ijamrsd.com
ISSN: 2583-6404
Journal of Advanced Multidisciplinary Research Studies and Development
Peer Reviewed Referred Journal | Bi-monthly | Open Access

ARTIFICIAL INTELLIGENCE AND ORGANIZATIONAL DEVELOPMENT: A CONCEPTUAL REVIEW OF IT FIRMS IN PUNE

Suhas Shewale[1], Dr. Yogesh Gaikwad[2]
[1,2] MET's Institute of Management, Bhujbal Knowledge City, Nashik (Affiliated to Savitribai Phule Pune University).

Abstract
Artificial Intelligence (AI) is reshaping organizational practices, particularly within the Information Technology (IT) sector. IT firms are increasingly adopting AI to improve efficiency, decision-making, and innovation. Pune, one of India's leading IT hubs, has seen rapid integration of AI across software development, human resource management, customer service, and strategic planning. This study provides a conceptual review of national and international literature on AI's role in organizational development (OD). It synthesizes prior research to identify key dimensions, outcomes, and challenges of AI adoption. A conceptual framework is proposed to explain the relationship between AI and OD, emphasizing the need for future empirical studies in city-specific contexts such as Pune. Every Business is impacted while in the transformation phase. Similarly, AI is also proven to impact business operations. However, enhancing market leadership and sustainability while implementing AI is challenging.
Keywords: Artificial Intelligence, Organizational Development, IT firms, Pune, Organization.

► *Corresponding Author: Suhas Shewale*

1. Introduction

Every generation brings up an incredible technology. Some are already invented and running successfully, while some are yet to be developed. Artificial intelligence is one such upcoming technology discussed in several fields. Artificial Intelligence aims to implement Human Intelligence in the smart system using machines. In short, AI plans to merge computers and Human Intelligence to form a unique and smart process in every field. AI does not have any specific definition. Though several firms claim that they have implemented several programs having AI, an author of Forbes disagrees with this claim. It is because the author believes that a simple Artificial Intelligence system is learned by experience, the genuine AI helps to improve getting smart with more awareness and enhance the knowledge and capability [1].

Many industries are involving themselves in a much smarter system to compete in the developed market. As per research, it was noticed that around 83 % of companies had increased their annual budget for the implementation of Artificial Intelligence (AI). This highlights the belief that each organization keeps in AI-powered products for a better future. Artificial Intelligence benefits each field of interest in society. For instance, there is an application named Climate Basic, which helps the farmers to monitor the climate regularly, which means they can increase their yield [2].

In the coming days, we can expect AI to be used for problem- solving, scheduling, Training, etc. Business in the corporate world had already implemented Artificial Intelligence, and it has a vast impact on business intelligence. Business Intelligence apps identify trends and firms' external inputs and databases. For the last 10 years, business intelligence has been expected to grow fast

with the support of Artificial Intelligence Technology [3]. As we discussed earlier, several organizations are urging to develop artificial intelligence in their Business. However, the employees' Training and development through Artificial intelligence become an essential requirement for fast and cost saving business. Hence organizations are eager to invest their time and money to groom their capable employees with the support of Artificial Intelligence. The gap in skills related to AI must be improved to get a long-run advantage. The significance of this study lies in its potential to contribute to both academic literature and managerial practice. From a theoretical standpoint, it offers a structured conceptual model.

The rapid advancement of Artificial Intelligence (AI) has significantly altered the way organizations operate, compete, and grow in a dynamic business environment. AI refers to the ability of machines and computer systems to perform tasks that traditionally require human intelligence such as learning, reasoning, problem-solving, and decision-making. In recent years, AI technologies such as machine learning, data analytics, robotic process automation, and intelligent decision-support systems have been widely adopted by organizations to improve operational efficiency and strategic effectiveness.

Pune, recognized as one of India's prominent IT hubs, provides a highly relevant context for examining this relationship. The city hosts a diverse ecosystem of multinational corporations, domestic IT firms, and technology startups, all of which are actively adopting digital technologies to maintain competitive advantage. The availability of skilled talent, supportive infrastructure, and a dynamic business environment has accelerated the adoption of AI-driven solutions across organizations in the region. Consequently, IT firms in Pune are increasingly focusing on integrating AI into their organizational strategies, processes, and culture.

Despite the growing adoption of AI, there remains a lack of comprehensive understanding regarding how these technologies influence organizational development outcomes, particularly within the context of regional IT ecosystems like Pune. Existing studies often examine AI from a technological or operational perspective, while limited attention has been given to its broader organizational implications. This gap highlights the need for a structured conceptual analysis that integrates technological, organizational, and human factors. In response to this gap, the present study aims to develop a conceptual framework that explains the relationship between AI adoption and organizational development in IT firms located in Pune. The study synthesizes existing literature to identify key variables, including mediating factors such as digital organizational culture, employee capability development, data-driven decision-making, and process efficiency, as well as moderating factors such as leadership support and organizational readiness.

The Literature Review of this study will support the development of this conceptual study. The literature study helps to develop the significant research and acquire the aim. This study emphasizes the Significance of Training and development of AI in the corporate world.

Training is gaining essential knowledge of skills and enhancing the competency level of the employees. Training supports achieving the target and developing the capability, capacity, productivity, and performance. [4] observed that training and development goal at emerging capabilities such as human, technical, conceptual and managerial for the persistence of organization and individual growth [4]. Likewise, [5] specified that the practice of training and development is an endless one.[6] proposed that the aims of training are to provide the knowledge, skills, and aptitudes which is essential to assume prerequisite job proficiently.

Training and development in any organization are essential to increase the firm's efficiency, flexibility, and liability, reduce the work of supervision, and many more advantages are availed. Hence, Artificial intelligence is a novel technology that needs to be explained to all the employees

in the organization. After going through this, our study also aims to seal the gap identified between current Training. Thus, we can expect multiple benefits for the corporate world staff, but it should be correctly planned and implemented.

2. Literature Review

The Literature review for this study is important and studied completely for a successful result.
In their research, [7] discuss the effect of the latest automated technology that increases the demand for a skilled job. This is not a routine job with low pay. However, it is a non-routine job with good pay, which requires manual skills. [3] also stress their study and firmly notify that technology will replace the human labor tasks. However, it cannot replace a non-routine task. [8] stated that Organizations mostly capitalizes a lot on their human investment to achieve their training requirements and progress their expertise usually by organizing training programs or modules to mark their capabilities in accord with the requirements of changing world which lastly funds to gain the competitive advantage for an organization.
Moving forward, a new wave was introduced for advance and automation techniques. It is the smart and intelligent technology that increases the ease of high-skill tasks. Artificial Intelligence is the latest trend that all companies prefer to acquire for fast development. The investigators in McKinsey Global Institute found through their study that Artificial Intelligence will grow ten times faster in the society and three hundred times faster in the revolution of organization and will have three thousand times impact on the profit [8].
[9], found that numerous firms face infinite capacity challenges for applying AI in the HR function and adopting Artificial Intelligence in their work process. Firms including Tesla, IBM, Apple, Amazon, etc., all accept AI in the HR work process by overpowering all the hurdles of employees. Furthermore, many organizations are still uncertain and reluctant to accept AI globally. However, few organizations in the Business of finance, marketing, etc., are ready to adopt this technology.
The organization that is ready to accept AI for their growth in Business are now urging towards the next level of Training and development through Artificial Intelligence for all their potential employees. [10] explains Artificial Intelligence appearance. His research claims that AI first appeared after developing an electronic digital system [10].
Today, Machines that work on Artificial Intelligence are performing the high task with ease. However, Machines do have limitations like specific data sets are stored. Hence, Artificial Intelligence becomes more essential in Training and development for all the employees. This is a challenging task but can be achieved through proper understanding and learning. Learning in the corporate world is not a new task for most organizations. Many skillful employees accept the change to improvise their skills through learning programs organized by the firm. In this way, organizations are also benefited from skilled, capable, and productive employees.
[11], in his research, explains that Training and development is one activity that all the organization performs and keep goal for better outcome through the performance of the group and individual. Training and development is one part of Human Resource management. Training supports the development of the employees in their present jobs by making the employees ready for future responsibility. The value added to their skill can effectively be used to succeed in the corporate world.
[12]investigate and learn the theoretical framework with models that relate to employee development through development and training programs. They notice the impact of employee performance through the present evidence and note it in the form of a checklist. It is appropriate

to check employee performance, identify the real issues while working, and provide a relevant training program.

[13] explains the necessity of improvising technology, work culture, and the system. It has to be accepted that effective and efficient Training is an apparent outcome for the organization. Therefore, employee training and development can be emphasized for a long.

Many studies in the market explain the implementation of the latest technology in the corporate world. The application of Artificial intelligence in the proper way will work with good benefits to the organization and also the employee. Training and development of Artificial Intelligence play an essential role in a successful business in an organization. This study will attempt to understand the proper methods for implementing AI through theoretical and conceptual study.

3. Conceptual Study to Implement Artificial Intelligence in Organizational Practices in the Corporate World

1. Strategic Integration of AI

Alignment with organizational goals: AI adoption must be tied to long-term corporate strategies such as efficiency, innovation, and competitiveness.

Decision-making enhancement: AI systems provide predictive analytics, enabling leaders to make evidence-based decisions and reduce uncertainty.

Resource optimization: Automating repetitive tasks allows firms to reallocate human talent toward creative and strategic roles

Training is the essential process for implementing and developing upgraded knowledge in the market. Research explores that firm investing in Training shows the highest sales and gross profit per employee [15]. Fig.1. represents the Phillips model that helped to determine the Investment in Human resource development.

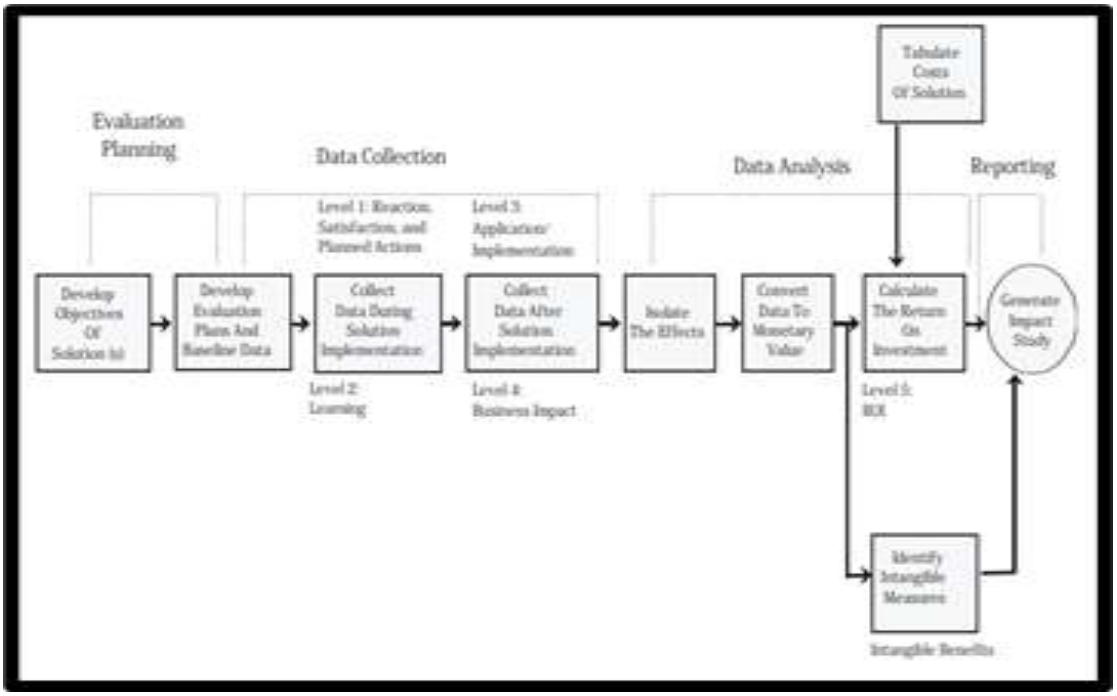


Figure 1. Phillips' Model to determine the Return to Investment in Human Resource Development (HRD) And Training (Source: Phillips ,1997).

2. Organizational Development Dimensions

Structural transformation: AI encourages flatter hierarchies by decentralizing decision-making through intelligent systems.

Cultural adaptation: Successful adoption requires fostering a culture of digital literacy, openness to innovation, and ethical responsibility.

Learning organizations: Continuous training and reskilling become central, as employees must adapt to AI-driven workflows,

3. Conceptual Frameworks for AI Adoption

Phased implementation model:

Conceptualization – identifying organizational needs and AI opportunities.

Implementation – deploying AI tools in HR, operations, customer service, and knowledge management.

Assessment – evaluating performance outcomes and ethical implications Figure 2 represents the process in which Artificial Intelligence helps to detect a learning strategy.

4. Corporate World Applications

Human Resource Management: AI-driven recruitment, performance evaluation, and employee engagement systems.

Operations & Supply Chain: Predictive analytics for demand forecasting, inventory management, and process automation.

Customer Relationship Management: Chatbots, sentiment analysis, and personalized service delivery.

Knowledge Management: AI-enabled systems for capturing, storing, and disseminating organizational knowledge.

5. Challenges & Ethical Considerations

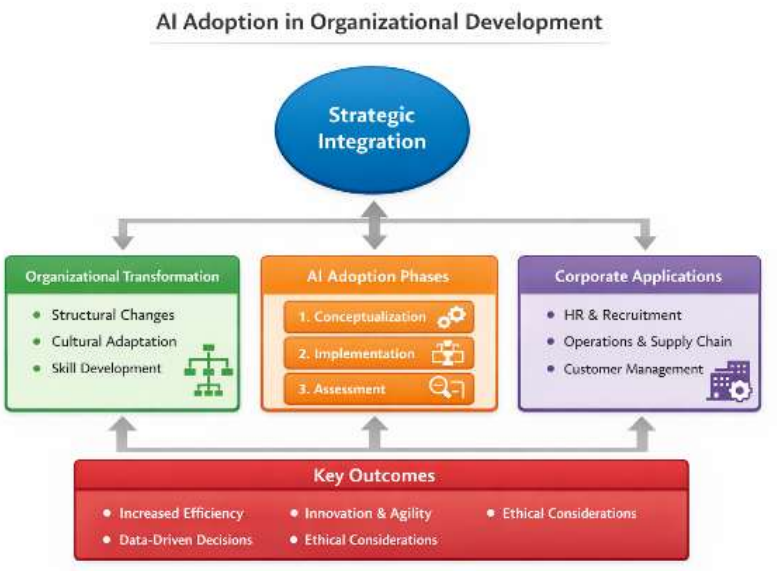
Fragmented processes: Integrating AI across diverse organizational units requires overcoming silos.

Ethical concerns: Issues of bias, transparency, and accountability must be addressed.

Change management: Resistance from employees and leadership can hinder adoption unless supported by strong communication and training.

structured conceptual diagram / framework model showing AI Adoption in Organizational Development is illustrated in Diagram.

This framework visually and conceptually ties together AI adoption, organizational transformation, and corporate applications, while highlighting strategic integration and developmental outcomes.



1. Strategic Integration (Top Layer)
AI must align with corporate vision and long-term goals.
Acts as the guiding principle for adoption across organizational practices.
2. Organizational Transformation (Left Block)
Structural Changes: Flattened hierarchies, decentralized decision-making.
Cultural Adaptation: Promoting digital literacy and openness to innovation.
Skill Development: Continuous reskilling and training programs.
3. AI Adoption Phases (Center Block)
Conceptualization: Identifying organizational needs and AI opportunities.
Implementation: Deploying AI in HR, operations, customer service, and knowledge management.
Assessment: Evaluating performance, ethics, and sustainability.
4. Corporate Applications (Right Block)
HR & Recruitment: AI-driven hiring, performance evaluation, employee engagement.
Operations & Supply Chain: Predictive analytics, automation, demand forecasting.
Customer Management: Chatbots, sentiment analysis, personalized services.
5. Key Outcomes (Bottom Layer)
Efficiency Gains: Streamlined processes and reduced redundancies.
Innovation & Agility: New business models and faster adaptability.
Data-Driven Decisions: Evidence-based strategic choices.
Ethical Considerations: Transparency, fairness, and accountability. The conceptual framework underpinning the implementation of Artificial Intelligence (AI) in organizational development within IT firms is predicated on the strategic alignment of technological capabilities with corporate objectives.
AI is increasingly recognized not merely as a tool for automation but as a transformative agent that reconfigures organizational structures, cultures, and competencies. At its core, strategic integration ensures that AI initiatives are embedded within the broader vision of the organization, thereby facilitating goal-oriented deployment across functional domains. he framework delineates a phased approach to AI adoption comprising three stages: conceptualization, implementation, and assessment. In the conceptualization phase, firms identify operational challenges and map AI

capabilities to address them. The implementation phase involves deploying AI solutions across key departments such as human resources, operations, and customer service. The assessment phase focuses on evaluating performance outcomes, ethical compliance, and organizational impact.
This phased adoption is supported by organizational transformation mechanisms, including structural changes that promote decentralized decision-making, cultural adaptation that fosters digital fluency and innovation, and continuous skill development to align human capital with evolving technological demands. Furthermore, the framework highlights corporate applications of AI in areas such as recruitment analytics, predictive supply chain management, and personalized customer engagement. These applications contribute to enhanced operational efficiency, improved agility, and data-driven decision-making. Importantly, the framework also integrates ethical considerations, emphasizing transparency, fairness, and accountability in AI deployment. Collectively, this conceptual model offers a structured lens through which IT firms—particularly those operating in dynamic urban ecosystems like
Pune—can navigate the complexities of AI-driven organizational development while fostering sustainable growth and innovation.

4. Methodology

This study adopts a conceptual review methodology to examine the relationship between Artificial Intelligence (AI) adoption and Organizational Development (OD) within IT firms located in Pune. Rather than relying on primary data collection, the research is grounded in a systematic synthesis of existing academic literature, enabling the development of a theoretically informed conceptual framework.

Research Design

The research follows a qualitative, exploratory design, appropriate for conceptual and theory-building studies. The objective is to integrate diverse perspectives from prior research and establish a structured understanding of how AI-driven technologies influence organizational development outcomes. This approach facilitates the identification of key constructs, relationships, and research gaps within the domain.

Data Sources and Selection Criteria

The study is based on secondary data collected from peer-reviewed journal articles, conference proceedings, books, and reputable academic databases such as Scopus, Web of Science, Google Scholar, and ScienceDirect. The selection of literature was guided by the following inclusion criteria:

Methodology

Publications focusing on Artificial Intelligence, digital transformation, or analytics
Studies examining organizational development, performance, or change management

Literature Review Approach

A systematic and thematic literature review approach was employed to analyze the selected studies. The process involved:Identification of relevant keywords such as “Artificial Intelligence,” “Organizational Development,” “Digital Transformation,” and “IT Firms”
Screening of abstracts and full texts to ensure relevance

Identification of relevant keywords such as "Artificial Intelligence," "Organizational Development," "Digital Transformation," and "IT Firms"
Screening of abstracts and full texts to ensure relevance
Categorization of literature based on recurring themes
Synthesis of findings to identify patterns, relationships, and theoretical insights
Analytical Approach
The study employs a theoretical and interpretive analysis to examine the relationships among identified variables. By comparing and integrating findings from multiple studies, the research provides a comprehensive understanding of how AI influences organizational processes and outcomes. The analysis also highlights inconsistencies and gaps in the existing literature, thereby offering directions for future empirical research.

5. Research Gap

A critical analysis of existing literature reveals that most studies focus primarily on technological aspects of AI adoption with limited emphasis on organizational development outcomes. City-specific studies focusing on IT firms located in Pune are scarce. Furthermore, integrated conceptual frameworks linking AI adoption, organizational development, and change management are limited.

6. Conclusion

A critical analysis of existing literature reveals that most studies focus primarily on technological aspects of AI adoption with limited emphasis on organizational development outcomes. City-specific studies focusing on IT firms located in Pune are scarce. Furthermore, integrated conceptual frameworks linking AI adoption, organizational development, and change management are limited.

Conflicts of Interest

The authors declare no conflicts of interest.

References

1. Adams. R. L, "10 powerful examples of artificial intelligence in use today", Forbes, 2017.
2. Live Tiles, "15 pros and cons of artificial intelligence in the classroom", Live Tiles, 2017.
3. Autor. D., F. Levy and R. J. Murnane, "The Skill Content of Recent Technological Change: An Empirical Exploration", Quarterly Journal of Economics, vol.118, no.4, pp. 1279–333, 2003.
4. Oribabor. P.E, "Human Resources Management, - A Strategic Approval", Human Resources Management, vol. 9, no.4, pp. 21 – 24, 2000.
5. Isyaku. I.A, "Training and retraining of Teachers through Distance Education", Paper presented at the National Workshop on Distance Education Held at Abuja Nigeria, pp. 27-29, 2000.
6. Pitfield. R. C, "Effective Human Resource Development",
California: Jossey Bass Inc.P Publishers, 1982.
7. Goos. M. and A. Manning, "Lousy and Lovely Jobs: The Rising Polarization of Work in Britain", The Review of Economics and Statistics, vol.89, no.1, pp.118–33, 2007
8. Dobbs. R., J. Manyika. and J. Woetzel, "The Four Global Forces Breaking all the Trends", London, San Francisco, Shanghai: McKinsey Global Institute, 2015.

9. Aspan.H, "Individual characteristics and job characteristics on work effectiveness in the state-owned company: the moderating effect of emotional intelligence", International Journal of Innovation Creativity and Change (IJICC), vol.13, no.6, pp.761– 774, 2020.
10. William Vorhies, "Artificial general intelligence - The Holy Grail of AI", DataScienceCentral.com, 2016
11. Valle. R; Martın. F; Romero PM; Dolan.S, "Business strategy, work processes and human resource training: are they congruent", Journal of Organizational Behavior, vol.21, pp. 283-297, 2014.
12. Dr. Amir Elnaga & Amen Imran, "The Effect of Training on Employee Performance.", European Journal of Business and Management, vol.5, no.4, 2013
13. Olaniyan. D. A. and Ojo B. Lucas. 2008, "Staff Training and Development: A Vital Tool for Organizational Effectiveness", European Journal of Scientific Research, ISSN 1450-216X, vol. 24, no. 03, pp.326-331, 2018.
14. Blanchard. P, Nick and Tracker, James. W, "Effective Training Systems – Strategic and Practices", 2nd Ed., Prentice Hall of India Pvt Ltd., New Delhi, p.4, 2006.
15. Uday Pareek and Venkateswara Rao, "Designing and Managing Human Resource System", Oxford and IBM Publishing Company Pvt Ltd., New Delhi, p.207, 1999.
16. Phillips. J. J. (Ed.), "Measuring return on investment", Alexandria, VA, vol. 2, 1997.
17. Wilson David; Fosway Group, "American Society for Training and Development - Path to learning personalization", Employee Training and Development, McGraw Hill, New York, 2019.
18. Cain. C; Haque. S, "Organizational Workflow and Its Impact on Work Quality", In: Hughes RG, editor, Patient Safety and Quality: An Evidence-Based Handbook for Nurses. Rockville (MD): Agency for Healthcare Research and Quality (US), Chapter 31, 2008.
19. Vidhi Jain, "An Impact of Artificial Intelligence on business", International Journal of Research and Analytical Reviews, vol.6, no. 2, 2019.
20. [20] Philip Boucher, "European Parliamentary Research Service",
Author: Scientific Foresight Unit (STOA), PE, pp. 641.547, 2020.
21. Palani Velu, Vasanthi B, "Role of Artificial Intelligence in Business Transformation", International Journal of Advanced Science and Technology, vol.29, no.4, pp.392-400, 2020.
22. Strohmeier. S; Piazza. F, "Artificial Intelligence Techniques in Human Resource Management - A Conceptual Exploration in C Kahraman, Ç Onar", Intelligent Techniques in Engineering Management, pp. 149-172, 2015.
23. Buczko. I; Dyachenko. Y; Nemashkalo. O, "Evaluation of human capital as a tool for management of human resource development", Actual Problems of Economics, vol.116, pp. 117-123, 2011.
24. Dyachenko.Y, "Methodology of personnel development in the frames of economic paradigms,' Information Technologies, Management and Society, vol.3, pp. 96-107, 2010.
25. Oren Tsur, Dmitry Davidiv, and Ari Rappoport, "Icwsm – a great catchy name: Semi-supervised recognition of sarcastic sentences in product reviews", International AAAI Conference on Weblogs and social media, 2010.
26. Pasquale. F, "The Black Box Society, the Secret Algorithms That Control Money and Information", Cambridge, MA: Harvard University Press, 2015.
27. Neven Louis, "By any Means? Questioning the Link Between Geron technological Innovation and Older People's Wish to Live at Home", Technological Forecasting and Social Change, vol.93, pp.32–43, 2015.