

A Study on Employee Perception Towards Digital Learning and Development Programs

Dr. V. Paramasivam¹, Mr. K. Sivakumar², P. Preethika³, S. Poovendran⁴

¹Professor & Head of the Department, Department of Management Studies, Kangeyam Institute of Technology, Kangeyam – 638108, Tamilnadu, India.

²Associate Professor, Department of Management Studies, Kangeyam Institute of Technology, Kangeyam – 638108, Tamilnadu, India.

^{3,4}II-MBA, Department of Management Studies, Kangeyam Institute of Technology, Kangeyam – 638108, Tamilnadu, India

ABSTRACT

The rapid advancement of digital technology has brought significant changes to learning and development practices within modern organizations. Digital learning and development programs provide flexible, cost-effective, and accessible training opportunities that support continuous skill enhancement among employees. The present study aims to examine employees' perception towards digital learning and development programs and to evaluate their effectiveness in improving job-related skills and overall satisfaction. The study also analyzes the relevance of digital learning initiatives to employees' job roles and identifies challenges affecting their successful implementation. A descriptive research design was adopted, and data were collected from 100 employees using a structured questionnaire through convenience sampling. Statistical tools such as descriptive analysis, correlation, regression, and ANOVA were employed for data analysis. The findings indicate that employees generally hold a positive perception of digital learning programs and report a satisfactory level of overall satisfaction. However, the relevance of digital learning content to specific job roles was found to be moderate. The study further reveals a positive and significant relationship between job-role relevance and overall satisfaction. The study concludes that enhancing content relevance and strengthening organizational support can significantly improve employee engagement and the effectiveness of digital learning programs.

Keywords: Digital Learning, Employee Perception, Learning and Development, Job Role Relevance, Employee Satisfaction,

INTRODUCTION

The rapid advancement of digital technology has transformed learning and development practices in modern organizations. Organizations increasingly rely on digital learning and development programs to enhance employee skills and support continuous professional growth. These programs provide flexible learning opportunities that allow employees to access training anytime and anywhere. Digital learning platforms include e-learning modules, virtual training sessions, learning management systems, and mobile-based learning tools. While such programs offer convenience and cost efficiency, their success depends largely on employee perception and acceptance. Employee perception towards digital learning plays a crucial role in determining the effectiveness of training initiatives. Positive perception leads to

higher participation, better engagement, and improved learning outcomes. Digital learning programs aim to enhance employees' skills, competencies, and job performance by offering relevant and updated content. However, the effectiveness of these programs varies based on content quality, ease of use, and organizational support. Employees' acceptance and satisfaction are influenced by factors such as platform usability, learning flexibility, and management encouragement. Despite the benefits, employees may face challenges such as technical issues, limited interaction, and time constraints. These challenges can reduce motivation and hinder effective learning. Understanding employee perception and identifying challenges are therefore essential for improving digital learning strategies. The present study focuses on examining employee perception towards digital learning and development programs. It also assesses their effectiveness, analyzes influencing factors, and identifies challenges in order to suggest strategies for enhancing digital learning practices in organizations.

STATEMENT OF THE PROBLEM

Organizations are increasingly investing in digital learning and development programs to enhance employee skills and improve organizational performance. Despite the widespread adoption of these digital training initiatives, many organizations face challenges in achieving the desired learning outcomes. The effectiveness of digital learning programs often varies due to differences in employee perception, acceptance, and engagement with digital platforms. Negative perceptions, lack of motivation, and limited satisfaction among employees can result in low participation and reduced impact on job performance. Additionally, factors such as technological difficulties, inadequate content relevance, limited interaction, and time constraints may hinder employees from fully utilizing digital learning opportunities. While digital learning is expected to provide flexible and efficient training solutions, the actual experiences and challenges faced by employees are not always clearly understood. There is a need to systematically examine how employees perceive digital learning and development programs, how effective these programs are in enhancing skills and performance, and what challenges affect their successful implementation. Addressing these issues is essential for organizations to improve digital learning strategies and maximize the benefits of their training investments.

OBJECTIVES

- To examine the perception of employees towards digital learning and development programs implemented in organizations.
- To assess the effectiveness of digital learning and development programs in improving employees' skills, competencies, and job performance.
- To analyze the factors influencing employees' acceptance, satisfaction, and engagement with digital learning platforms.
- To identify the challenges associated with digital learning and development programs and propose strategies for enhancing their effectiveness.

REVIEW OF LITERATURE

Digital learning and development have become an important area of research due to rapid technological changes in organizations. Previous studies have examined employee attitudes, perceptions, and responses towards e-learning and digital training programs. Researchers have focused on the effectiveness of digital

learning in improving skills, performance, and work efficiency. The literature also highlights both the benefits and challenges associated with digital learning initiatives.

Batalla-Busquets and Pacheco-Bernal (2013) studied workers' attitudes toward on-the-job e-learning. The study found that employees view e-learning as a flexible and useful training method. Workers believe that e-learning helps them update skills while continuing their jobs. The results show positive attitudes toward workplace e-learning. The study suggests that e-learning benefits both employees and organizations.

Brougham and Haar (2016) studied employees' views on smart technology, artificial intelligence, robotics, and algorithms (STARA). The study explains that many employees fear job loss due to advanced technologies. It found that higher awareness of STARA is linked to lower job satisfaction and commitment. Employees also showed higher stress and turnover intentions. The study highlights the need for organizations to prepare employees for technological change.

E-learning is commonly used in corporate training programs. **Sharma and Rathore (2022)** explained that e-learning helps improve employee performance and work efficiency. It allows employees to learn anytime and anywhere. E-learning also reduces training costs for organizations. The study concludes that e-learning is useful for corporate employees.

Syed and Abdul (2023) studied employees' perception of e-learning in the information technology sector in India. The study found that e-learning improves employees' skills and job performance. Employees viewed e-learning as flexible and easy to use. The results also showed that e-learning increases productivity and learning interest. The study concludes that e-learning is beneficial for both employees and organizations.

Zervas and Triantari (2025) studied digital HRM practices and employees' digital competence. The study shows that digital HRM practices like e-learning and digital performance management improve employees' digital skills. It also explains that organizational culture plays an important role in digital competence. Supportive and innovative cultures help employees develop better digital skills. The study highlights the need for organizations to align digital HR practices with their culture.

The reviewed studies indicate that digital learning programs generally create positive outcomes for employees and organizations. However, concerns related to technological stress, acceptance, and engagement continue to exist. Existing literature emphasizes the importance of organizational support and digital readiness. Therefore, further research is required to understand employee perception and challenges in digital learning and development programs.

RESEARCH METHODOLOGY

This study examines employees' perceptions of digital learning initiatives and their relevance to job roles. It was conducted to understand how digital learning programs influence overall satisfaction and alignment with work responsibilities. The research was carried out over one month, from **[01-12-2025] to [29-12-2025]**, with **100 respondents** selected through convenience sampling. Data were collected using structured questionnaires. The study evaluates the effectiveness of digital learning in improving satisfaction and assesses the relationship between program relevance and employee engagement. Findings aim to inform strategies for enhancing digital learning content and job-role alignment.

Table 1. DESCRIPTIVE STATISTICS OF OVERALL SATISFACTION AND RELEVANCE OF DIGITAL LEARNING PROGRAMS

		Overall satisfaction with digital learning initiatives	Relevance of digital learning to job role
N	Valid	100	100
	Missing	0	0
Mean		3.72	3.23
Median		4.00	3.00
Mode		4	3
Std. Deviation		.996	1.109
Minimum		1	1
Maximum		5	5

INTERPRETATION

The descriptive statistics show that employees generally have a positive perception of digital learning initiatives. The mean score of **3.72** for overall satisfaction indicates that most respondents are satisfied with the digital learning programs offered by their organization.

The median and mode value of **4** further support this positive level of satisfaction. The standard deviation of **0.996** suggests moderate variation in satisfaction levels among employees. The relevance of digital learning to job roles has a mean score of **3.23**, indicating a moderately favorable perception. However, the higher standard deviation of **1.109** shows greater variation in opinions regarding relevance. Overall, the findings suggest that while satisfaction with digital learning initiatives is high, improving job-role relevance could further enhance employee satisfaction.

Table 2. FREQUENCY DISTRIBUTION OF OVERALL SATISFACTION WITH DIGITAL LEARNING INITIATIVES

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	3	3.0	3.0	3.0
	Disagree	6	6.0	6.0	9.0
	Neutral	31	31.0	31.0	40.0
	Agree	36	36.0	36.0	76.0
	Strongly Agree	24	24.0	24.0	100.0
	Total	100	100.0	100.0	

INTERPRETATION

The frequency distribution indicates that employees generally hold a positive perception of digital learning initiatives in their organization. A majority of respondents, **36% agree** and **24% strongly agree**, showing that **60%** of employees are satisfied with digital learning programs. About **31%** of respondents expressed a neutral opinion, indicating moderate satisfaction or uncertainty. Only a small proportion, **9%**, reported dissatisfaction with the initiatives. The cumulative results suggest that digital learning programs are well accepted by employees. Overall, the findings reflect a favorable level of satisfaction, highlighting the effectiveness of digital learning and development initiatives within the organization.

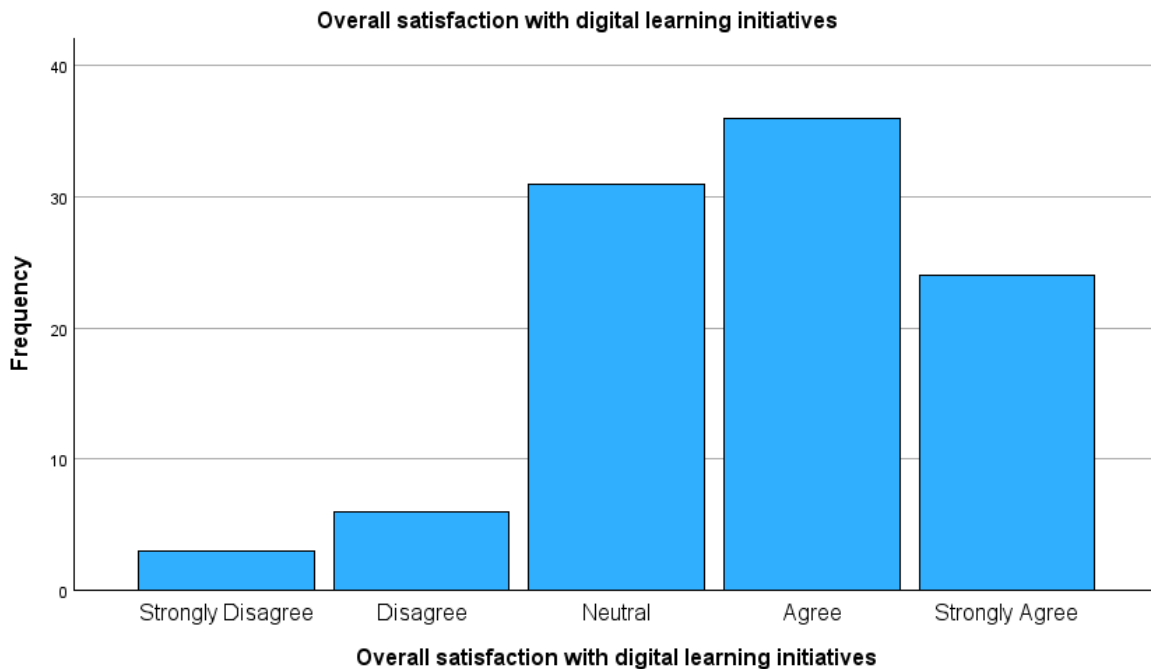
Table 3. FREQUENCY DISTRIBUTION OF RELEVANCE OF DIGITAL LEARNING TO JOB ROLE

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very irrelevant	11	11.0	11.0	11.0
	Irrelevant	8	8.0	8.0	19.0
	Neutral	39	39.0	39.0	58.0
	Relevant	31	31.0	31.0	89.0
	Very relevant	11	11.0	11.0	100.0
	Total	100	100.0	100.0	

INTERPRETATION

The frequency analysis shows mixed perceptions regarding the relevance of digital learning programs to employees’ job roles. A majority of respondents (**39%**) expressed a neutral opinion, indicating uncertainty about how closely digital learning aligns with their job responsibilities. Meanwhile, **31% agreed** and **11% strongly agreed**, showing that **42%** of employees perceive digital learning as relevant to their roles. On the other hand, **19%** of respondents felt that digital learning was irrelevant to their job.

Figure 1. OVERALL SATISFACTION WITH DIGITAL LEARNING INITIATIVES

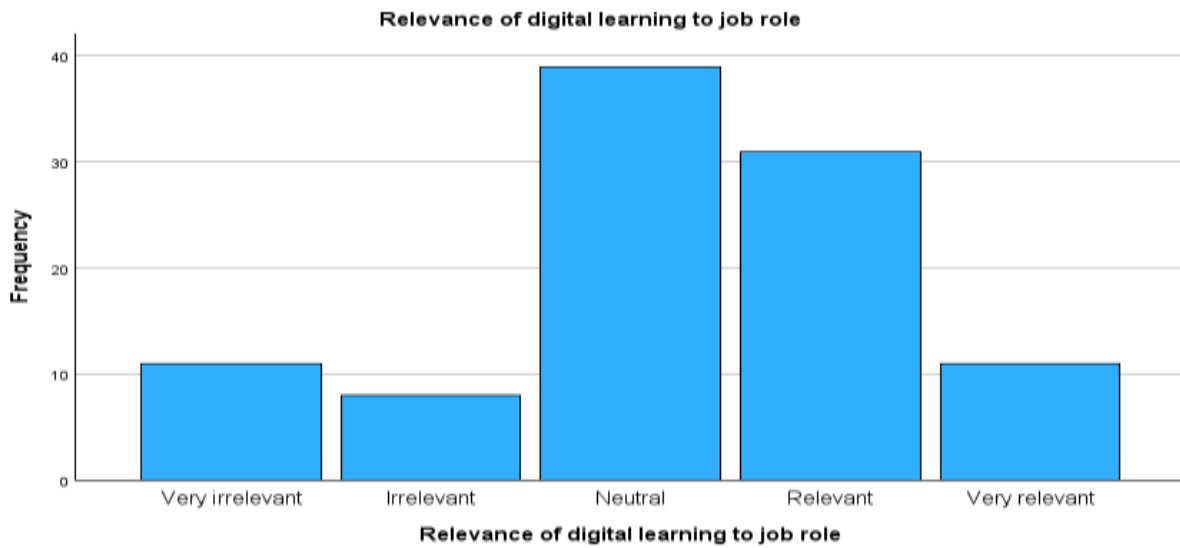


INTERPRETATION

The bar chart illustrates respondents’ overall satisfaction with digital learning initiatives in the organization. A majority of employees expressed positive satisfaction, with **36% agreeing** and **24% strongly agreeing**, indicating that digital learning programs are generally well received. About **31% of respondents remained neutral**, suggesting moderate satisfaction or uncertainty about the effectiveness of these initiatives. Only a small proportion expressed dissatisfaction, with **6% disagreeing** and **3% strongly disagreeing**. Overall, the results highlight a favorable perception of digital learning, while also

indicating opportunities to further enhance program quality to convert neutral respondents into satisfied participants.

Figure 2. RELEVANCE OF DIGITAL LEARNING TO JOB ROLE



INTERPRETATION

The bar chart depicts employees’ perceptions of the relevance of digital learning programs to their job roles. A significant portion of respondents (39%) selected the neutral option, indicating uncertainty about how well digital learning aligns with their job requirements. However, 31% agreed and 11% strongly agreed, showing that a considerable number of employees find digital learning relevant to their roles. On the other hand, 19% of respondents perceived digital learning as irrelevant or very irrelevant. Overall, the findings suggest that while digital learning is relevant for many employees, further customization of content could enhance its job-related applicability.

Table 4. CORRELATION BETWEEN RELEVANCE OF DIGITAL LEARNING AND OVERALL SATISFACTION

		Overall satisfaction with digital learning initiatives	Relevance of digital learning to job role
Overall satisfaction with digital learning initiatives	Pearson Correlation	1	.224*
	Sig. (2-tailed)		.025
	N	100	100
Relevance of digital learning to job role	Pearson Correlation	.224*	1
	Sig. (2-tailed)	.025	
	N	100	100

*. Correlation is significant at the 0.05 level (2-tailed).

INTERPRETATION

The Pearson correlation analysis shows a **positive correlation (r = 0.224)** between the relevance of digital learning to the job role and overall satisfaction with digital learning initiatives. This indicates that employees who perceive digital learning programs as more relevant to their job roles tend to report higher levels of overall satisfaction. The relationship is **statistically significant at the 0.05 level (p = 0.025)**, confirming that the association is meaningful and not due to chance. Although the strength of the correlation is moderate, it highlights the importance of aligning digital learning content with job-specific needs. Improving job relevance can therefore contribute to enhanced employee satisfaction with digital learning programs.

Table 5. VARIABLES ENTERED/REMOVED IN REGRESSION ANALYSIS

Model	Variables Entered	Variables Removed	Method
1	Relevance of digital learning to job role ^b	.	Enter
a. Dependent Variable: Overall satisfaction with digital learning initiatives			
b. All requested variables entered.			

INTERPRETATION

The table shows that the regression model was constructed using the **Enter method**, where the independent variable “**Relevance of digital learning to job role**” was directly included in the analysis. No variables were removed from the model, indicating that all selected variables were considered appropriate for the study.

The dependent variable in this model is “**Overall satisfaction with digital learning initiatives.**” This setup reflects the study’s objective to examine whether the perceived relevance of digital learning programs can predict employees’ overall satisfaction. The model structure is straightforward and suitable for assessing the direct relationship between relevance and satisfaction.

Table 6. MODEL SUMMARY OF REGRESSION ANALYSIS

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.224 ^a	.050	.040	.975
a. Predictors: (Constant), Relevance of digital learning to job role				

INTERPRETATION

The model summary indicates a correlation coefficient (**R = 0.224**), showing a weak but positive relationship between the relevance of digital learning to the job role and overall satisfaction with digital learning initiatives. The **R Square value of 0.050** suggests that about **5% of the variation in overall satisfaction** is explained by the relevance of digital learning programs. The **Adjusted R Square (0.040)**, which accounts for sample size, also indicates a low explanatory power of the model. The **standard error of estimate (0.975)** reflects the average deviation of observed values from the predicted values. Overall, while relevance contributes positively to satisfaction, other factors also play a significant role in influencing employees’ overall satisfaction with digital learning initiatives.

Table 7. ANOVA RESULTS FOR REGRESSION MODEL

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4.908	1	4.908	5.158	.025 ^b
	Residual	93.252	98	.952		
	Total	98.160	99			
a. Dependent Variable: Overall satisfaction with digital learning initiatives						
b. Predictors: (Constant), Relevance of digital learning to job role						

INTERPRETATION

The ANOVA table shows that the regression model is **statistically significant**, with an **F value of 5.158** and a **p-value of 0.025**, which is below the 0.05 significance level. This indicates that the model effectively explains variation in **overall satisfaction with digital learning initiatives** based on the **relevance of digital learning to the job role**. The regression sum of squares (4.908) suggests that the predictor contributes meaningfully to explaining satisfaction, while the residual sum of squares (93.252) reflects unexplained variance. Overall, the results confirm that the relevance of digital learning programs has a significant impact on employees’ overall satisfaction, even though the effect size is modest.

Table 8. ONE-WAY ANOVA FOR OVERALL SATISFACTION WITH DIGITAL LEARNING INITIATIVES

Overall satisfaction with digital learning initiatives					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	11.224	4	2.806	3.066	.020
Within Groups	86.936	95	.915		
Total	98.160	99			

INTERPRETATION

The one-way ANOVA results indicate a **statistically significant difference** in overall satisfaction with digital learning initiatives across the groups, as shown by an **F value of 3.066** and a **p-value of 0.020**, which is less than the 0.05 significance level. This suggests that overall satisfaction varies meaningfully among the different groups considered in the analysis. The between-groups sum of squares (11.224) shows that group differences contribute to variations in satisfaction levels, while the within-groups sum of squares (86.936) reflects individual differences within each group. Overall, the findings imply that group-related factors have a significant influence on employees’ satisfaction with digital learning initiatives.

Table 9. EFFECT SIZES FOR OVERALL SATISFACTION WITH DIGITAL LEARNING INITIATIVES (ANOVA)

		Point Estimate	95% Confidence Interval	
			Lower	Upper
Overall satisfaction with digital learning initiatives	Eta-squared	.114	.002	.211
	Epsilon-squared	.077	-.040	.177

	Omega-squared effect	Fixed-	.076	-.040	.176
	Omega-squared effect	Random-	.020	-.010	.051
a. Eta-squared and Epsilon-squared are estimated based on the fixed-effect model.					
b. Negative but less biased estimates are retained, not rounded to zero.					

INTERPRETATION

The table shows effect sizes for overall satisfaction with digital learning initiatives.

Eta-squared ($\eta^2 = 0.114$) indicates that 11.4% of the variance is explained by the factor.

Epsilon-squared ($\epsilon^2 = 0.077$) and Omega-squared fixed-effect ($\omega^2 = 0.076$) provide less biased estimates, suggesting a small effect.

Confidence intervals for ϵ^2 and ω^2 include negative values, reflecting minimal or negligible effects.

Omega-squared random-effect ($\omega^2 = 0.020$) indicates a very small effect in the broader population.

Overall, factor has a small impact on satisfaction. These results suggest that differences between groups are statistically small but present.

FINDINGS OF THE STUDY

- The majority of employees show a positive perception towards digital learning and development programs.
- Overall satisfaction with digital learning initiatives is high, with most respondents agreeing that such programs are beneficial.
- Employees perceive the relevance of digital learning to their job roles as moderate, indicating scope for improvement.
- A significant positive relationship exists between job-role relevance and overall satisfaction with digital learning initiatives.
- Regression analysis shows that relevance of digital learning has a positive but limited impact on overall satisfaction.
- ANOVA results indicate significant differences in satisfaction levels among different employee groups.

SUGGESTIONS

- Organizations should customize digital learning content to align more closely with specific job roles.
- Regular feedback should be collected from employees to improve the quality and relevance of digital training programs.
- Management should actively encourage employee participation in digital learning initiatives.
- Technical support and user-friendly platforms should be enhanced to reduce learning barriers.
- Interactive elements such as virtual discussions and practical modules should be included to increase engagement.

CONCLUSION

Digital learning and development programs play a vital role in enhancing employee skills and supporting organizational growth in a technology-driven environment. The present study reveals that employees

generally hold a favorable perception towards digital learning initiatives and express a satisfactory level of overall satisfaction. However, the relevance of digital learning content to specific job roles remains an area requiring improvement. The findings confirm that greater alignment between digital learning programs and job requirements leads to higher employee satisfaction. Although digital learning offers flexibility and accessibility, its effectiveness depends on content relevance, organizational support, and employee engagement. By addressing existing challenges and implementing targeted improvements, organizations can enhance the impact of digital learning programs. Ultimately, well-designed digital learning initiatives can contribute significantly to employee development, productivity, and long-term organizational success.

REFERENCES

1. Sharma, S., & Rathore, R. (2022). A study on e-learning perspective for employees of corporate sector. *Journal of Management and Science*, 12(1), 31–35. <https://doi.org/10.26524/jms.12.6>
2. Abhari, K. (2025). Employee participation in digital transformation: From digitalization sentiment to transformation predisposition. *Information & Management*, 62, 104212. <https://doi.org/10.1016/j.im.2025.104212>
3. Beydoun, A. R., & Saleh, R. F. (2023). Literature review on training and development in work setting. *BAU Journal – Society, Culture and Human Behavior*, 4(2), Article 13. <https://doi.org/10.54729/2789-8296.1136>
4. Agrawal, V., Agrawal, S., & Agrawal, A. M. (2017). Perception of employees toward e-learning service quality: Exploratory factor analysis. *Industrial and Commercial Training*, 49(7/8), 350–356. <https://doi.org/10.1108/ICT-06-2017-0042>
5. Syed, F. U., & Abdul, S. M. (2023). Employees' perception towards e-learning: An exploratory study in the information technology sector in India. *Industrial and Commercial Training*. <https://doi.org/10.1108/ICT-11-2022-0082>
6. Syamsulbahri, & Bardai, B. (2025). The effect of learning and development programs, digital communication platforms, and performance management systems on employee productivity in digital work environments in Indonesia. *The Eastasouth Journal of Social Science and Humanities*, 2(2), 289–301. <https://doi.org/10.58812/esssh.v2i02>
7. Majrashi, K. (2024). Employees' perceptions of the fairness of AI-based performance prediction features. *Cogent Business & Management*, 11(1). <https://doi.org/10.1080/23311975.2025.2456111>
8. Opland, L. E., Pappas, I. O., Engesmo, J., & Jaccheri, L. (2022). Employee-driven digital innovation: A systematic review and a research agenda. *Journal of Business Research*, 143, 255–271. <https://doi.org/10.1016/j.jbusres.2022.01.038>
9. Gunnam, V. R. (2019). A study of employees' perception in training and development in IT sector. *International Journal of Research and Analytical Reviews (IJRAR)*, 6(2), 769–776.
10. Deng, K., Mo, Y., & Yang, Y. (2022). From the employee perception view towards digital transformation (Bachelor's thesis). Jönköping University, Sweden.