results

**Employee Engagement** includes motivation, communication, leadership, training and development, individual objective. As shown in table 4 the following items shows the residual correlation between the parameters which says that individual objective and training &

development has the highest negative correlation of .107 whereas the highest positive correlation occurs between training & development and leadership. Since, none of the parameters cross the suggested threshold of .10, it means employees engagement is a good fit to the model.

	EE1	EE2	EE3	EE4	EE5
EE1	0.000				
EE2	0.009	0.000			
EE3	0.013	0.023	0.000		
EE4	-0.102	-0.002	-0.107	0.000	
EE5	-0.004	-0.048	-0.064	0.081	0.000

Table 4: Model based on residual coefficients  
Source: Author’s interpretation

**Organisational culture** includes job satisfaction, work life integration, employee well-being, flexible hours, efficacy. As shown in table 5 the following items shows that there is highest negative correlation of .132 between job satisfaction and flexible working hours whereas the correlation between job satisfaction and efficacy has crossed the suggested threshold of .10, which is a flag to problematic coefficients.

	OC1	OC2	OC3	OC4	OC5
OC1	0.000				
OC2	0.128	0.000			
OC3	0.034	-0.055	0.000		
OC4	-0.124	-0.121	-0.008	0.000	
OC5	-0.132	-0.124	0.013	0.010	0.000

Table 5: Model based on residual coefficients  
Source: Author’s interpretation

**Performance management** includes feedback, goal setting, commitment, planning, leadership. As shown in table 6 the following items shows the residual correlation between the parameters which says that goal setting and feedback has the highest negative correlation of .072 whereas the highest positive correlation occurs within commitment & feedback. Since, none of the parameters cross the suggested threshold of .10, and most of the items is positively correlated to each other hence, performance management is a good fit in the model.

	PM1	PM2	PM3	PM4	PM5
PM1	0.000				
PM2	-0.017	0.000			
PM3	0.047	-0.072	0.000		
PM4	-0.062	0.025	0.020	0.000	
PM5	0.008	0.036	-0.023	-0.025	0.000

Table 6: Model based on residual coefficients  
Source: Author’s interpretation

Finally, it is worthwhile to look at correlation residuals. These pairwise coefficients provide detail about possible locations of model misfit. We obtained residuals from lavaan. Using a suggested threshold of .10 to flag problematic coefficients, there does not appear to be any

substantive problems in the model based on residual coefficients. Based on the various fit measures, we concluded that our model was plausible.

The results shows that employee engagement has a positive and significant relationship with communication, motivation, individual objective, training & development and leadership as predicted (**H1**: shown in table 7) it is clear with the results that positively engaged employees have good communication skill and are more motivated, trained and have leadership quality which helps to achieve individual objective.

The results shows that Organisational culture has a positive and significant relationship with job satisfaction, efficacy, work life integration, employee well-being and flexible hours (**H2**: shown in table 8) hence we can say that a satisfied employee, efficacy, work life integration, employee well-being and flexible hours brings a positive organisational culture in an organisation.

By analysing table 9 for **H3** it is easy to say that performance management has a positive and significant relationship with commitment, goal setting feedback, leadership and planning. Which argues that those employees who are committed to the organisation and provide proper feedback with good leadership quality and planning skills always have positive increase in their performance

The analysis shows that **H4** is statistically accepted ( $\beta=1.156$  and  $p < 0.01$ ) which means Adoption of technology strengthens the positive and significant relation between employee engagement and performance management.

**H5** (not significant) Adoption of technology does not have any significant relation between organisational culture and performance management.

Relationships	Estimates	Standard error	Significant level	Hypotheses testing
ES =~ ES1	0.903	0.024	***	H1 Accepted
ES =~ ES2	0.918	0.023	***	
ES =~ ES3	0.911	0.028	**	
ES =~ ES4	0.901	0.031	***	
ES =~ ES5	0.916	0.029	**	

Notes: \*  $p < 0.1$ ; \*\* $p < 0.05$ ; \*\*\* $p < 0.01$ ; ns (not significant)

Table 7: Hypotheses test results

Source: Authors interpretation using R studio

Relationships	Estimates	Standard error	Significant level	Hypotheses testing
EE =~ EE1	0.971	0.009	***	H2 Accepted
EE =~ EE2	0.898	0.027	***	
EE =~ EE3	0.884	0.037	***	
EE =~ EE4	0.890	0.033	**	
EE =~ EE5	0.875	0.035	***	

Notes: \*  $p < 0.1$ ; \*\* $p < 0.05$ ; \*\*\* $p < 0.01$ ; ns (not significant)

Table 8: Hypotheses test results

Source: Authors interpretation using R studio

Relationships	Estimates	Standard error	Significant level	Hypotheses testing
PM =~ PM1	0.919	0.026	***	
PM =~ PM2	0.942	0.020	**	

PM =~ PM3	0.860	0.040	**	H3 Accepted
PM =~ PM4	0.889	0.028	***	
PM =~ PM5	0.945	0.019	***	
PM ~ EE	1.156	0.231	**	H4 Accepted
PM ~ OC	-0.173	0.231	ns	H5 Rejected

Notes: \* p < 0.1; \*\*p < 0.05; \*\*\*p < 0.01; ns (not significant)

Table 9: Hypotheses test results

Source: Authors interpretation using R studio

As shown in figure 6, findings revealed that performance management is highly impacted when there is an increasing effect on employee’s engagement and organisational culture. As shown in figure 6, PM5 has the highest score of average 4.26 amongst all the sub construct which is followed by EE1, ES2, EE3 having an average score of 4.22 which shows that employee engagement helps in increasing the performance management in an organisation.

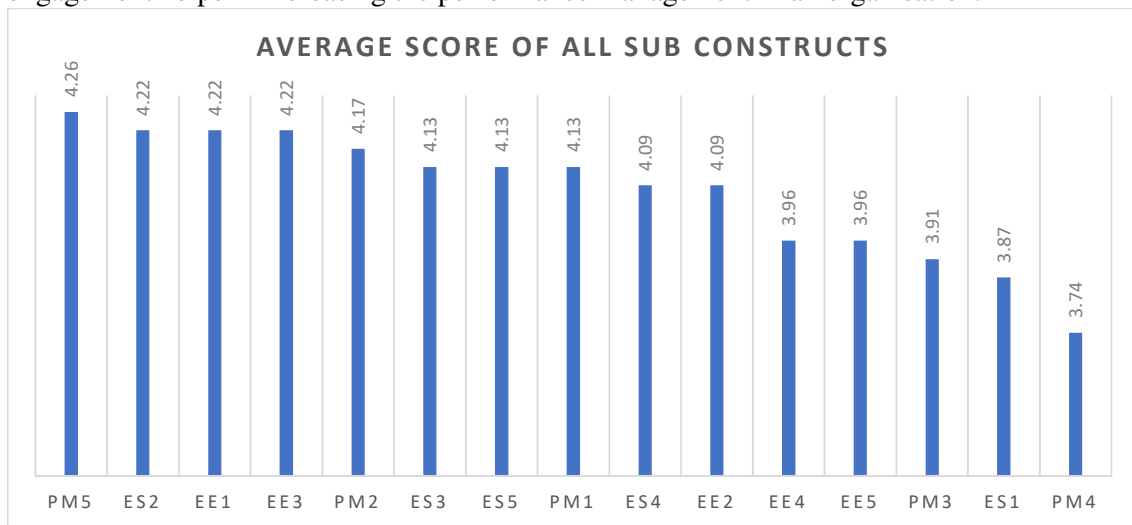


Figure 2: Average scores of all sub constructs.

Source: Author’s interpretation

### 4.2 Discussion

As the Indian hotel industry continues to evolve, technology will play an increasingly vital role in front office departments. AI-driven chatbots, augmented reality for training, and predictive analytics for workforce management are among the emerging trends that have the potential to further enhance engagement, performance, and satisfaction among the employees. Technology will be increasingly used to monitor and support employee well-being. Wearable devices, mental health apps, and stress management tools will be integrated into HR practices.

As remote work becomes more prevalent, mobile and remote-friendly solutions will be essential. Apps and platforms that facilitate engagement and performance management for off-site employees will gain importance. With the increasing use of technology comes the need for robust data security and privacy measures. Compliance with data protection regulations will be crucial. Sustainability will be a key focus. Hotels may adopt eco-friendly technology solutions to improve employee satisfaction by aligning with sustainability values.

Integrated platforms that manage the entire employee experience, from recruitment to retirement, will become more prevalent. These platforms will provide a holistic view of employee engagement and satisfaction. Real-time feedback mechanisms will continue to evolve, allowing employees to provide feedback and receive immediate responses. Continuous improvement will be a priority. Technology in front office departments will increasingly

integrate with other hotel operations, ensuring a seamless and efficient experience for both guests and employees.

### **CONCLUSION**

The research demonstrates that technology is a valuable asset in assessing and enhancing employee engagement, performance management, and satisfaction in front office departments of Indian hotels. By addressing the challenges and staying attuned to emerging trends, hotel management can leverage technology to create a more engaged, productive, and satisfied workforce, ultimately contributing to the success and competitiveness of their establishments in the dynamic hospitality industry.

The research indicates that technology-driven initiatives, plays a crucial role in modernizing performance management processes in the hotel industry. Performance appraisal software, data analytics, and automated goal tracking systems streamline performance evaluations. The integration of technology in surveying employee satisfaction has improved the accuracy and speed of feedback collection.

Employees in Indian hotels appreciate the convenience of providing input through digital platforms, leading to a better understanding of their needs and concerns. Hotel management should consider investing in user-friendly and integrated technology solutions tailored to their specific front office needs. Continual training and support for employees are crucial to maximize the benefits of technology adoption. Regularly collect and analyze data to make informed decisions about HR practices and improve the employee experience.

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