



REVIEW STUDY ON ROLE OF TECHNOLOGY IN LEADERSHIP AND ORGANIZATION AT PRESENT SCENARIO

* Kiran S. Sonar

SPDM Arts, Commerce and Science College, Shirpur, Dist. Dhule

Abstract:

This research paper explores the evolving role of technology in leadership and organizational dynamics in the current business environment. With the rapid advancement of technology, leaders are faced with new challenges and opportunities that require a deep understanding of how to leverage digital tools for organizational success. The paper reviews relevant literature, analyzes case studies, and presents empirical evidence to examine the multifaceted impact of technology on leadership styles, organizational structures, and overall effectiveness.

Keywords: Technology, Organization, Leadership.

Copyright © 2023 The Author(s): This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CC BY-NC 4.0) which permits unrestricted use, distribution, and reproduction in any medium for non-commercial use provided the original author and source are credited.

Introduction:

This paper explores the evolving relationship between technology, leadership and organization in the modern age. There are many types of technology, e.g. industrial technology, communication technology, machine technology, healthcare technology, electronic technology and manufacturing or production technology. These are the 6 types of technology in today's world. We can use this technology in management and business organization. Technological advancement is in full swing, so leaders and organizations are faced with various opportunities and challenges to gain a comprehensive understanding of the business environment.

The business organization is an institution that is established for both commercial and social purposes. Business organization is the backbone of any economic development. There are essentially two types of businesses: for-profit businesses and not-for-profit businesses. These organizations come in various forms,

such as sole proprietorships, partnerships and limited liability companies. All of these organizations need to grow and become a profitable business in order to survive the fierce competition. To achieve this goal, businesses need to do something about technology, e.g. proper communication, expanding production by using new modern machines, decision making, technology-based training for employees, improving sales through e-commerce, etc.

Leader is both a guide and an influencer; leadership is a process of influencing workers, subordinates, senior leaders and management. A leader has the ability to influence them and get work from them to achieve organizational goals. Without the ability to influence, it is impossible to become a leader. Leadership is about connecting people beyond the formal level and creating a relationship that motivates them rather than forcing them to do something. Leadership means giving responsibility to a specific person in charge and giving them the authority to do the job at hand. Leadership is

a very important function in companies. With the help of technological applications in leadership, leaders use data analytics to make decisions, identify trends and estimate future outcomes.

Objectives:

- To overview the technology in Leadership and Organization.
- To examine the role of technology is shaping the leadership styles.
- To study the impact of technology on organizational structure.

Literature Review:

N. Suresh Kumar & Dr, (MS) Shikha Kapoor (2020), “Impact of technology on different leadership styles to support distance working: A study of india’s service sector with reference to delhi/ NCR area.”

Researcher here tried to mention that the study explores the impact of technology on leadership style in the context of remote working, especially in the Indian service sector post the global pandemic. The findings of the study conducted in Delhi & NCR with 328 respondents show that technology is impacting various leadership styles by facilitating clear communication, skills management, active participation and managing work behavior. In addition, technology significantly enables remote working by supporting communication and mobility, determining the suitability of technology for the task at hand and fostering a sense of belonging. The study suggests leveraging practices such as cloud-based internal communication portals and reward systems to reap the benefits of technology for business continuity in the evolving organizational landscape. The Indian service sector faces the challenge of improving service delivery at minimum cost, especially in the wake of a widespread shift to telecommuting. Companies that require efficient management of their workforce are using technology to perfect their management style suitable for remote working. With

the need for a skilled and cost-effective workforce, the Indian services sector is increasingly turning to technology to optimize leadership and facilitate remote working. This study, based on a survey of 328 respondents, explores the impact of technology on different leadership styles related to remote working in the Indian service sector. The analysis shows that technology plays a critical role in supporting different leadership styles by enhancing communication, skills management, participation, task performance, goal achievement and work behavior management. In addition, technology contributes to remote work by facilitating communication, mobility, matching technology to tasks, fostering a sense of belonging, collaboration and setting clear performance expectations. The predominant leadership style in the service sector is the transformational style.

Lonnie Morris (January 2027), “The Impact of Emerging technology on leadership Development.”

The researcher has tried to mention here that the development of new technologies has an impact on leadership development and its effects. Organizational leaders need to focus on learner-centered and leader-centered approaches. If an organization meets the leadership development requirements, it should not focus on a single learning program, but the organization's sneakers should review the organization and continuously monitor the desired outcomes and provide a complementary technology. Simulations and games, social media, and blogging focus on these three elements to support the organization's goals.

Kathleen M. Wilburn and H. Ralph Wilburn (2019), “The impact of technology on business and Society.”

The author explains here the impact of technology on business organization. Companies use technology to shorten the time from product idea to product manufacture and the product's journey, i.e. from production to delivery to the customer, so that only a minimum of labor is required and all the work can be



done by robots. Robots can replace humans and automation can increase production, which also has an impact on costs. Technology also opens the door to freelance work for people in remote areas, which is a new organizational model. Some types of work can be done by freelancers, which is not only cost-effective, but also means that professionals in the field can get the work done quickly to be the first to benefit from the market. The author goes on to explain that the use of automation technology presents both opportunities and threats for businesses. To find out where technology can be most usefully deployed to boost performance, executives create a heat map of where automation technology is most beneficial.

Although technology is most important for the economy, its impact on society cannot be ignored. For example, full automation also has an impact on jobs. In view of this, the author says that the balance between human capital and technology is the most important prerequisite for the success of a company.

Wayne F Cascio & Ramiro Montealegre March 2016, “How technology is changing work and organizations.”

In this research article, the author attempts to explain that scholars in the field of organizational psychology and behavior are actively studying the impact of technology on work and employment. This article provides an overview of current research in this area, addressing several important aspects. First, it traces the evolution of technology, then examines the disruptive effects of new information and communication technologies and discusses the potential for worker displacement. The article examines how technology is shaping work systems and organizations, citing examples such as electronic surveillance systems, robots, teleconferencing and portable computers. Different perspectives on the role of technology in management are examined, illustrating the diversity of views on its development. The concluding section of

the article considers the impact of technology on human resource management and suggests research questions to guide future studies in this dynamic and evolving area.

Research Methodology:

This paper is based on secondary data obtained from various sources such as books, journals, online articles and research using the internet.

Role of Technology in Leadership and Organization:

1) Operational Efficiency:

- a) **Automation:** Automation in business involves the application of technology to streamline and optimize various processes, reducing the need for manual intervention. It spans functions such as data entry, customer service, marketing, finance, human resources, and supply chain management. By leveraging automated tools and systems, businesses can enhance efficiency, accuracy, and overall operational performance.
- b) **Streamlined Processes:** Advanced software and systems help organizations streamline their business processes, minimizing delays and errors.

2) Communication and Collaboration:

- a) **Global Connectivity:** Technology facilitates instant communication and collaboration across geographically dispersed teams, improving coordination and teamwork.
- b) **Remote Work:** Organizations can implement remote work policies, allowing employees to work from anywhere with the help of communication and collaboration tools. Technology enables leaders to manage and lead teams remotely. Video conferencing, collaboration platforms, and instant messaging tools facilitate communication, ensuring that

leaders can stay connected with team members regardless of their physical location.

- c) **Real-time Updates:** Leaders can use technology to receive real-time updates on projects, key performance indicators (KPIs), and other critical information, allowing for timely decision-making.
- 3) **Data Management and Analysis:**
 - a) **Data Storage and Accessibility:** Cloud computing provides efficient and scalable storage solutions, allowing organizations to store and access vast amounts of data.
 - b) **Data Analytics:** Organizations can leverage data analytics tools to gain insights into customer behavior, market trends, and operational performance, informing strategic decision-making.
 - c) **Market Research:** Technology aids leaders in conducting market research, monitoring industry trends, and staying informed about changes that may impact their organizations.
 - 4) **Customer Engagement:**
 - a) **Digital Marketing:** Organizations use technology to reach and engage customers through digital channels, including social media, email, and online advertising.
 - b) **E-commerce:** Technology enables organizations to conduct business online, providing customers with convenient and personalized shopping experiences. Ex. Amazon
 - 5) **Innovation and Productivity:**
 - a) **Research and Development:** Technology supports innovation by providing tools for research, development, and the creation of new products and services.
 - b) **Collaborative Platforms:** Organizations use collaborative platforms and project management tools to foster innovation and improve productivity.
 - 6) **Supply Chain Management:**
 - a) **Inventory Control:** Technology assists in real-time monitoring of inventory levels, optimizing supply chain efficiency and reducing costs.
 - b) **Logistics Optimization:** Advanced technologies, such as GPS and RFID, enhance logistics management, improving the tracking and transportation of goods.
 - 7) **Security and Risk Management:**
 - a) **Cybersecurity:** Organizations are investing in cybersecurity measures to protect sensitive data, customer information and intellectual property from cyber threats. Executives need to be vigilant about cybersecurity and ensure sensitive data is protected. Technology provides tools for cybersecurity measures, including firewalls, encryption and threat detection systems.
 - b) **Risk Assessment:** Technology helps identify and mitigate business risks through risk management tools and predictive analytics. Executives can use technology to assess and mitigate the various risks the organization faces - from cybersecurity threats to market fluctuations.
 - 8) **Employee Training and Development:**
 - a) **Learning Management Systems:** Organizations use technology to provide online training and development programs, fostering continuous learning and skill enhancement and Leaders can utilize technology to provide training and development opportunities for employees through online courses, webinars, and other digital learning resources.

- b) **Performance Monitoring:** Technology allows organizations to monitor employee performance and provide constructive feedback through performance management systems.
- c) **Employee Feedback:** Technology enables leaders to collect feedback from employees through surveys, forums, and other platforms, fostering a culture of continuous improvement.

9) **Strategic Decision-Making:**

- a) **Business Intelligence:** Organizations leverage BI tools to analyze data and make informed strategic decisions based on market trends, customer insights, and internal performance metrics. Technology provides leaders with access to sophisticated analytics tools and data-driven insights. This helps in making informed decisions based on accurate and up-to-date information.
- b) **Predictive Analytics:** Organizations and Leaders can use technology to analyze trends and predict future scenarios, allowing them to proactively address challenges and capitalize on opportunities.

10) **Cost Reduction and Resource Optimization:**

- a) **Cloud Computing:** Organizations can reduce infrastructure costs by leveraging cloud services, paying only for the resources they use.
- b) **Energy Efficiency:** Technology can contribute to resource optimization by implementing energy-efficient systems and processes.

11) **Compliance and Reporting:**

- a) **Regulatory Compliance:** Technology helps organizations stay compliant with regulations by automating compliance processes and ensuring accurate reporting.

- b) **Transparency:** Technology enables organizations to maintain transparency in their operations, fostering trust among stakeholders.

12) **Change Management:**

- a) **Communication Platforms:** During times of organizational change, leaders can use technology to communicate transparently with employees. Webinars, town hall meetings, and other virtual platforms facilitate effective change management.
- b) **Project Management Tools:** Leaders can employ project management software to plan, monitor, and track progress during change initiatives.

Conclusion:

In conclusion, technology plays a critical role in shaping leadership practices and organizational dynamics. Its influence extends to communication, decision-making, innovation and overall business operations. Leaders must use technology strategically to increase efficiency, foster collaboration and manage the complexity of the modern business world. The effective integration of technology contributes to organizational resilience, adaptability and sustainable success in an ever-evolving digital era. The role of technology in leadership and organizations is transformative and essential to remain competitive in today's business environment. Technology enables improved communication, data-driven decision making and flexible, adaptable organizational structures. Leaders are using technology to drive employee engagement, drive innovation and adopt customer-centric approaches. Ethical leadership in the use of technology, continuous learning and global connectivity are important aspects of effective leadership. Overall, technology plays a critical role in shaping the practices, strategies and success of modern leaders and organizations.

References:

Donald J. Klingborg (February 2006). What is Leadership.

Lonnie Morris (January 2017). The impact of emerging technology on leadership development.

John P. Kotter. Leadership: what is it?

Britannica updated in oct. 2020 by Pat Bauer. Business organization

Tableau's article. The Role of Business Intelligence (BI) In IT

Wayne F Cascio & Ramiro Montealegre March 2016, "How technology is changing work and organizations."

Kathleen M. Wilburn and H. Ralph Wilburn (2019), "The impact of technology on business and Society."

N. Suresh Kumar & Dr, (MS) Shikha Kapoor (2020), "Impact of technology on different leadership styles to support distance working: A study of india's service sector with reference to delhi/ NCR area."

Lonnie Morris (January 2027), "The Impact of Emerging technology on leadership Development."

<https://theyouandme.com/blog/top-5-reasons-why-technology-is-important-in-business>

<https://reciprocity.com/resources/what-is-compliance-reporting/>

Cite This Article:

Sonar K.S. (2023). REVIEW STUDY ON ROLE OF TECHNOLOGY IN LEADERSHIP AND ORGANIZATION AT PRESENT SCENARIO. In Aarhat Multidisciplinary International Education Research Journal: Vol. XII (Number VI, pp. 142–147). AMIERJ. <https://doi.org/10.5281/zenodo.10517942>