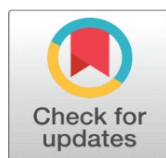


EFFECT OF COLLABORATION APPROACHES ON EMPLOYEE EFFICIENCY AND JOB-RELATED OUTCOMES: TRANSFORMED BUSINESS MODEL APPROACH IN TRAINING AND DEVELOPMENT

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ABSTRACT

Purpose: The purpose of this study is to determine whether employee productivity in information technology (IT) companies can be sustainably improved by the organizational collaboration strategy. Additionally, in order to offer insights for improving workplace dynamics and employee performance in the IT industry, it aims to investigate how employee efficiency effects important job-related outcomes, such as job satisfaction, organizational commitment, and team spirit.

Methodology: A correlational research design was employed for this study, utilizing a quantitative approach to examine the relationships between the organizational collaboration approach, employee efficiency, and job-related outcomes in the Indian IT sector. Data was collected through a survey distributed using convenience sampling to employees in various IT organizations across India. A 5-point Likert scale was used to measure key variables, including organizational collaboration, employee efficiency, job satisfaction, organizational commitment, and team spirit. Structural equation modelling (SEM) was conducted using SPSS and AMOS to analyze the direct and indirect relationships among variables, with reliability and validity checks performed through Cronbach's alpha and Average Variance Extracted (AVE).

Findings: According to the study, employee productivity in the Indian IT sector is significantly and sustainably impacted by the organizational collaboration method. The impact of employee efficiency on job satisfaction, organizational commitment, and team spirit was also found to be significant. Strong favourable correlations between employee performance outcomes and cooperation practices were found using structural equation modelling (SEM) analysis. According to the findings, workers who feel that their workplace is collaborative are more productive, which raises job satisfaction and organizational commitment levels, which in turn fosters a sense of camaraderie and harmony among coworkers.

Implication: Academically, this study adds a quantitative evaluation of how collaboration affects important job-related outcomes to the expanding corpus of information on organizational cooperation and employee efficiency, particularly in the IT sector. The results of this study have practical implications for IT businesses. Specifically, they indicate that investments in collaborative work environments can increase employee efficiency and, consequently, job satisfaction, organizational commitment, and team spirit—all of which are critical for long-term success. From a social perspective, the study emphasizes how collaborative techniques can enhance workplace culture and employee well-being. This can result in more cohesive, motivated, and inclusive teams that benefit people as well as the larger community.

Keywords: Organization Collaboration, Employee Efficiency, Job Satisfaction, Organization Commitment, Team Spirit, Employee Performance.

1. INTRODUCTION

In today's quickly changing business environment, companies are always looking for new and creative ways to boost worker productivity and boost results connected to their jobs. Among the many tactics used, teamwork is particularly

effective at accelerating organizational success (Manaf et al., 2018). In addition to promoting harmony and teamwork, collaboration in the workplace also develops a culture of mutual support and shared objectives. The significance of cooperation approaches in training and development cannot be exaggerated, since they are essential in moulding the skills and talents of employees. The Transformed Business Model approach (TBMA) is a noteworthy method of collaboration that has been gaining attention. By focusing on a more dynamic and adaptable framework that is in line with the constantly shifting needs of contemporary businesses, this approach marks a break from traditional training techniques (Nijp et al. 2016). The fundamental principles of TBMA are the integration of agility, innovation, and strategic alignment to transform the way businesses approach activities related to training and development.

A key component of the TBMA concept is the understanding that efforts in training and development need to go beyond the acquisition of skills and instead concentrate on promoting a comprehensive change in the workforce (Dittes & Smolnik, 2019). TBMA aims to promote a culture of knowledge sharing and continuous development by utilizing collaborative strategies including cross-functional teams, peer learning networks, and experiential learning opportunities. This strategy fosters a collective intelligence that drives organizational growth and resilience in the face of uncertainty, in addition to improving individual proficiency. TBMA encourages employees to take charge of their learning process, in contrast to conventional top-down training techniques, which instil a sense of independence and self-efficacy (Sung & Choi. 2018). TBMA fosters creativity and innovation at all organizational levels by giving staff members the ability to experiment with new ideas and explore a variety of learning pathways. Moreover, using the adoption of an open and transparent culture, TBMA promotes positive feedback loops that speed up the iteration and improvement of training methods in response to changing demands and real-time insights.

Furthermore, TBMA emphasizes the significance of coordinating learning activities with strategic objectives by acknowledging the relationship between training and business outcomes (Aliu & Alenoghena. 2023). Training should not be seen as an independent activity divorced from essential business operations; instead, TBMA promotes a comprehensive strategy that smoothly incorporates training and development into the structure of the company. Enhancing customer satisfaction, increasing productivity, and creating competitive advantage are only some of the tangible results that training initiatives are guaranteed to drive because TBMA promotes cross-functional teamwork and a common understanding of company rules (Lathabhavan & Griffiths. 2023). Essentially, the power of collaboration approaches especially TBMA in training and development lies in their capacity to ignite organizational change through the utilization of workers' combined knowledge and skills. In addition to improving employee efficiency and job-related outcomes, Transformed Business Model Approach (TBMA) sets up businesses for long-term success in the fast-paced business world of today by encouraging a culture of cooperation, creativity, and strategic alignment.

Collaboration within organizations in the IT industry improves effectiveness by encouraging group work, simplifying communication, and encouraging the sharing of information among staff members. This environment of teamwork helps to solve problems quickly, fosters creativity, and ultimately increases productivity in IT sectors. Thus, organizational collaboration impacts employee efficiency in the IT sector (Dwivedi et al. 2020). The correlation between employee efficiency and job-related outcomes in the IT sector is evident, as it is linked to job satisfaction, organizational commitment, and team spirit. In a high-speed sector such as IT, productive workers guarantee seamless operations, quick issue resolution, and efficient resource usage, ultimately resulting in mission success and client contentment (Soomro & Shah. 2019). Thus, employee efficiency impacts job-related outcomes in IT.

The importance of training and development programs cannot be emphasized in the quickly changing business environment of today. Businesses must constantly modify their business models due to market demands, globalization, and technological improvements. Thus, research into how collaborative approaches affect employee efficiency and job-related outcomes in training and development programs is essential (Sendawula et al. 2018). Companies are increasingly recognizing the importance of promoting teamwork among employees to sustain an innovative and competitive workforce in the face of rapidly evolving technology. This research seeks to offer valuable insights into the optimal approaches to enhance employee productivity and performance by analysing these strategies within the Indian IT industry. This objective underscores the significance of cooperative frameworks and organizational structures in enhancing worker productivity, with significant implications for HR regulations and organizational management practices within the Indian IT sector (Prasetya. 2018).

The effects of collaboration on employee satisfaction levels can be seen through various traditional human resource management practices (training and development) that offer an assortment of different approaches to maintaining organizational satisfaction levels. The participative management style is gaining importance in modern corporations

and, more importantly, giving employees a voice that can positively affect the change process. Collaborative management plays a critical role in limiting resistance to change (Kawiana et al. 2018). The other benefits of participative management include greater creativity and enhanced decision-making skills. Participative leadership and management refer to the practice of encouraging the involvement of employees throughout the decision-making process. The connections among the workgroups in an organization develop through improved business culture and employee behaviors that reflect commitment and collaboration.

A study concentrating on the effect of collaboration approaches within the framework of a transformed business model in training and development is essential for several reasons. Firstly, in the face of disruptive technological developments and changing market dynamics, firms must embrace collaborative learning approaches to provide employees with the essential skills and knowledge to be relevant and competitive (Chian et al. 2019). Secondly, traditional hierarchical structures are giving way to more flexible and interconnected frameworks, emphasizing the significance of promoting collaboration across organizational levels (Kawiana et al. 2018). Investigating how such collaborative techniques affect employee efficiency and job-related outcomes can provide essential insights into enhancing training and development initiatives for increased organizational performance and employee engagement. To help organizations succeed in the current rapid and globally integrated business environment, this study aims to close the gap between theoretical frameworks and implementation.

Organizational collaboration is crucial in determining employee efficiency in India's dynamic Information Technology (IT) sector, which in turn affects a range of job-related outcomes. Understanding the complexity of organizational collaboration approaches becomes crucial for maximizing worker efficiency and promoting great employee experiences as the IT industry continues to evolve quickly, defined by ongoing innovation and technology advancements.

Based on which the following research questions are framed:

RQ1: Does the organizational collaboration approach have a sustainable influence on employee efficiency towards employees in IT organizations?

RQ2: How does employee efficiency impact job-related outcomes (job satisfaction, organization commitment, and team spirit) of employees in the Information Technology (IT) sector?

2. LITERATURE REVIEW AND HYPOTHESIS

2.1. Theoretical Background

The study's theoretical framework is based on Social Exchange Theory (SET) and Collaborative Governance Theory (CGT) to explore organizational collaboration dynamics and their impact on employee efficiency and job outcomes in IT firms in India.

According to Social Exchange Theory, employees have a greater sense of loyalty to the company when their financial needs are met through benefits (Yin. 2018). Eisenberger et al. (1990) noted that "a widespread view of the amount to which the company recognizes general contributions and cares for their wellbeing" is the first step in the social exchange process that organizations follow. Therefore, employees will react with positive work attitudes and behaviors when they believe that their employers value and treat them fairly (Xerri. 2013). The social exchange theory, which is recognized as one of the most significant ideas for comprehending workplace behavior, has been used to explain the relationship between employee job outcomes including job satisfaction, organizational commitment, and team spirit. Employees feel compelled to politely return the favor when they receive it, according to the reciprocity principle of social exchange theory. Stated differently, workers who perceive their employers as trustworthy and fair are more likely to respond with good employee attitudes like job satisfaction and organizational loyalty, which in turn improves worker performance (Rupp & Cropanzano. 2002). As a result, the reward is the centre of the employment relationship since the quantity and calibre of rewards offered by the company directly impact employee satisfaction and performance.

Similarly, Collaborative Governance Theory noted that the collaborative processes can be time-consuming and their effectiveness may only become evident in the long run, when tangible outcomes from negotiation and cooperation are realized and adaptive reactions are observed (Hossu et al., 2019). The success of collaborative activities is determined by the interplay of principled engagement, shared motivation, and joint action. The framework was developed using information from various fields of study, such as planning, conflict management, and environmental governance, as well as empirical research. It is therefore appropriate for conducting empirical assessments of case studies. Additionally, it allows for comparisons of collaborative interactions in addressing environmental disputes and is particularly valuable for evaluating theories formulated from the authors' findings (Emerson et al. 2012).

2.2 Proposition Development

In the past few decades, a variety of approaches have been developed to direct the growth of online learning communities, in which participants exchange, enhance, and co-create content, but there aren't many instruments available to assess their effectiveness. According to the study, Glassman et al. (2021) argued that the concept of online collective efficacy can be used to understand the success of some online groups. Collective efficacy is an emergent variable that gives members agency in the success of the community. According to collective efficacy, the success of a group depends on the relationships that exist between its members on two fronts: first, the degree to which each member feels that they can contribute to the group already in existence, and second, the degree to which each member feels that their skills, preferences, and objectives align with those of the other members of the group.

Based on Ribers et al. (2021) investigated novel research avenues for social educators and teachers to acquire and grow their professional ethics in collaboration with many field actors, including public institutions, educators, students, and educational leaders. Professionals are equipped with the skills necessary to effectively handle ethical dilemmas in the actual world through lifelong learning paths. These skills are founded on practical knowledge, which is defined as pedagogical phronesis. We contend that many aspects of tacit practical wisdom, which are emphasized in the perception of practice, are composed of an interchanging dynamic between subjective experiences and logical learning.

This mixed-methods study looks into whether and how students' understanding of collaboration may be improved by team-skills training and in-the-moment coaching by Sjølie et al. (2021). The results demonstrate that the intervention improved students' perceptions of their learning objectives and promoted group reflection. Four task design enabling structures were also found. The study adds to the body of research on the facilitation of collaborative learning activities in higher education and makes the case that the development of transferrable collaborative skills requires the cultivation of a language surrounding cooperation.

Proposition 1: Approaches and methods are enhancing the collaboration in training and development

2.3 Organizational Collaboration Approaches and Employee Efficiency

Organizational collaboration approaches play a pivotal role in enhancing employee efficiency within an organization. By fostering a culture of teamwork and open communication, employees are empowered to share ideas, resources, and expertise. The study by Awan et al. (2018) investigated how contract governance affects collaboration, incorporating the moderating influence of cultural intelligence. According to the current authors, contract governance might work better in situations where a corporation has higher levels of cultural intelligence capabilities. Cultural intelligence is essential to cross-cultural relationship management in a supply chain and plays a significant role in the development and execution of collaboration. One viable strategy for the export industry to effectively manage cross-cultural differences and generate more profitable collaboration is through the application of cultural intelligence. Better social performance results from cooperation with a partner who practices social responsibility.

To achieve the most sustainable growth, it is imperative to address the social components of sustainability, which include equitable labor practices and decent working conditions, health and safety, the prohibition of child labor, and employee empowerment. Campbell's (2018) study concept is regarding the readiness of employees to collaborate, wherein the impact of transformational leadership is partly dictated by the organizational context's performance orientation. According to the analysis, an organization's emphasis on internal efficiency and use of performance-based incentives, which have independent positive and negative effects on attitudes towards collaboration, respectively, may enhance the impact of transformational leadership. This study emphasizes the context-dependent influence of transformative leadership and ties it to a process that is becoming more and more important in the public sector. The findings' implications are examined, including the possibility that strategies used to encourage inter-organizational collaboration may be more effective if they are in line with the practicalities of long-standing organizational policies and procedures. Hernandez-Espallardo et al. (2018) research aimed to contribute to the current understanding of how a firm's participation in collaborative innovation affects its performance. The contextual resource-based dimensions have a positive effect on employees' attitudes toward their jobs, which enhances the performance of the participating organization. The empirical data in this study adds to the lack of knowledge regarding the impact of human resources on inter-organizational collaborative innovation performance in the field of open innovation. Specifically, it provides strong

evidence for the important moderating function of job-related outcomes held by employees in the relationship between complementary competencies and innovation culture as circumstances that create value and the final sales and financial performance of the participating organization.

The study adapted Escher, & Brzustewicz. (2020) The theory of the nature of interactions between businesses and other organizations (including NGOs) when working together on activities to achieve sustainable development goals is seriously lacking in the study. Specifically, a thorough analysis of the firm perspective has not yet been conducted. Therefore, the company's perspective on these interactions is presented in this study, especially about how corporate representatives characterize the contributions made by each partner in the collaboration and the results it produces for the firm. Håkansson and Snehota's Activities–Resources–Actors (ARA) model provides the theoretical foundation for the empirical study.

It is well known that using collaborative organization approaches in the agrifood industry can assist rural farmers in achieving sustainable development objectives. In any case, the scientific literature currently lacks a comprehensive and cohesive understanding of sustainability, organizational paradigms, and auxiliary technologies in the agri-food industry. To close this gap, we hope to present a methodology in this study that will assist practitioners and academics in the analysis and creation of long-term Collaborative Networks in the agri-food industry. Ammirato et al. (2021)

Hypothesis 1: There is a significant positive impact of organizational collaboration on employee efficiency in the IT sector.

2.4 Employee efficiency and employees' Job satisfaction

The present study centers on the examination of the relationship between the antecedent variable of transformational leadership and the job performance of middle-level executives within an organization by Eliyana, & Ma'arif, (2019). Questionnaires are the method used to get data from the respondents to reduce interpretation conflicts between the researcher and the respondents. According to this study, organizational commitment and work satisfaction are directly and significantly impacted by transformative leadership. On the other hand, transformational leadership cannot directly affect work performance and cannot have a major effect on job performance when organizational commitment interferes.

The effects of organizational culture and a focus on entrepreneurship on employee efficiency, organizational commitment, and job satisfaction by Soomro & Shah. (2019). The findings showed that organizational commitment, job satisfaction, and organizational culture all had a favourable and significant effect on employee efficiency. Organizational commitment is positively and significantly impacted by a culture of entrepreneurship. Organizational commitment affects job satisfaction, and job satisfaction influences organizational culture. Conversely, there is no discernible effect of an entrepreneurial attitude on worker performance. Employers have the power to influence company culture and improve workers' overall satisfaction with their work.

The study examined the association between employee efficiency and boss phubbing, also known as phone snubbing, which is defined as an employee's belief that their immediate supervisor is using their smartphone while in their presence Roberts & David. (2020). Despite the significance of contact between supervisors and subordinates and the widespread use of cell phones, research on the effects of smartphones on significant employee outcomes is still lacking. The proposed model of links between job satisfaction, performance, supervisory trust, and boss phubbing is based on three theories: social presence theory, reciprocal social exchange theory, and expectation violations theory. Employing a sequential mediation approach, the associations between supervisor phubbing and worker job performance were investigated. Supervisory trust and job satisfaction are the two ways in which boss phubbing is negatively correlated with employee job performance, according to two studies of US adults employed in various industries.

Hypothesis 2: There is a significant positive impact of employee efficiency on employees' job satisfaction.

2.5. Employee efficiency and employees' Job Commitment

According to the literature currently in publication, an organization's perceived performance which is thought to be a good representation of its actual performance, and organizational commitment a crucial concept in terms of employee attitudes is positively correlated. The impact of organizational climate on perceived organizational performance and organizational commitment was investigated by Berberoglu. (2018), and the opinions of healthcare workers regarding

the environment were assessed. The study used a quantitative methodology, gathering information via a self-administered questionnaire from healthcare professionals currently working in North Cyprus' public hospitals. The findings showed a strong correlation between perceived organizational performance and organizational commitment and atmosphere. The results of a simple linear regression showed that organizational climate plays a substantial role in predicting perceived organizational performance and organizational commitment.

The study examines the relationship between organizational learning and job satisfaction, organizational commitment and job satisfaction, performance and organizational learning, and job satisfaction and organizational commitment in PTPN XIII (Limited Liability Company) in West Kalimantan by Hendri. (2019). A proportional random sampling methodology based on the work area (three work areas: Head Office, West Kalimantan I District, and West Kalimantan District II) is the sampling method employed. Employee performance is not much affected by a learning organization, but work satisfaction and organizational commitment are significantly and favourably impacted. The impact of job happiness and organizational commitment on employee performance is notable. According to Robbins (1996), there is little correlation between performance and organizational learning. To ascertain the degree to which organizational learning can aid in performance improvement, additional elements that can strengthen the connection must be present.

Recently, attention has been attracted to the largely unexplored field of knowledge management in the public sector through research and practice. Public sector knowledge management activities are no longer restricted to industrialized nations. To address the issues of poor organizational commitment (increased turnover rates) and the performance of knowledge workers, the public sectors of some developing nations, including Pakistan, have built knowledge management functions. According to Razzaq et al. (2019), the paper is to investigate how organizational commitment functions as a mediator in the relationship between knowledge-worker performance and knowledge-management techniques. The association between knowledge management techniques and knowledge-work performance is almost mediated by organizational commitment.

Hypothesis 3: There is a significant positive power of employee efficiency on the organizational commitment of employees in the IT sector.

2.6. Employee Efficiency and Team Spirit

A multi-level research design to examine how employee engagement affects team performance. It delves deeper into the ways that organizational citizenship and employee commitment mediate the relationship between employee engagement and team performance. According to the study by Uddin et al. (2019), increased employee involvement may enhance team productivity in work environments. Employee engagement and team performance were mediated by organizational commitment and citizenship behavior. To further our understanding of the area of employee engagement, more study on the mediating impacts of demographic factors is recommended. The study incorporates multi-level variables to examine the impact of individual employee engagement on organizational team performance, based on the premises of both the employee stewardship theory and the social exchange theory. This integrated model, which makes use of predictors from several levels, shows how interactions between various aspects of an individual's conduct can improve team performance.

Jamshed & Majeed. (2019) examined how knowledge sharing and team emotional intelligence function as mediators in the relationship between team culture and performance. The study promoted the idea that team culture affects how members of the team share knowledge and how the team develops its emotional intelligence. It is also suggested that team emotional intelligence and knowledge exchange have a good impact on team performance. The results clearly showed that teamwork is influenced by information exchange and emotional intelligence within the team. Furthermore, using knowledge sharing and team emotional intelligence, this study validates the substantial correlation between team culture and team performance. This study provides observational evidence to healthcare services to educate employees about the potential of emotional intelligence and to encourage knowledge sharing for improved teamwork.

One of the most crucial elements of corporate success in the contemporary economy is teamwork. Teams are getting more and more attention in practically every aspect of business because it has been shown that working as a team improves individual, group, and even organizational performance. Berber et al. (2020) examined the connection between team performance and the efficacy of cooperation. The authors specifically looked at whether aspects of

effective teamwork are positively correlated with both team performance and the long-term viability of teams. The effectiveness of collaboration is a construct that is extensively discussed in the theoretical domains of organizational behavior and human resource management but has not received enough attention in empirical research, particularly in the banking industry. The findings demonstrated the favourable relationships between teamwork performance and elements including the creative behavior of the team members, the Caliber of teamwork, and teamwork compatibility.

Hypothesis 4: There is a significant positive impact of employee efficiency on employees' team spirit.

2.7 Conceptual Framework

Figure 1 shows the conceptual framework to explore how organizational collaboration approaches impact employee efficiency towards employees in IT organizations in India. Also, to investigate the impact of employee efficiency on job-related outcomes (job satisfaction, organization commitment, and team spirit) of employees in the Information Technology (IT) sector. This study intends to provide useful insights into successful organizational strategies that can support the development of a positive work environment and the stimulation and contentment of employees in the dynamic world of Indian IT firms by clarifying these relationships (Moradi et al. 2018) (Chian et al. 2019).

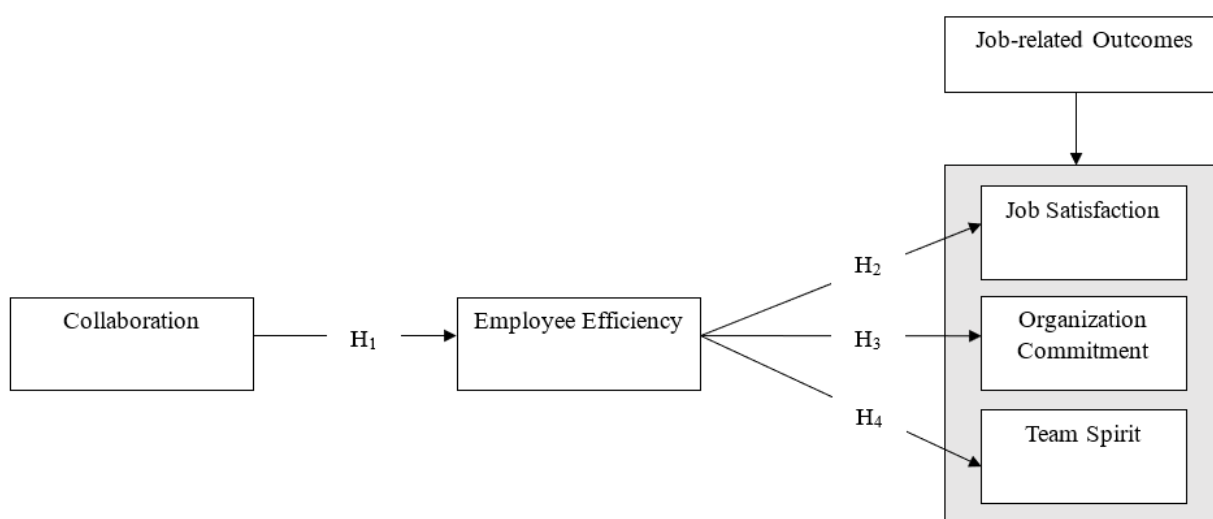


Figure 1: Proposed Hypothesized Mode

3. METHODOLOGY

3.1 Research Design

The research design outlined in the methodology chapter may be seen as an essential element that the researcher must follow to properly perform and complete the research study (Zong et al. 2023). The research design dictates the aspects of the sampling design, including sample size and method. It also specifies the tools and techniques that must be used while analysing data. A correlational research design will be used for this investigation. Given that the study is survey-based, it must also be quantitative to measure the variables and understand the proposed relationship (Rehman et al. 2022).

3.2 Sampling technique

The study adopted a quantitative approach, by collecting data from the employees in the IT sectors in India representing the current research population. The data for this survey was collected using a convenience sampling method, a non-probability sampling technique. Criterion-based sampling technique involves selecting individuals based on specific criteria who are relevant to the research. In this case, participants were reached by distributing an online questionnaire using Google Forms. The survey was administered directly to participants via email (Mariani et al. 2019).

3.3 Instrument Measure

In the first section of the questionnaire, questions about demographic information such as age, gender, occupation, monthly income, and source were requested. Questionnaires for each variable make up the second segment, which awards the sector a 5-point Likert scale. A Likert scale with five options is presented to the employees of the IT sector in the Indian population (1-Strongly Disagree, 2- Disagree, 3-Neutral, 4-Agree, 5-Strongly Agree) for the variables organizational collaboration approach, employee efficiency, job satisfaction, organization commitment, and team spirit in the organization. Several statistical techniques and tools were employed to analyze the data for this investigation (Xueyun et al. 2023).

3.4 Data Collection and Sample Size

The main aim of this research is to investigate the impact of organizational collaboration approaches on employee efficiency towards employees in IT organizations in India. Also, to explore how employee efficiency impacts job-related outcomes in an organization. The research gathered data from employees (managers, executives, or any other relevant personnel who provide information related to the study) in the IT sectors in India.

The sample size (n) can be determined using the formula:

$$n = \frac{N}{1 + (e)^2 N}$$

Where;

n = Sample Size, N = Population Size, e = Margin of Error

3.5 Analysis Tools

In the research's methodology, hypotheses were developed to support the expected results. The following examination of the inquiry utilizes structural equation modelling (SEM) using both SPSS and AMOS. By Hair et al. [36], the investigation progresses in a two-step process. The initial stage involves a comprehensive assessment of the measurement model's reliability and validity. This involves assessing the internal consistency and accuracy of measurement tools, utilizing established reliability measures such as Cronbach's alpha, and conducting a variety of validity assessments. Following this, phase two is centered on the structural model, which involves analysing the specified pathways connecting variables. The study assesses the structural validity of the model by analysing the direct and indirect relationships outlined in the hypotheses with the help of AMOS. (Zong et al. 2023).

The validity and reliability analysis are used to identify the variables loading, α , and AVE investigation. This analysis employs threshold values, even though factor loadings and Cronbach's alpha (α) must have threshold values above 0.7 as suggested. A value greater than 0.5 is also used as a sufficient range, and the AVE research threshold number should be beyond 0.5 for an accepted range for analysis (Mariani et al. 2019).

4. ANALYSIS AND RESULTS

Variance-based SEM (Smart-PLS software) is employed because the investigation calculates the entire variation explained by the structural model, which includes both formative and reflecting measures. Both the measurement model and the structural model are estimated using the Partial Least Square Method.

The variables, collaboration and employment efficiency, and the outcome variables, job satisfaction, organization commitment, and team spirit, were tested for internal consistency (Cronbach alpha) to ensure the reliability of the scales (Table 1). The overall values ranged as follows: collaboration (0.83), employment efficiency (0.86), job satisfaction (0.84), organization commitment (0.80), and team spirit (0.78).

Table 1: Internal Consistency and PCA Report of the Scale

Name of the higher-order Construct	Factor Loadings (Principal Component)	KMO	TVE	Internal consistency (α)	CR
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	Analysis)				
Collaboration	0.84-0.88	0.74	0.64	0.83	0.85
Employment Efficiency	0.91-0.94	0.82	0.52	0.86	0.88
Job Satisfaction	0.79-0.85	0.72	0.58	0.84	0.86
Organization commitment	0.75-0.82	0.70	0.66	0.80	0.83
Team Spirit	0.68-0.79	0.72	0.68	0.78	0.79

The sample adequacy is guaranteed by KMO values larger than 0.6, which fall between 0.70 and 0.82. Each construct created from LOC accounts for at least 50% of the variation in HOC in PCA as a single component, according to the TVE values ranging from 0.52 to 0.66.

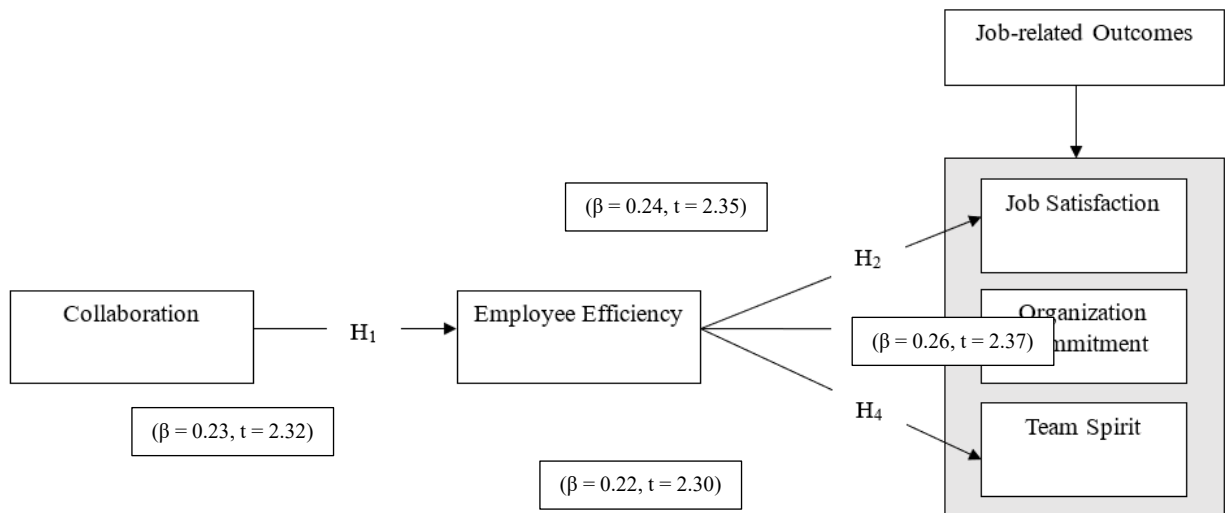


Figure 2: Estimated Hypothesized Model

The model was reconstructed to estimate the path estimates and mediation effect by formulating the structural model. To confirm the significance of the suggested hypothesis at a 95% confidence interval in a two-tailed t-test, the model is first examined using the PLS technique to obtain the β (beta) coefficient and R² values. It is then bootstrapped (using 500 samples) to provide t-statistic values. The effect of collaboration on employee efficiency ($\beta = 0.23, t = 2.32$); employee efficiency on job satisfaction ($\beta = 0.24, t = 2.35$); employee efficiency on organizational commitment ($\beta = 0.26, t = 2.37$); and employee efficiency on team spirit ($\beta = 0.22, t = 2.30$).

5. DISCUSSION

The study's conclusion sheds light on how employee productivity, organizational cooperation, and other work-related outcomes interact in the Indian IT industry. The ramifications of these findings are further discussed in this party which also places them within the body of current literature and emphasizes their applicability to both academic research and real-world organizational applications.

Organizational cooperation greatly increases worker productivity in the IT sector, according to the study. This result is consistent with other research showing that cooperative work settings improve employees' capacity for communication, knowledge exchange, and problem-solving. IT companies' emphasis on cooperation and teamwork is not just a fad, rather it is an essential component of navigating the complexity of contemporary projects, which frequently call for a wide range of knowledge and quick adaptation. Collaboration is crucial because IT work frequently requires a high degree of dependency among team members. Workers in collaborative settings are more likely to feel appreciated and connected, which can increase motivation and engagement. The study's conclusions highlight the need for IT companies to consciously implement collaborative practices in order to foster a culture that values and acknowledges cooperation. Teamwork, organizational commitment, and job satisfaction are all significantly improved by staff efficiency. The resource-based approach, which holds that worker productivity is a vital organizational resource that may provide competitive advantage, is supported by this discovery. Employees are more likely to feel satisfied with their jobs when they believe they are contributing effectively to their teams.

Furthermore, there is a remarkable correlation between organizational dedication and personnel efficiency. High productivity increases workers' emotional commitment to their companies and creates a sense of accomplishment. In the IT industry, where turnover rates can be significant, this dedication is essential. Businesses that foster an atmosphere where productivity is valued and rewarded may discover that their employees are more dedicated, which may eventually lower turnover costs and improve team stability. The study's conclusions have significant implications for IT companies trying to raise worker happiness and productivity. In terms of worker performance and overall organizational success, investments in collaborative work environments which include team-building exercises, open lines of communication, and collaborative technologies can pay off well.

Companies have to think about putting in place training courses designed to improve staff members' ability to work together. These courses may concentrate on team dynamics, effective communication, and conflict resolution, skills necessary for succeeding in a cooperative setting. In addition, leadership is essential to creating a collaborative atmosphere. Leaders may encourage their teams to embrace similar principles by setting an example of teamwork and putting team success first. Furthermore, team members may work together more effectively when collaborative technologies like project management software and communication tools are used, particularly in industries where remote work arrangements are common. Organizations may improve real-time communication, expedite procedures, and eventually increase staff productivity by incorporating these technologies into their everyday operations.

The focus on teamwork in the workplace can enhance company culture and employee well-being from a wider social standpoint. In order to support employees' mental health and well-being, a collaborative work environment can result in higher job satisfaction and reduced levels of workplace stress. This is particularly important in the high-pressure setting that characterizes the IT industry, where workers frequently deal with difficult problems and short deadlines. Additionally, encouraging cooperative methods can help teams become more inclusive. Collaboration may act as a link between disparate viewpoints and experiences as businesses accept diversity, eventually producing more creative results. By fostering a more equal working culture, this inclusion not only helps the company but also the larger community.

6. LIMITATIONS AND FUTURE RESEARCH DIRECTIONS

Although this study offers insightful information, it is important to recognize its limits. Convenience sampling may add biases, and the study's cross-sectional design limits the ability to draw conclusions about causality. Longitudinal designs should be investigated in future studies to gain a deeper understanding of the temporal relationships among job-related outcomes, employee productivity, and organizational cooperation.

Furthermore, broadening the focus to encompass industries other than IT would offer a more thorough comprehension of the findings' generalizability. Comparative studies that look at how different sectors use collaborative techniques might provide important information about best practices and obstacles unique to a certain industry.

7. CONCLUSION

In conclusion, this study emphasizes how important organizational cooperation is to raising worker productivity and promoting favourable work-related outcomes in the Indian IT industry. Organizations may increase worker productivity and provide a positive work environment that encourages dedication, job satisfaction, and teamwork by investing in

collaborative practices. These findings have a wide range of ramifications, providing both theoretical and applied insights that might direct future organizational initiatives in the IT industry and beyond.

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CONFLICT OF INTEREST

The authors declare no conflict of interest between them.

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