

Volume 12, Issue 10, October 2024

International Journal of Advance Research in Computer Science and Management Studies

Research Article / Survey Paper / Case Study

Available online at: www.ijarcsms.com

A Monthly Double-Blind Peer Reviewed, Refereed, Open Access, International Journal - Included in
the International Serial Directories

Impact of Artificial Intelligence in Training and Development of Private Bank Employees

Dr. M.S. Sureshkumar¹

Assistant Professor,
Department of Corporate Secretaryship,
Nandha Arts and Science College,
Erode, Tamil Nadu, India.

A. Senthil Raghavan²

Assistant Professor,
Department of Management Studies,
Dr. SNS Rajalakshmi College of Arts and Science,
Coimbatore, Tamil Nadu, India.

Dr. P. Mohanraj³

Associate Professor,
Department of Management Studies,
Nandha Arts and Science College,
Erode, Tamil Nadu, India.
shanjay.mr@gmail.com

DOI: <https://doi.org/10.61161/ijarcsms.v12i10.1>

Short DOI:

Abstract: Professionals in the training and development sector are continuously searching for innovative solutions to improve performance in learning, besides various other new needs a learner may have. Artificial intelligence has transformed the very fabric of designing, delivering, and optimizing training programs. This study aimed at to know the impact of artificial intelligence in training and development of private bank employees in Erode District. 100 private bank employees were chosen in the study area through convenience sampling method. Questionnaire method was used to collect primary information from the sample employees. The blog majorly digs deep into the implications of AI in training and development while at the same time giving information as to how professionals can make use of this technology to develop effective and more personalized learning experiences.

Keywords: professionals; artificial intelligence; training; technology; learning.

I. INTRODUCTION

Employee training and development encompass programs aimed at imparting specific knowledge, skills, and abilities to improve current performance while also providing growth opportunities. While training has a short-term focus on immediate job-related skills, development takes a long-term approach, preparing employees for both present and future roles through learning opportunities that enhance their capabilities for more complex tasks. In today's fast-paced and competitive landscape, where change is constant and innovation emerges daily, organizations must remain agile in their business processes. This adaptability requires continuous implementation of changes to stay competitive in the market. Training is a fundamental aspect of human resource development, focused on enhancing specific skills to meet established standards through instruction and practice. It serves as a vital tool that equips employees to perform their roles effectively and responsibly. Essentially, training increases an employee's knowledge and skills for specific job functions. Career development involves a progression through various stages, each linked to distinct development tasks, activities, and relationships. It can also be viewed as an ongoing formal effort by an organization to enhance its human resources in alignment with both employee and organizational needs.

From a company perspective, neglecting to support employee career advancement can lead to a talent shortage, decreased employee commitment, and inefficient use of training budgets. Conversely, assisting employees in developing career plans can reduce turnover, boost morale, and enhance productivity, ultimately benefiting the organization. When new employees join an organization, they typically receive job-specific training to ensure they can perform their duties effectively, thus contributing to the organization's success. Training is often directed at middle or entry-level employees, whereas development programs are tailored for those in higher positions within the organizational hierarchy. Professionals in the training and development sector are continuously searching for innovative solutions to improve performance in learning, besides various other new needs a learner may have. Artificial intelligence has transformed the very fabric of designing, delivering, and optimizing training programs. The blog majorly digs deep into the implications of AI in training and development while at the same time giving information as to how professionals can make use of this technology to develop effective and more personalized learning experiences.

Main advantages of AI in training include the ability to develop unique learning routes based on the needs of the learner. The algorithms applied by AI in assessing data on learners' performance, preferences, and progression determine personalized content and exercises. This means personalization ensures that each learner gets an experience that is unique and targeted to ensure that learners are maximally engaged and can retain knowledge learned. AI adaptive learning platforms represent the next generation in training delivery. The systems constantly assess learners' abilities and change the content and difficulty levels in response to their progression. Such adaptability therefore caters to every learner's style, and ensures that each learner is always challenged just enough to improve continuously. Introduced into the fray were elements of fun and competition along with gamification beyond the traditional method of training, AI-driven gamification raises the bar in preparation. The AI algorithms measure performance in all the modules and dynamically adjust the difficulty levels for an optimal level of challenge to engagement. In addition, AI delivers one to receive immersive learning through simulation, for instance, virtual reality (VR) or augmented reality (AR) but live on a simulation, hands-on but in a risk-free environment. Content curation also involves the ability of AI to help the training and development professional weed through endless amounts of data to find important and relevant resources that can be used in learning. With application of natural language processing and machine learning capabilities, AI-based platforms can curate content tailored towards specific learning objectives, thereby helping professionals save precious time and get relevant information to learners.

II. NEED OF THE STUDY

Training programs can even allow learners to have on-the-go support and guidance by being able to integrate artificial intelligence through chatbots. It might be used to help answer questions, clarify course content, provide instant feedback and more. These reduce the workload of training professionals because improving automated support functions improves learning at large and the complex parts of program design and delivery are assisted by it. AI is also helpful in continuous learning models, avoiding the model based on traditional batches of training. The very nature of microlearning tends to be content broken into small, digestible modules, better suited for applications with AI, which subsequently leads to the application of AI in recommending personalized microlearning modules based on the learner's individual needs, thus realizing skill development on an ongoing basis without tremendous overwhelming long sessions. AI signaled a significant deal of transformation as professionals approach learning initiatives. With personalized learning paths, adaptive platforms, intelligent content curation, gamification, predictive analytics, and chatbots and models of continuous learning, the training professional is better positioned to produce more effective, engaging, and focused learning experiences. As AI forms an important part of the trajectory of improvements for training and development, the future of workplace learning will start taking a more dynamic shape. Professionals who embrace the power of AI will not only be enhancing the skills and competencies of their staff but will also be setting the trend for others in this revolution. Training and development professionals use predictive analytics as a visioning tool to look forward and discover potential gaps in the skill levels within

an organization. Predictive algorithms analyze employees' performance data, view trends, and predict shortages of skills on the horizon. When professionals become aware of the trends, then they can get specific training to equip employees with the skills needed for current as well as future challenges.

III. STATEMENT OF THE PROBLEM

One challenge of artificial intelligence is the skills gap among developers, as well as a high learning curve in mastering such technologies. Such issues may lead to biased AI algorithms with ethical concerns or problems relating to data privacy and security. Overreliance on AI tools also affect critical and creative problem-solving skills because people rely too much on technology instead of engaging their cognitive abilities. This means that other challenges, including high integration costs of the AI system and other resources limitations, also provide a lot of struggles for many organizations to implement these innovations.

IV. OBJECTIVE OF THE STUDY

This study aimed at to know the impact of artificial intelligence in training and development of private bank employees in Erode District.

V. REVIEW OF LITERATURE

Mahajan (2024) stated that the incorporation of artificial intelligence (AI) into training and development programs in multinational corporations (MNCs) marks a significant evolution in workplace learning. By leveraging AI-driven technologies, organizations seek to improve learning outcomes, streamline training processes, and promote innovation in employee development. This study aimed to investigate employees' perceptions, experiences, and expectations regarding AI's role in training and development within MNCs. Analyzing survey responses from a varied participant group yielded several key findings, offering valuable insights into the current state and future direction of AI-enhanced training initiatives. The survey results highlighted a broad acknowledgment of AI's importance in enhancing training and development programs in MNCs. Most respondents expressed optimism about AI's potential to improve training outcomes, with many anticipating favorable impacts in the future. This positive outlook reflects the increasing acceptance of AI as an essential tool for fostering continuous improvement and innovation in employee learning initiatives. Wang and Liu (2017) examined the influence of AI on knowledge transfer and organizational learning within multinational technology companies. Their research looks into how AI-driven training initiatives promote knowledge sharing, collaboration, and innovation among employees, ultimately enhancing organizational performance and competitive edge. The findings suggest that AI technologies are vital for fostering continuous learning and knowledge creation in MNCs, contributing to their success in a fast-changing digital environment.

VI. RESEARCH METHODOLOGY

In this study, Erode district was purposefully chosen due to its high employment rates, challenges in various banking sectors, and the changing lifestyles of bank employees. A total of 100 private bank employees from the district were selected using convenience sampling method. The research findings are grounded in a systematic approach to data collection and analysis, utilizing both primary and secondary data. Primary data was gathered through questionnaire with employees employed in various private banks in Erode District. Information collected included the current situation, job opportunities, income levels, challenges faced, and overall satisfaction on training and development.

VII. DATA ANALYSIS AND INTERPRETATION

The table below offerings the mean score reflecting the impact of artificial intelligence on the training and development of employees in private banks, along with the associated independent variables.

TABLE 1 Age and impact of artificial intelligence in training and development of private bank employees

Age	N	%	Mean	Minimum	Maximum
Below 30 years	23	23.0%	81.91	54	101
30-40 years	34	34.0%	84.21	24	115
41-50 years	22	22.0%	76.91	51	96
Above 50 years	21	21.0%	86.90	48	102
Total	100				

It is noted that the private bank employees of above 50 years had a high mean value of 86.90 on impact of artificial intelligence in training and development and the bank employees of below 30 years had a low mean value of 81.91 on impact of artificial intelligence in training and development.

TABLE 2 Gender and impact of artificial intelligence in training and development of private bank employees

Gender	N	%	Mean	Minimum	Maximum
Male	52	52.0%	80.94	48	112
Female	48	48.0%	84.48	24	115
Total	100				

It is renowned that the private bank employees of female category had a high mean value of 84.48 on impact of artificial intelligence in training and development and the bank employees of male category had a low mean value of 80.94 on impact of artificial intelligence in training and development.

TABLE 3 Educational qualification and impact of artificial intelligence in training and development of private bank employees

Educational qualification	N	%	Mean	Minimum	Maximum
Diploma	30	30.0%	81.60	24	115
UG	45	45.0%	82.00	52	102
PG	25	25.0%	85.04	48	112
Total	100				

It is well-known that the private bank employees of PG category had a high mean value of 85.04 on impact of artificial intelligence in training and development and the bank employees of Diploma category had a low mean value of 81.60 on impact of artificial intelligence in training and development.

Table 4 Location of bank and impact of artificial intelligence in training and development of private bank employees

Location	N	%	Mean	Minimum	Maximum
Urban	42	42.0%	81.86	24	115
Semi-urban	31	31.0%	87.68	48	112
Rural	27	27.0%	78.07	51	102
Total	100				

It is well-known that the private bank employees working in semi-urban banks had a high mean value of 87.68 on impact of artificial intelligence in training and development and the bank employees working in rural banks had a low mean value of 78.07 on impact of artificial intelligence in training and development.

TABLE 5 Awareness on AI and impact of artificial intelligence in training and development of private bank employees

Opinion	N	%	Mean	Minimum	Maximum
Yes	91	91.0%	82.60	24	115
No	9	9.0%	83.00	55	94
Total	100				

It is highlighted that the private bank employees not having awareness had a high mean value of 83.0 on impact of artificial intelligence in training and development and the bank employees having awareness had a low mean value of 82.60 on impact of artificial intelligence in training and development.

TABLE 6 Frequency of attending training and impact of artificial intelligence in training and development of private bank employees

Frequency	N	%	Mean	Minimum	Maximum
Initial training	42	42.0%	81.29	24	102
Occasionally	9	9.0%	81.56	59	90
Rarely	24	24.0%	83.42	51	115
Yearly once	25	25.0%	84.56	48	110
Total	100				

It is emphasized that the private bank employees attending training every year had a high mean value of 84.56 on impact of artificial intelligence in training and development and the bank employees attending initial training had a low mean value of 81.29 on impact of artificial intelligence in training and development.

VIII. SUGGESTIONS AND CONCLUSION

Artificial Intelligence (AI) and automation are rapidly transforming the banking sector, fundamentally changing job roles and the skills needed for success. As these roles evolve, the demand for skills is shifting towards those that complement AI and automation technologies. Proficiency in data analysis and interpretation is essential for effectively leveraging AI tools. Data literacy encompassing the ability to read, analyze, and utilize data for informed decision-making is a crucial skill in today's data-driven landscape. The banks should offer wealth management advice to customers based on their portfolios and other characteristics. AI is key in understanding the needs and risk tolerance of clients, through which they are provided with personalized products. It makes it easier and richer for customers to identify market trends and makes them understand what might happen to prices in the future and therefore assist potential investors in selecting suitable products to add to their portfolios. Beyond algorithm-driven portfolio management, AI systems would also be able to analyze the salary, savings, and expenditure habits of its customers to create a financial plan that meets individualistic demands. Familiarity with programming languages like Python, R, and SQL is also important for developing and managing AI systems. These skills enable employees to create, modify, and optimize algorithms, improving the functionality and efficiency of AI applications. Additionally, understanding cybersecurity principles and practices is vital for protecting sensitive financial information and systems. This includes knowledge of encryption, network security, and threat detection and response strategies to defend against cyber threats.

References

1. Doumpos, M., Zopounidis, C., Gounopoulos, D., Platanakis, E. & Zhang, W. (2023). Operational research and artificial intelligence methods in banking. *European Journal of Operational Research*, 306(1), 1-16.
2. Mahajan, A. (2024). Role of AI in training and development of employees in MNC's. *International Journal of Creative Research Thoughts*. 12(4), 1223-1254.
3. Mohammed, S.H., & Thomaskutty, M.O. (2023). Awareness and impact of artificial intelligence technology in banking: a study among bank employees in Changanacherry Municipality, Kerala, India. *International Journal of Engineering Technology and Management Sciences*, 7(4), 565-568.
4. Park, S.C. (2017). The fourth industrial revolution and implications for innovative cluster policies. *AI & Society*, 33(3), 433-445.
5. Tang, S., & Tien, H. (2020). Impact of artificial intelligence on Vietnam commercial bank operations. *International Journal of Social Science and Economics Invention*, 6(7), 296-303.
6. Wang, C., & Liu, H. (2017). Assessing the effectiveness of AI-driven training programs: A comparative study of MNCs in different industries. *Journal of Applied Psychology*, 102(5), 789-804.
7. Yahya, A., Bala, Y., & Girei, M.A., (2022). Entrepreneurship education and training: an imperative towards effective sustainable development in Nigeria economy. *International Journal of Management Studies and Social Science Research*, 4(5), 31-39.

How to cite this article?

Sureshkumar, M. S., Raghavan, A. S., & P. Mohanraj. (2024). Impact of artificial intelligence in training and development of private bank employees. *International Journal of Advance Research in Computer Science and Management Studies*, 12(10), 01–06. <https://doi.org/10.61161/ijarcsms.v12i10.1>