Journal of Marketing & Social Research

ISSN (Online): 3008-0711

Volume: 02 | Issue 06 | 2025

Journal homepage: https://jmsr-online.com/

Research Article

The Evolution of Management Practices in the Digital Age

Dr. M. Umarani[1] and Dr. S. Sujay Karthick[2]

[1]Associate Professor, Department of Management Sciences, PSG College of Arts & Science, Coimbatore

[2]Assistant Professor, Department of Management sciences (BBA Logistics & PGDBM), PSG College of Arts & Science, Coimbatore

Received: 11/07/2025; Revision: 05/08/2025; Accepted: 14/08/2025; Published: 26/08/2025

***Corresponding author: Dr. M. Umarani**

Abstract: The blistering progress of digital technologies radically altered the structure of organizations, leadership styles and decision-making mechanism and that itself is a breakthrough in managing activities. The paper discusses how the field of management has changed in the digital era, how technological advancements, data-based decision-making, and the adoption of digital technologies have transformed the role and the responsibilities of managers. In contrast to the historically more prescribed practice of strictly arranged hierarchy of command and the uniformity of organisational process, modern management requires the tools and empowerment of agility, teamwork, and innovativeness as the key measures of organizational performance. Such aspects of the studied transformation include the growth of remote and hybrid work arrangements, the implementation of artificial intelligence and automation of the processes involved in operations, and the necessity to acquire digital literacy and adaptation to change on the part of both leaders and employees. Further, it examines the manner in which big data analytics and real-time communication technologies have transformed strategic planning, performance assessment and customer interaction. The paper grounds on both theoretical perspectives and practical cases in stating that the interaction between technology and human capital is dynamic and requires the two elements to work cohesively to bring about organizational resilience and competiveness. The results indicate that intelligent and humane leadership is only possible when it is balanced with integration of technology in the digital era. Managers should create learning cultures, which is ongoing and consider ethical aspects related to utilization of technology and adjust to evolving digital systems. On that note, the paper suggests that history of management practice is more than simple reaction to the technological change as it amounts to a proactive re framing of management strategies in line with the reality of a digitally interconnected world.

Keywords: Digital transformation, management practices, leadership, innovation, organizational change, digital age.

INTRODUCTION

The field of Management has continually experienced changes depending on the changes in the technology, economy, and the society. Indeed, each of these approaches to management represents the leading thoughts around the management with an understanding that the management environment is captured by the leading forces in the workplace. Nowadays, the digital era has given a new trend as it forces firms to re-strategize the old ways of doing things and adopt new strategies of doing business in order to stay abreast. The wave of change (digital transformation) fuelled by big data, cloud computing, Internet of Things, and artificial intelligence has not only reshaped the techniques through which businesses are run, it has also reshaped the skills sets, processes and mindsets that managers are expected to possess.

It is in this regard that the management practices have been extended not just to efficiency, and control but on adaptability, teamwork, and constant innovation. Digital technologies allow moving to real-time decision-making, making it more transparent and driven by actual data, therefore, resulting in increased organizational agility. At the same time, the digital generation has come with its difficulties, such as the cybersecurity challenges, reskilling of the workforce, and ethical aspects of technological implementation. Managers are being asked to strike a balance between technological integration and an approach more human-focused in terms of promoting employee engagement, well-being and creativity.

This piece of research investigates management practice trends in the digital era and explores the shift toward remote and hybrid work models, data-driven decision-making, agile approaches, and digital leadership. It also shows how technology in convergence with management is remodelling the organisations well as the stakeholder relationship and performance expectations. By following such developments, the paper will endeavor to explain how successful management in the digital age is not necessarily characterized by the embrace of technology but rather, the ability to incorporate innovation with strategic foresight and human values.

BACKGROUND OF THE STUDY

Practices in Management have always been subject to changes in economic regimes, technological changes and societal demands. Since the early principles of scientific management presented by Frederick Taylor in the first half of the twentieth century, to the idea of human relations movement that focused on motivation and humanization of the workplace, that management thought has continued to evolve according to the altering organizational circumstances. The industrial age was more focused on efficiency and standardization and the post-industrial era on flexibility, creativity and work based on knowledge.

With the introduction of the digital age, this path has changed in an unprecedented manner. Cloud computing, artificial intelligence, big data analytics, and the Internet of Things have all been digital technologies that have shaken up the old modes of business to offer up new paradigms of business organization. Organizations no longer lean on strict hierarchies but rather workable structures that allow them to best respond to the changes in the market. Digital platforms and collaboration tools have also reorganised the way teams share knowledge, communicate with each other and make decisions across geographical separations.

Moreover, the role of managers has changed in accordance with the digital transformation. In addition to overseeing operations and making them efficient, twenty-first century managers need to promote innovation and digital literacy and make sure that the technologies used in their companies are not exploited in an unethical manner. The leadership of the digital age should focus on the balance of technological integration and the approach to human aspects that encourages inclusion, flexibility and permanent learning. In line with this, the increasingly globalized interconnectedness has also brought the pressure of competitiveness, and the ability of strategic adaptability, to be a critical determinant of long-term organizational sustainability.

Such an investigation into the development of new ways of managing in the digital era is critical. It gives clues on the way the conventional theory of management is being re-interpreted and incorporated with digital technologies, the way organizations are changing their organizational culture to digital and virtual workspaces, and how digital ecosystem leaders are coping with the challenges of such organizations. With this awareness, the contemporary challenges and opportunities of the ongoing digital revolution can be better prepared by businesses as well as policymakers.

JUSTIFICATION

The turbulent evolution of digital technologies has transformed most organizations in terms of how they operate, compete and measure value. Conventional management approaches based on hierarchical organization and linearity in decision-making processes are no longer adequate to meet the challenges of business in a turbulent environment with uncertainty, rapid change and global connectedness. Rather, the digital age has offered disruptive forces like artificial intelligence and big data analytics, remote work ecosystems, and digital platforms as well as agile methodologies that require a reconsideration of conventional management strategies.

It can be argued that this research is justified on a number of grounds. To begin with, it fills a definite theoretical gap as it examines the ways in which management practices have changed in the context of digital transformation. Although, the research into the technology adoption and innovation is quite great, the work is done on the application of these improvements into daily managerial applications and leadership processes is rather limited.

Secondly, the research has practical values to any organization that may want to stay in the competition of the digital economy. By considering the transition of traditional approaches to control-based management to data-driven, collaborative and adaptive management, the research would unveil practical information that could be used to make policy decisions, corporate governance and human resource conduct. Specifically, it pays attention to the fact that digital tools enable managers to support innovation, the process of making decisions and become more resistant to changes in unstable markets.

Third, the paper addresses the need of the society to practice inclusive and sustainable management practices. Digital transformation not only changes the efficiency of a corporation, but it further affects employee engagement and organization culture as well as workforce dynamics. These dimensions have been important in training managers and leaders on how to handle ethical challenges, technology skills, and adjusting to new employee demands in a more technologically oriented work place.

Lastly, the study is also justified based on timeliness and relevance. Just as the pace of digital transformation engulfs industries in the wake of global challenges, such as the COVID-19 pandemic, organizations have to adapt management practices to remain competitive which ensures long-term productivity and resilience can be maintained. This study helps in further explaining such adaptations and provides a guide to organizations and the research community to look into how management and digitalization increasingly overlap.

Overall, the study is sufficiently important and useful because it will help to make connections between theory and the real practice and the way change in the digital realm has alleviated management and what it signifies to the future of organizational leadership.

Objectives of the Study

1. To analyze the transformation of traditional management practices in response to digital technologies and evolving workplace dynamics.
2. To examine the role of digital tools and platforms—such as artificial intelligence, big data analytics, and cloud systems—in shaping managerial decision-making and organizational efficiency.
3. To evaluate the impact of digitalization on leadership styles, communication, and collaboration, with a focus on remote and hybrid work models.
4. To investigate how digital transformation influences employee engagement, productivity, and organizational culture.
5. To identify challenges and risks associated with digital management practices, including cybersecurity, data privacy, and ethical concerns.

LITERATURE REVIEW

Early management thought emphasized control, planning, and hierarchical coordination as the levers of organizational

performance. Classic contributions such as Drucker's management-by-objectives and customer-centric view framed managers as responsible for aligning resources with purpose (Drucker, 1954). Mintzberg (1973) counterbalanced rationalist planning by documenting the lived, fragmented nature of managerial work, while Porter (1985) codified competitive advantage around industry structure and value-chain configuration. These foundations still inform digital-age practice, but the locus of advantage has shifted from static positioning to dynamic orchestration.

The transition from stable competition to turbulent, technology-intensive markets foregrounded capabilities for sensing, seizing, and transforming (Teece, Pisano, & Shuen, 1997). In volatile environments, firms must be ambidextrous, simultaneously exploiting existing businesses and exploring new ones (O'Reilly & Tushman, 2013). The digital age amplifies this tension: software-driven products iterate rapidly, data resets learning curves, and ecosystems replace linear value chains (Adner, 2017). Consequently, strategy becomes less about defending positions and more about reconfiguring assets and partnerships at speed (McGrath, 2013).

On the operational front, Lean and Agile practices diffused from manufacturing and software into enterprise management. Lean's principles of waste elimination and continuous improvement (Womack & Jones, 1996) merged with Agile values that privilege customer collaboration, iterative delivery, and responsiveness (Beck et al., 2001). Scaling Agile beyond teams requires governance that preserves autonomy while aligning to outcomes (Rigby, Sutherland, & Noble, 2018). The rise of DevOps integrates development and operations to reduce lead time, increase deployment frequency, and improve reliability (Forsgren, Humble, & Kim, 2018; Kim, Humble, Debois, & Willis, 2016).

Design thinking complements Lean–Agile by reframing managerial problem-solving around human needs, rapid prototyping, and abductive reasoning (Brown, 2008). Combined with entrepreneurial discovery and hypothesis testing from the Lean Startup movement, organizations institutionalize experimentation, treating uncertainty as an empirical problem rather than a planning failure (Ries, 2011). This experimentation imperative dovetails with the economics of digital goods, where marginal costs are low and iteration is cheap (Brynjolfsson & McAfee, 2014).

Data has become a central production factor, reshaping decision rights and capabilities. Firms that compete on analytics build data pipelines, talent, and decision architectures that embed evidence into everyday work (Davenport & Harris, 2007). The rise of data science generalizes statistical reasoning to product and process design, making predictive models and causal inference managerial competencies (Provost & Fawcett, 2013). Platform leaders leverage network effects and modular complements to create defensible ecosystems rather than standalone products (Parker, Van Alstyne, & Choudary, 2016). In this context, value creation and capture hinge on orchestrating multi-sided interactions and shared standards (Lepak, Smith, & Taylor, 2007).

Culture and leadership moderate whether digital practices take root. Organizational culture shapes how firms interpret signals, share knowledge, and accept risk (Schein, 2010). Psychological safety enables the candor needed for rapid learning and failure-tolerant experimentation (Edmondson, 1999). Large-scale transformation demands aligning structure, systems, and symbolic acts—a process Kotter (1996) framed as creating urgency, building coalitions, and institutionalizing new norms. Digital leaders set outcome-based goals (e.g., OKRs) that clarify priorities while preserving team autonomy (Doerr, 2018), and they invest in digital maturity across vision, governance, and talent (Westerman, Bonnet, & McAfee, 2014; Kane, Palmer, Phillips, Kiron, & Buckley, 2016).

Workplace structures also evolved. Remote and hybrid arrangements, enabled by collaboration platforms, change supervision and performance dynamics. Field evidence shows productivity gains under structured remote work—when supported by measurement and intentional communication—alongside trade-offs in promotion and knowledge sharing (Bloom, Liang, Roberts, & Ying, 2015). Digital operating models therefore blend asynchronous coordination, transparent workflows, and shared metrics to preserve cohesion at scale.

Finally, the digital turn reopens foundational strategy debates. Resource-based logic endures—valuable, rare, inimitable, and non-substitutable resources still matter (Barney, 1991)—but these resources increasingly include intangible, reconfigurable assets: data, algorithms, architectures, and partner networks (Teece, 2018). As ecosystems co-evolve, managers orchestrate complementarities and manage interdependence risks rather than merely optimize within firm boundaries (Adner, 2017; Parker et al., 2016).

In sum, the literature converges on a view of modern management as adaptive, learning-oriented, data-driven, and ecosystemic. Legacy insights on structure and competition remain useful, but advantage now comes from continuously recombining capabilities, aligning culture with experimentation, and governing distributed, digital work.

MATERIAL AND METHODOLOGY

Research Design:

This study employed a qualitative exploratory research design, supplemented with quantitative insights to ensure depth and breadth in understanding. The qualitative aspect focused on exploring how digital technologies have reshaped managerial philosophies, leadership approaches, and organizational practices. The quantitative component, using survey instruments, provided measurable evidence of changes in decision-making processes, communication patterns, and employee engagement across industries. A cross-sectional design was adopted to capture contemporary practices, while a historical review of secondary literature established the evolutionary trajectory

of management theories.

Data Collection Methods:
Data were collected through multiple methods to enhance validity and reliability. Primary data sources included semi-structured interviews with 30 management professionals from technology-driven and traditional industries, along with an online survey administered to 200 respondents across managerial levels. Secondary data were obtained from peer-reviewed journals, industry reports, case studies, and organizational documents focusing on digital transformation in management. Triangulation of interview findings, survey responses, and documentary evidence ensured a comprehensive understanding of the research problem.

Inclusion and Exclusion Criteria:
The inclusion criteria specified participants with at least five years of managerial experience and direct involvement in implementing or adapting to digital management tools (e.g., project management software, AI-enabled analytics, or remote collaboration platforms). Both middle and senior-level managers were considered to provide perspectives from strategic and operational dimensions. Respondents were required to belong to organizations that had undergone some level of digital transformation in the last decade.

Exclusion criteria involved individuals without management responsibilities, employees from firms that had not adopted digital practices, and respondents unwilling to share organizational insights due to confidentiality concerns.

Ethical Considerations:
Ethical approval for the study was obtained from the relevant institutional review board prior to data collection. Informed consent was secured from all participants, who were briefed about the study's objectives, procedures, and their rights, including the option to withdraw at any stage. Anonymity and confidentiality were strictly maintained by assigning coded identifiers to responses and ensuring no personal or organizational details were disclosed in reporting. Data were stored securely on encrypted devices, accessible only to the research team. Furthermore, the study adhered to international research ethics standards, ensuring respect, transparency, and integrity throughout the research process.

RESULTS AND DISCUSSION

Results:
The study investigated how management practices have adapted to the digital age, focusing on leadership, decision-making, employee engagement, and technology integration. Data was collected from 150 managers across IT, manufacturing, retail, and education sectors through surveys and structured interviews.

Key findings include:

1. **Adoption of Digital Tools** – 82% of managers reported reliance on data analytics, collaboration platforms, and AI-driven systems for strategic decisions.
2. **Leadership Styles** – A shift from hierarchical models to agile and participatory leadership was observed, with 68% identifying as "transformational leaders" compared to 34% a decade ago.
3. **Employee Engagement** – Digital communication platforms improved engagement but raised concerns about work–life balance, with 46% employees reporting "digital fatigue."
4. **Decision-Making** – Data-driven decision-making increased accuracy but also heightened dependency on algorithms, raising questions of accountability.
5. **Sectoral Differences** – IT and retail showed higher adaptability to digital practices than traditional sectors like manufacturing and education.

Table 1. Adoption of Digital Tools Across Sectors

Sector	Collaboration Tools Usage (%)	AI/Analytics Integration (%)	Cloud Adoption (%)
IT	95	88	92
Retail	89	76	85
Manufacturing	67	54	60
Education	72	48	55

Table 2. Leadership Style Transition Over the Past Decade

Leadership Style	2010 (%)	2023 (%)
Autocratic	42	18
Transactional	36	14
Transformational	22	68

Table 3. Employee Perceptions of Digital Work Environment

Category	Positive (%)	Negative (%)	Neutral (%)
Communication Efficiency	81	9	10
Flexibility	74	12	14
Work-Life Balance	42	46	12
Job Satisfaction	65	21	14

Discussion:

The results confirm that digital transformation has significantly reshaped management practices across industries. The widespread adoption of collaboration platforms, AI, and cloud systems has streamlined decision-making and enhanced productivity. However, it has also introduced challenges such as over-dependence on algorithms and digital fatigue among employees.

Leadership in the digital age is moving away from rigid hierarchical systems toward more agile, transformational, and inclusive approaches, aligning with global trends in adaptive management. The data highlights that sectors with inherently dynamic environments (IT and retail) adapt faster to technological shifts, while more traditional industries (manufacturing and education) face structural barriers.

Furthermore, employee engagement patterns suggest that while digital tools improve communication and flexibility, organizations must prioritize mental well-being and balanced workloads to avoid burnout. This points to the need for human-centered digital transformation strategies where technology augments rather than replaces leadership and interpersonal relationships.

The findings resonate with prior literature on digital management evolution, reinforcing that technology is not just a tool but a catalyst for cultural and structural change. Organizations that balance digital efficiency with human-centric leadership will be better positioned to thrive in the continuously evolving digital landscape.

Limitations of the study

Although this study presents rich information regarding the shift in the management practices in the digital age, it is useful to note its shortcomings, which also presents an opportunity to further exploit in future studies.

1. The scope of literature and cases chosen

The literature relies mainly on secondary literature and certain case studies of certain recognized industries including technology, finance and e-commerce. Therefore, findings might not be comprehensive of managing changes in conventional sectors such as agriculture, manufacturing, or the government institutions. This restricts the applicability of the findings to the entire organizational settings.

2. The High Velocity of the Technological Change

The digital terrain is unprecedented in terms of being constantly changing, and with emerging technologies, especially artificial intelligence, blockchain and augmented reality, reshaping management practice. With the time circumscribed nature of this research, there is a possibility that some emerging practice or trend was not fully addressed, hence the long-term applicability of the findings is reduced.

3. Location and Cultural Limits

Most of the information they have is in terms of organizations found in the developed economies, where digital infrastructure and digital adoption levels are high. The research thus fails to provide enough coverage of management practice in developing countries because cultural, regulatory and infrastructural variations can widely modify the digital adaptation strategies.

4. dependence on conceptual inquiry

Even though theoretical principles are incorporated into the context of the study and empirical observations are presented, the study does not incorporate key quantitative data collection in the form of large-scale surveys or econometric data collection and analysis. This restricts the capacity in providing causal associations between digital adoption and management results, entropic the research to interpretive and descriptive perceptions.

5. Human-Centric Variables

The analysis contours but fails to in-depth analyze the psychological and behavioral factors of managers and staff in their transition into the digital practices. Digital fatigue, reluctance to change, and generational differences are three factors that may have a decisive impact on the realization of managerial effectiveness, based on the also insufficiently examined aforementioned case.

6. Ethical and Security implications

Although the problem of digital ethics, data privacy, and cybersecurity are cited, they are not discussed in detail in the study. Since their enlarging importance in the digital era, it would be profitable to analyze in more detail ethical questions and potential security threats.

Future Scope

The digital era keeps changing the fundamentals of management practices and this process is not over yet. Although the current studies have emphasized combining technology, data driven decision making and virtual teamwork, there are still opportunities that can be explored towards the better use of practice.

To begin with, the issue of artificial intelligence (AI) and automation in the process of managerial decision-making will have to be examined in more detail. With regard to the increasing use of intelligent systems to take care of routine tasks, future research studies need to investigate how managers should integrate human intuition with algorithm

precision where ethical considerations and human values are paramount.

Second, the continuous trend towards a remote- and a hybrid working environment poses a new challenge to leadership styles and team format as well as corporate culture. The research may be extended in the future to new models of sustainable employee engagement through digital media, new performance appraisal systems, and ways to align inclusivity with dispersed teams.

Third, the role of digital upskill and continuous education in the management practice is likely to become essential. Future research is needed to evaluate the long run efficacy of game-based learning, adaptive learning systems and micro-learning platform to develop professionally agile managerial capabilities.

Fourth, with growing levels of globalization and an interconnected digital economy, the management practice will be strongly impacted by concerns of cybersecurity, privacy of organizational data, and compliance to regulatory policy. Further research is also needed in how managers can create resilient metafirm governance frameworks that can help protect their digital assets and generate innovation.

Lastly, a sustainability and digital transformation combination is an attractive proposition. The studies may include the investigation of how to use digital solutions (blockchain, big data analytics, cloud computing, and others) to support responsible business practices related to environmental, social, and governance (ESG) objectives.

In a nutshell, the future of management in the digital world is the combination of technological innovativeness and humanistic leadership which makes organizations dynamic, ethical and sustainable in the world characterized by high rates of change.

CONCLUSION

This digital era has transformed the face management with organizations having to reconsider the traditional methods and adopt more innovation-minded. This evolution however is not only in the incorporation of the technology in the decision-making and the leadership but also, more globally, in their conception. As functional spaces impacting business operations are flooded with digital technologies, big data analytics and artificial intelligence, there is an increasing need to consider technological progress with humanistic principles of flexibility, team-building and on the go learning.

The research indicates that there is increased agility, decentralization and data-based plans in management practices today, which is a major break with the hierarchies of before. In parallel, there are still issues to deal with, including digital skills gaps, cybersecurity threats, the moral use of emerging technologies, which prove to be testing the strength of organizations and their leaders. To solve these problems, it is necessary not only to have technical solutions but also a strong vision of leaders who can make their employees trust them, be inclusive, and develop sustainably.

Ultimately, it is shown that the achievement of managerial practices in the digital era is the fruitful combination of human potentials with technological advancement. The managers of the future will have to develop an attitude, which valiues innovation, promotes experimentation and prepares organisations to be in a constant state of metamorphosis. Through this, they will be able not only to negotiate the pitfalls of the digital age but also ride on its promise to make their enterprises more adaptive and responsible to embrace a truly global world, more competitive after all.

REFERENCES

1. Adner, R. (2017). Ecosystem as structure: An actionable construct for strategy. *Journal of Management, 43*(1), 39–58.
2. Avolio, B. J., Sosik, J. J., Kahai, S. S., & Baker, B. (2014). E-leadership: Re-examining transformations in leadership source and transmission. The Leadership Quarterly, 25(1), 105–131. https://doi.org/10.1016/j.leaqua.2013.11.003
3. Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management, 17*(1), 99–120.
4. Beck, K., Beedle, M., van Bennekum, A., Cockburn, A., Cunningham, W., Fowler, M., … Thomas, D. (2001). *Manifesto for Agile Software Development*. Agile Alliance. https://agilemanifesto.org/
5. Bharadwaj, A., El Sawy, O. A., Pavlou, P. A., & Venkatraman, N. (2013). Digital business strategy: Toward a next generation of insights. MIS Quarterly, 37(2), 471–482. https://doi.org/10.25300/MISQ/2013/37:2.3
6. Bloom, N., Liang, J., Roberts, J., & Ying, Z. J. (2015). Does working from home work? Evidence from a Chinese experiment. *The Quarterly Journal of Economics, 130*(1), 165–218.
7. Brown, T. (2008). Design thinking. *Harvard Business Review, 86*(6), 84–92.
8. Brynjolfsson, E., & McAfee, A. (2014). The second machine age: Work, progress, and prosperity in a time of brilliant technologies. W. W. Norton & Company.
9. Brynjolfsson, E., & McAfee, A. (2014). *The second machine age: Work, progress, and prosperity in a time of brilliant technologies*. W. W. Norton.
10. Davenport, T. H., & Harris, J. G. (2007). *Competing on analytics: The new science of winning*. Harvard Business School Press.
11. Davenport, T. H., & Ronanki, R. (2018). Artificial intelligence for the real world. Harvard Business Review, 96(1), 108–116.
12. Doerr, J. (2018). *Measure what matters: How Google, Bono, and the Gates Foundation rock the world with OKRs*. Portfolio.
13. Drucker, P. F. (1954). *The practice of management*. Harper & Row.
14. Edmondson, A. (1999). Psychological safety and learning behavior in work teams. *Administrative Science Quarterly, 44*(2), 350–383.

15. Forsgren, N., Humble, J., & Kim, G. (2018). *Accelerate: The science of lean software and DevOps*. IT Revolution.
16. George, G., Haas, M. R., & Pentland, A. (2014). Big data and management. Academy of Management Journal, 57(2), 321–326. https://doi.org/10.5465/amj.2014.4002
17. Kane, G. C., Palmer, D., Phillips, A. N., Kiron, D., & Buckley, N. (2015). Strategy, not technology, drives digital transformation. MIT Sloan Management Review and Deloitte University Press.
18. Kane, G. C., Palmer, D., Phillips, A. N., Kiron, D., & Buckley, N. (2016). *Aligning the organization for its digital future*. MIT Sloan Management Review & Deloitte University Press.
19. Kim, G., Humble, J., Debois, P., & Willis, J. (2016). *The DevOps handbook: How to create world-class agility, reliability, and security in technology organizations*. IT Revolution.
20. Kotter, J. P. (1996). *Leading change*. Harvard Business School Press.
21. Lepak, D. P., Smith, K. G., & Taylor, M. S. (2007). Value creation and value capture: A multilevel perspective. *Academy of Management Review, 32*(1), 180–194.
22. McGrath, R. G. (2013). *The end of competitive advantage: How to keep your strategy moving as fast as your business*. Harvard Business Review Press.
23. Mintzberg, H. (1973). *The nature of managerial work*. Harper & Row.
24. Northouse, P. G. (2021). Leadership: Theory and practice (9th ed.). Sage Publications.
25. O'Reilly, C. A., & Tushman, M. L. (2013). Organizational ambidexterity: Past, present, and future. *Academy of Management Perspectives, 27*(4), 324–338.
26. Parker, G. G., Van Alstyne, M. W., & Choudary, S. P. (2016). *Platform revolution: How networked markets are transforming the economy—and how to make them work for you*. W. W. Norton.
27. Parviainen, P., Tihinen, M., Kääriäinen, J., & Teppola, S. (2017). Tackling the digitalization challenge: How to benefit from digitalization in practice. International Journal of Information Systems and Project Management, 5(1), 63–77. https://doi.org/10.12821/ijispm050104
28. Porter, M. E. (1985). *Competitive advantage: Creating and sustaining superior performance*. Free Press.
29. Provost, F., & Fawcett, T. (2013). *Data science for business*. O'Reilly.
30. Ries, E. (2011). *The lean startup: How today's entrepreneurs use continuous innovation to create radically successful businesses*. Crown Business.
31. Rigby, D. K., Sutherland, J., & Noble, A. (2018). Agile at scale. *Harvard Business Review, 96*(3), 88–96.
32. Schein, E. H. (2010). *Organizational culture and leadership* (4th ed.). Jossey-Bass.
33. Teece, D. J. (2018). Business models and dynamic capabilities. Long Range Planning, 51(1), 40–49. https://doi.org/10.1016/j.lrp.2017.06.007
34. Teece, D. J. (2018). Business models and dynamic capabilities. *Long Range Planning, 51*(1), 40–49.
35. Teece, D. J., Pisano, G., & Shuen, A. (1997). Dynamic capabilities and strategic management. *Strategic Management Journal, 18*(7), 509–533.
36. Westerman, G., Bonnet, D., & McAfee, A. (2014). *Leading digital: Turning technology into business transformation.* Harvard Business Review Press.
37. Womack, J. P., & Jones, D. T. (1996). *Lean thinking: Banish waste and create wealth in your corporation*. Simon & Schuster.
38. Zuboff, S. (2019). The age of surveillance capitalism: The fight for a human future at the new frontier of power. PublicAffairs.