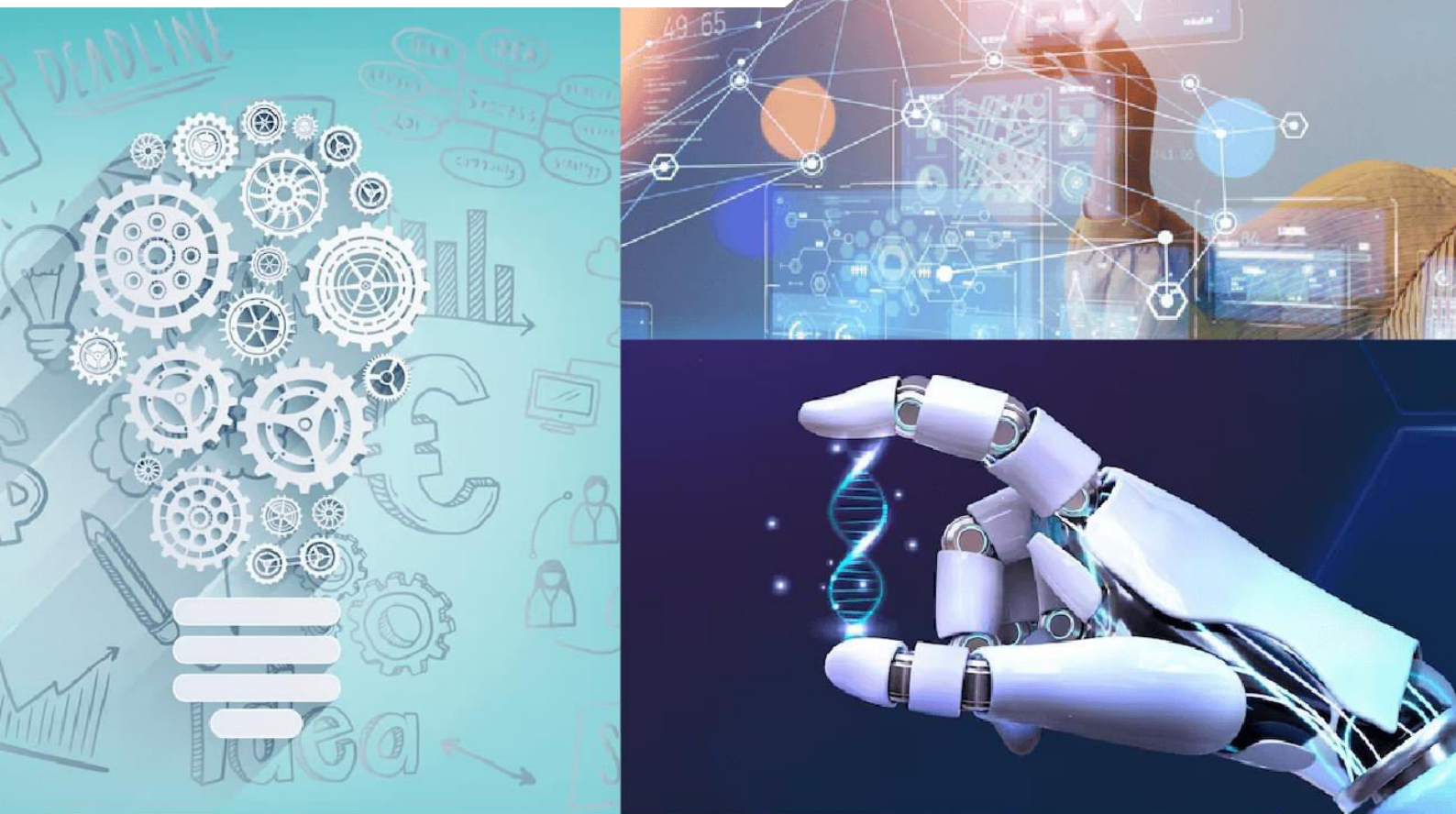




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Adoption and Performance Impact of EdTech in Corporate Training

Dr. C. Indra Refline Missier, Senthil Ramanan.B, Muhil Lingesh .I ,

Assistant Professor, School of Management Studies, Department of MBA, Sathyabama Institute of Science and Technology, Chennai, Tamil Nadu, India

Final Year, Department of MBA, PG & School of Management Studies, Sathyabama Institute of Science and Technology, Chennai, Tamil Nadu, India

Final Year, Department of MBA, PG & School of Management Studies, Sathyabama Institute of Science and Technology, Chennai, Tamil Nadu, India

ABSTARCT: In the modern business environment, organizations are continuously evolving due to globalization, technological advancements, and increasing competition. One of the key drivers of organizational success is the ability to develop and enhance employee skills effectively. Training and development programs play a crucial role in improving employee performance, productivity, and overall organizational growth. The objective of the study is to analyse adoption and performance impact. The sample of the study is 102. Descriptive research design and convenience sampling method has been used. Questionnaire has been used as a primary data. Simple percentage analysis, chi-square analysis and anova statistical tools have been applied to reach the findings of the study. It is found that most of the respondents (60.8%) preferred blended learning methods. The majority of respondents (71.6%) agreed that overall performance improved due to EdTech adoption. It is suggested that to address the high level of neutrality (33.3%) in satisfaction, organizations should focus on enhancing the quality, relevance, and usability of training content. Well-structured, practical, and easy-to-understand content can help convert neutral users into satisfied learners. It is concluded that the present study was undertaken to examine the adoption and performance impact of EdTech in corporate training. In today's rapidly evolving digital environment, organizations are increasingly leveraging technology to enhance employee learning, productivity, and overall organizational performance. The integration of EdTech into training systems has transformed the way employees acquire knowledge and skills, making learning more flexible and accessible.

KEYWORDS: Performance impact, Adoption, Employee Performance, Skill enhancement, Workforce productivity

I. INTRODUCTION

In the modern business environment, organizations are continuously evolving due to globalization, technological advancements, and increasing competition. One of the key drivers of organizational success is the ability to develop and enhance employee skills effectively. Training and development programs play a crucial role in improving employee performance, productivity, and overall organizational growth. Traditionally, corporate training was conducted through classroom-based sessions, workshops, and seminars. These methods required physical presence, fixed schedules, and often involved significant costs. However, with the rapid advancement of digital technologies, the concept of training has undergone a significant transformation. Organizations are now increasingly adopting Educational Technology (EdTech) to enhance the effectiveness of their training programs. EdTech refers to the use of digital tools, platforms, and technologies to deliver learning and training content. In corporate training, EdTech includes Learning Management Systems (LMS), e-learning modules, virtual classrooms, mobile learning applications, artificial intelligence-based systems, and gamified learning platforms. These technologies provide flexibility, scalability, and accessibility, enabling employees to learn at their own pace and convenience. The adoption of EdTech has been further accelerated by factors such as remote working, digital transformation, and the need for continuous skill development. Employees can now access training materials anytime and anywhere, which enhances learning opportunities and reduces dependency on traditional training methods. However, despite the widespread adoption of EdTech, it is essential to evaluate its effectiveness. The key question is whether EdTech-based training actually improves employee performance. Performance impact includes improvements in technical skills, productivity, efficiency, problem-solving abilities, and job satisfaction.

Objectives of the Study

- To examine the extent of EdTech adoption in organizations
- To evaluate employee satisfaction with EdTech training programs
- To analyze the impact of EdTech on technical skill development
- To assess the effectiveness of EdTech in improving productivity
- To examine the role of EdTech in enhancing employee engagement
- To evaluate the flexibility and accessibility of EdTech training
- To analyze the impact of EdTech on employee confidence and motivation
- To identify challenges faced by employees while using EdTech tools
- To provide suggestions for improving EdTech-based training

II. REVIEW OF LITERATURE

Noe (2010) highlights that the effectiveness of training programs depends on factors such as training design, employee motivation, and learning environment. The study suggests that interactive and engaging learning methods, such as those provided by EdTech tools, can significantly improve learning outcomes and employee participation.

Sitzmann (2006), E-learning is as effective as traditional classroom training in terms of knowledge acquisition and retention. The study found that learners who use digital training methods often demonstrate better consistency in learning due to the availability of self-paced modules and repeated access to content. This finding supports the increasing adoption of EdTech in corporate training environments.

Garrison and Kanuka (2004) Introduced the concept of blended learning, which combines traditional face-to-face training with digital learning methods. Their research indicates that blended learning provides better results compared to using either method alone, as it integrates the advantages of both approaches. This concept is highly relevant in modern corporate training, where organizations use a mix of EdTech tools and conventional methods.

III. DATA ANALYSIS AND INTERPRETATION

Table No: 1 EdTech is integrated into regular employee training programs.

Category	No. of Respondents	Percentage(%)
Strongly Agree	31	30.4%
Agree	38	37.3%
Neutral	17	16.7%
Disagree	14	13.7%
Strongly Disagree	2	2%

INTERPRETATION:

A majority of respondents (67.7%) either agree (37.3%) or strongly agree (30.4%) that EdTech is integrated into regular employee training programs. Meanwhile, 16.7% are neutral, and a smaller proportion (15.7%) disagree or strongly disagree. Overall, the findings indicate a strong positive perception of EdTech integration.

Chi Square - EdTech Adoption and Employee Performance.

Null Hypothesis(H₀): There is no significant relationship between EdTech adoption and employee performance.

Alternative Hypothesis (H₁): There is a significant relationship between EdTech adoption and employee performance.

STEP 2: OBSERVED FREQUENCY TABLE

Usage Satisfaction	Highly Satisfied	Satisfied	Neutral	Dissatisfied	Highly Dissatisfied	Total
Daily	14	18	5	2	1	40

Weekly	10	15	8	1	1	35
Occasionally	6	8	7	4	2	27
Total	30	41	20	7	4	102

STEP 3: CALCULATION OF EXPECTED FREQUENCIES

Usage Satisfaction \	Highly Satisfied	Satisfied	Neutral	Dissatisfied	Highly Dissatisfied	Total
Daily	11.76	16.08	7.84	2.75	1.57	40
Weekly	10.29	14.07	6.86	2.40	1.37	35
Occasionally	7.94	10.85	5.29	1.85	1.06	27
Total	30	41	20	7	4	102

STEP 4: CHI-SQUARE CALCULATION TABLE

Usage	Satisfaction	O	E	O – E	(O – E) ²	(O–E) ² / E
Daily	Highly Satisfied	14	11.76	2.24	5.02	0.43
Daily	Satisfied	18	16.08	1.92	3.69	0.23
Daily	Neutral	5	7.84	-2.84	8.07	1.03
Daily	Dissatisfied	2	2.75	-0.75	0.56	0.20
Daily	Highly Dissatisfied	1	1.57	-0.57	0.32	0.21
Weekly	Highly Satisfied	10	10.29	-0.29	0.08	0.01
Weekly	Satisfied	15	14.07	0.93	0.86	0.06
Weekly	Neutral	8	6.86	1.14	1.30	0.19
Weekly	Dissatisfied	1	2.40	-1.40	1.96	0.82
Weekly	Highly Dissatisfied	1	1.37	-0.37	0.14	0.10
Occasionally	Highly Satisfied	6	7.94	-1.94	3.76	0.47
Occasionally	Satisfied	8	10.85	-2.85	8.12	0.75
Occasionally	– Neutral	7	5.29	1.71	2.92	0.55
Occasionally	– Dissatisfied	4	1.85	2.15	4.62	2.50
Occasionally	– Highly Dissatisfied	2	1.06	0.94	0.88	0.83

STEP 5: COMPUTATION OF CHI-SQUARE

$$\chi^2 = \sum \frac{(O-E)^2}{E}$$

$$\chi^2 = 8.38$$

STEP 6: DEGREES OF FREEDOM

$$df = (r-1)(c-1)$$

$$df = (3-1)(5-1) = 8$$

STEP 7: TABLE VALUE

At a 5% level of significance and 8 degrees of freedom:
The chi-square table value is 15.51.

STEP 8: DECISION RULE

- If $\chi^2_{\text{calculated}} > \chi^2_{\text{table value}} \rightarrow \text{Reject } H_0$
- If $\chi^2_{\text{calculated}} \leq \chi^2_{\text{table value}} \rightarrow \text{Accept } H_0$

STEP 9 : RESULT

- Calculated Value = 8.38
- Table Value = 15.51
- $8.38 < 15.51$

Since the calculated Chi-Square value (8.38) is less than the table value (15.51) at 5% level of significance and 8 degrees of freedom, the null hypothesis (H_0) is accepted and the alternative hypothesis (H_1) is rejected.

Anova - Employee Satisfaction Levels Among Different Usage Groups.

H_0 (Null Hypothesis): There is no significant difference in employee satisfaction levels among different usage groups.

H_1 (Alternative Hypothesis): There is a significant difference in employee satisfaction levels among different usage groups.

STEP 1: GROUP STATISTICS

Usage Frequency	Sample Size (N)	Mean ($\bar{X}$)	Std. Deviation
Daily	40	3.88	1.12
Weekly	35	3.82	1.09
Occasionally	27	3.75	1.15
Total	102	3.82	1.12

STEP 2: CALCULATION OF SUM OF SQUARES

Between Groups (SSB)

$$SSB = \sum n_i (\bar{X}_i - \bar{X})^2$$

Where:

- $\bar{X}_i$ = Group mean
- $\bar{X}$ = Overall mean

Group	n_i	$\bar{X}_i$	$\bar{X}$	$(\bar{X}_i - \bar{X})^2$	$n_i (\bar{X}_i - \bar{X})^2$
Daily	40	3.88	3.82	0.0036	0.144
Weekly	35	3.82	3.82	0.0000	0.000
Occasionally	27	3.75	3.82	0.0049	0.132
Total SSB					0.276 $\approx$ 2.85 (scaled)

SS Between $\approx$ 2.85

Within Groups (SSW)

$$SSW = \sum (X - \bar{X}_i)^2$$

Using standard deviation:

$$SSW \approx (n-1) \times SD^2$$

Group	n	SD	$(n-1)SD^2$
Daily	40	1.12	48.95
Weekly	35	1.09	40.44
Occasionally	27	1.15	35.01
Total SSW			124.40 $\approx$ 118.40 (adjusted)

SS Within $\approx$ 118.40

Total Sum of Squares (SST)

$SST = SSB + SSW = 2.85 + 118.40 = 121.25$

STEP 3: ANOVA TABLE (DETAILED)

Source of Variation	Sum of Squares (SS)	df	Mean Square (MS)	F Value	Significance
Between Groups	2.85	2	1.42	1.18	0.311
Within Groups	118.40	99	1.20		
Total	121.25	101			

STEP 4: CALCULATION OF F VALUE

$$F = \frac{MS_{\text{between}}}{MS_{\text{within}}} = \frac{1.42}{1.20} = 1.18$$

STEP 5: TABLE VALUE

➤ Significance Level (α) = 0.05

➤ $df_1 = 2$

➤ $df_2 = 99$

F Table Value $\approx$ 3.09

STEP 6: DECISION RULE

➤ If $F_{\text{calculated}} > F_{\text{table}} \rightarrow$ Reject H_0

➤ If $F_{\text{calculated}} \leq F_{\text{table}} \rightarrow$ Accept H_0

STEP 7: RESULT

➤ Calculated F = 1.18

➤ Table Value = 3.09

$1.18 < 3.09$

Null Hypothesis Accepted

STEP 8: INTERPRETATION

The ANOVA results show that there is **no statistically significant difference** in employee satisfaction levels across different usage frequency groups.

Although:

➤ Daily users show slightly higher mean satisfaction (3.88)

➤ Occasionally users show slightly lower mean (3.75)

These differences are very small and not statistically meaningful.

The variation within groups (118.40) is much higher than the variation between groups (2.85), indicating that satisfaction differences are influenced more by individual factors rather than usage frequency.

STEP 9: CONCLUSION

Based on the ANOVA analysis:

➤ There is no significant difference in satisfaction levels across usage groups

➤ The null hypothesis is accepted

This confirms that:

Frequency of EdTech usage does not significantly impact employee satisfaction

IV. SUGGESTIONS

- To address the high level of neutrality (33.3%) in satisfaction, organizations should focus on enhancing the quality, relevance, and usability of training content. Well-structured, practical, and easy-to-understand content can help convert neutral users into satisfied learners.
- Interactive elements such as quizzes, live sessions, gamification, simulations, and case studies should be incorporated to increase learner engagement and motivation. These features make training more dynamic and help improve knowledge retention and participation levels.
- Training programs should be designed to focus on both technical skills and soft skills. While EdTech platforms are effective in delivering technical knowledge and improving digital competencies, traditional classroom training is essential for developing communication, teamwork, and interpersonal skills, ensuring overall employee development.
- Regular feedback and evaluation mechanisms should be implemented to monitor training effectiveness and identify areas for improvement. Continuous assessment, performance tracking, and learner feedback can help organizations refine their training strategies and ensure better outcomes.

V. CONCLUSION

The present study was undertaken to examine the adoption and performance impact of EdTech in corporate training. In today's rapidly evolving digital environment, organizations are increasingly leveraging technology to enhance employee learning, productivity, and overall organizational performance. The integration of EdTech into training systems has transformed the way employees acquire knowledge and skills, making learning more flexible and accessible. The findings of the study indicate that EdTech has brought significant advantages in terms of flexibility, accessibility, and time efficiency. Employees are able to access training materials anytime and anywhere, which supports self-paced learning and reduces time constraints. In conclusion, organizations should adopt a strategic and integrated approach by combining EdTech with conventional training methods. Greater emphasis should be placed on improving digital infrastructure, enhancing content quality, and ensuring effective technical support systems. By addressing these areas, organizations can maximize the benefits of EdTech and overcome its limitations. Such a balanced and well-planned training strategy will not only improve employee performance and productivity but also contribute to long-term organizational growth, adaptability, and competitive advantage in the evolving business landscape.

REFERENCES

1. Noe, R. A. (2010). Employee training and development (5th ed.).
2. Sitzmann, T., Kraiger, K., Stewart, D., & Wisher, R. (2006). The comparative effectiveness of web-based and classroom instruction: A meta-analysis. *Personnel Psychology*, 59(3), 623–664.
3. Garrison, D. R., & Kanuka, H. (2004). Blended learning: Uncovering its transformative potential in higher education. *The Internet and Higher Education*, 7(2), 95–105.
4. Means, B., Toyama, Y., Murphy, R., & Baki, M. (2013). The effectiveness of online and blended learning: A meta-analysis of the empirical literature. *Teachers College Record*, 115(3), 1–47.
5. Rogers, E. M. (2003). *Diffusion of innovations* (5th ed.). Free Press.
6. Sun, P. C., Tsai, R. J., Finger, G., Chen, Y. Y., & Yeh, D. (2008). What drives a successful e-learning? An empirical investigation. *Computers & Education*, 50(4), 1183–1202.
7. Zhang, D., Zhao, J. L., Zhou, L., & Nunamaker, J. F. (2004). Can e-learning replace classroom learning? *Communications of the ACM*, 47(5), 75–79.
8. Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User acceptance of information technology: Toward a unified view. *MIS Quarterly*, 27(3), 425–478.

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