

Accelerating Digital Transformation Through Adaptability

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Abstract

The world of business is constantly evolving, and future challenges and customer demands test any organization's resilience, adaptability, innovation, and sustainability. To manage these challenges effectively, organizations must develop solutions and tools that strengthen adaptability. This adaptability can be enhanced by focusing on key internal factors, with leadership playing a critical role in communicating, inspiring, and motivating employees to adopt new digital transformation technologies. This paper explores these organizational factors and provides insights into how they can be leveraged to ensure adaptability in both local and global markets. Organizational adaptability is reflected in the shared culture of employees, emphasizing values, beliefs, and ethical principles, while leadership drives effective communication. Adopting a pragmatic research approach, this study integrates qualitative methods through in-depth interviews with organizational leaders to examine how change management strategies support digital transformation. Findings indicate accelerating trends in digital transformation technologies, with change management strategies and models offering structured, well-communicated, and managed approaches. The most critical binding element within organizations is effective communication, which unites values, leadership, and culture to support the implementation and adoption of new technologies. Finally, organizations must ensure that employees receive the necessary training and develop the skills required to adapt successfully.

Keywords

Leadership, Change Management, Communication, Culture, Digital Transformational Technologies.

1. Introduction

The business world is facing a wave of emerging technologies that hold significant potential benefits for organizations (Christensen, 2016); (McKinsey, 2017)). To enhance effectiveness and maintain competitiveness in the evolving global market, organizations must focus on the utilization and implementation of digital transformation technologies. However, adopting these technologies introduces challenges that can impact organizational culture, leadership structures, and adaptability (Jogulu & Wood, 2007). The correct selection and integration of digital technologies must align with strategic objectives to ensure meaningful outcomes. Importantly, if an organization fails to implement and adopt these technologies successfully, its future viability may be at risk ((Shivanda, 2022); (Memon, Ahmed & Rohra, 2009)).

Organizations embarking on digital transformation initiatives must employ structured methodologies to institutionalize these technologies effectively, providing the necessary tools to achieve strategic goals. A well-defined change management strategy is critical to ensuring seamless implementation and utilization. Proper alignment of change management approaches enables organizations to optimize technology adoption, ensuring employees successfully integrate digital solutions into their workflow. Selecting the right framework is essential to overcoming resistance, securing buy-in, and fostering adaptability among employees (Brown & Harvey, 2006); (Jogulu & Wood, 2007); (Molleman, Van Delft & Slomp, 2001).

A successful change management strategy should encompass cultural mindset shifts, leadership influence, and organizational restructuring to align with the requirements of digital transformation. Additionally, the rapid evolution of technology necessitates adaptability, institutionalization, and efficient implementation. Organizational adaptability is shaped by culture, leadership style, and employees' flexibility in responding to evolving technological demands ((Aakanksha, Renu & Pooja, 2013); (Waterman, Peters & Phillips, 1980)). Digital transformation technologies are setting new industry standards, offering comparability among organizations while shaping competitive factors such as time to market, innovation, and standardization across industries both locally in South Africa and globally ((Shivanda, 2022); (Mooya, 2010)).

Yet a significant challenge persists: many organizations lack effective change management strategies to support digital transformation due to employee resistance and limited management support (Sarran & Mendonca, 2019). Organizations must address several critical questions:

- Will the organizational culture support the deployment of new technologies?
- Can the organization effectively communicate these technologies, fostering universal understanding and employee buy-in (Adu Oppong & Agyin Birikorang, 2014)?
- Will future leaders be equipped to provide guidance and steer digital adoption?
- Does the organizational structure accommodate the integration of new technologies?

A key issue contributing to failure is the gap between strategy formulation and execution. Digital transformation technologies represent fundamental components of modern organizations, enabling them to achieve strategic goals and objectives. Cloud-based services, for instance, are defining industry benchmarks and streamlining resource utilization, knowledge management, AI integration, and cost management (Carlson, 2022); (Keith, 2021). These platforms address crucial needs such as real-time data analysis, storage, and customer information accessibility. This article examines the essential factors that drive organizational adaptability and explores change management strategies to successfully implement digital transformation technologies. By leveraging effective methodologies, organizations can ensure long-term sustainability and resilience in rapidly shifting business environments.

2. Recent Studies

Digital transformation technologies, artificial intelligence (AI), cloud services, customer relationship management (CRM), and augmented reality (AR) are reshaping organizations globally. Their adoption requires careful change management to mitigate risks and ensure competitiveness (Christensen, 2016); (McKinsey, 2017). The potential impact of these technologies must be managed to ensure they do not negatively affect operations, culture, products, or services. Organizations must focus on proper adoption, integration, agility, training and development, and data utilization to secure their future. While these technologies offer significant opportunities, they can also pose risks if poorly implemented. Careful management is therefore essential to mitigate potential negative effects. Together, these technologies create a future-oriented toolset that organizations can leverage to secure long-term viability.

2.1 Digital Transformation Technologies

Artificial intelligence (AI) encompasses evolving technologies that enable machines to perform human-like tasks, make decisions, and learn autonomously through machine learning (Christensen, 2016); (McKinsey, 2017). AI provides organizations with the ability to analyze vast volumes of customer data, predict outcomes, and improve customer experience. Customer relationship management (CRM) tools redefine how organizations interact with clients. By analyzing large datasets from customer interactions, CRM systems allow organizations to adapt quickly to expectations, improve flexibility, and strengthen engagement (Aakanksha, Renu & Pooja, 2013).

Cloud-based services are infrastructures, platforms, and software stacks hosted by external providers. They enhance organizational effectiveness by improving accessibility, reducing costs associated with physical servers, and enabling centralized data management (Carlson, 2022); RedHat, 2023; (Keith, 2021). Carlson (2022) emphasizes cloud technologies as key drivers of improved business outcomes and strategic goal achievement. Augmented reality (AR) is defined as an interactive system that overlays sensory information onto the real world, supporting real-time interaction and accurate 3D rendering of objects (Chaumon, 2021). Unlike virtual reality, which replaces the real world, AR enhances it, creating immersive environments that improve organizational processes and customer experiences. Advances in display hardware, device tracking, and VR applications have accelerated AR's evolution, making it a powerful tool for redefining business models and customer engagement.

2.2 Organizational Structure

Improving organizational effectiveness requires senior management and leadership to align with employees, redesign structures, and reengineer internal systems and processes. Equally important is cultivating a culture that supports digital transformation initiatives. Organizational structure provides the framework through which work deliverables are allocated and managed (Brown & Harvey, 2006). Structures such as functional, divisional, team-based, matrix, and network models each offer distinct advantages. Selecting the appropriate structure is critical to supporting digital transformation, ensuring alignment with communication strategies and change management initiatives.

2.3 Leadership

Leadership is a decisive factor in digital transformation. Jogulu and Wood (2007) highlight the importance of transitioning from transactional to transformational leadership styles. Transformational leaders foster respect, trust, empathy, and inspiration, creating environments where employees feel supported and motivated to embrace change. Choosing the right leadership style is essential to ensure that digital transformation projects are successfully implemented.

2.4 Culture

Organizational culture plays a decisive role in enabling digital transformation by shaping how employees respond to change (Brown & Harvey, 2006). When tasks, responsibilities, and feedback structures are redesigned, employees remain skilled, competent, and engaged in transformation initiatives. A strong feedback system empowers leadership to guide employees effectively, ensuring the successful adoption and implementation of new technologies. Culture thus becomes a driving force that binds values, leadership, and communication to support digital transformation.

2.5 Employees and Human Capital

Human capital is a cornerstone of successful transformation. Bradley and Coleman (2001) argue that organizations must recruit, upskill, and retain talent capable of managing high-tech environments. Memon, Mangi, and Rohra (2009) emphasize development chains that include recruitment, training, and retention to sustain human capital. Strong human capital enables organizations to implement transformational technologies and methodologies, thereby improving effectiveness, efficiency, and competitiveness.

2.6 Change Management Strategies

Change management is critical to ensuring the successful implementation of digital transformation technologies. A carefully planned methodology must address organizational culture, structures, and leadership (Brown & Harvey, 2006). This methodology defines and communicates change drivers, goals, and objectives while fostering cultural change and employee development, embedding transformation sustainably within the organization (Jogulu & Wood, 2007); (Molleman, Van Delft & Slomp, 2001).

Effective communication is the most fundamental element of a change management strategy (Adu-Oppong & Agyin-Birikorang, 2014). Communication ensures employees understand the rationale for change, reducing resistance and building engagement (Aakanksha, Renu & Pooja, 2013). Rapid technological evolution makes change management indispensable in guiding adoption (Carlson, 2022); (Christensen, 2016); (McKinsey, 2017); (Shivanda, 2022)). By addressing employee concerns and aligning leadership with organizational goals, change management strategies enable organizations to leverage human capital as a source of competitive advantage (Memon, Ahmed & Rohra, 2009).

2.6.1 Cultural Change Management Strategy

Reshapes shared values, beliefs, and norms to foster a culture that embraces innovation and digital transformation. Leaders embed new values into daily practices, reinforce them through communication, and recognize behaviors that align with transformation goals (Brown & Harvey, 2006); (Carlson, 2022); (Shivanda, 2022).

2.6.2 Developmental Change Management Strategy

Builds on existing processes and systems, enhancing them through continuous improvement rather than replacement. This approach allows gradual adaptation while achieving measurable improvements in efficiency and effectiveness (Chaumon, 2021).

2.6.3 Incremental Change Management Strategy

Introduces small, step-by-step adjustments to processes or services, reducing risk and allowing employees to adapt at a manageable pace. It enables organizations to test new approaches, gather feedback, and build confidence before scaling up (Chaumon, 2021).

2.6.4 Process Change Management Strategy

Focuses on redesigning organizational workflows and systems to optimize efficiency and align with new technologies. It involves mapping existing processes, identifying bottlenecks, and reengineering workflows to support strategic objectives ((Sarran & Mendonca, 2019).

2.6.5 Structural Change Management Strategy

Modifies hierarchies, reporting lines, and departmental arrangements to align with strategic goals and technology integration. By redefining roles and responsibilities, structural change enhances communication, accountability, and adaptability (McKinsey, 2017); (Christensen, 2016).

2.6.6 Transformational Change Management Strategy

Represents the most fundamental shift, altering business models and embedding digital technologies into core operations. It requires strong leadership, cultural adaptation, and sustained employee development, often driven by external pressures such as market disruption or global competition (Chaumon, 2021).

3. Change Models

Figure 1 illustrates the potential change management strategies that can be utilized to implement organizational change and depicts the models that can guide successful implementation (Sarran & Mendonca, 2019). The study defines and analyzes these components to provide a conceptual understanding of how strategies and models integrate to support transformation.

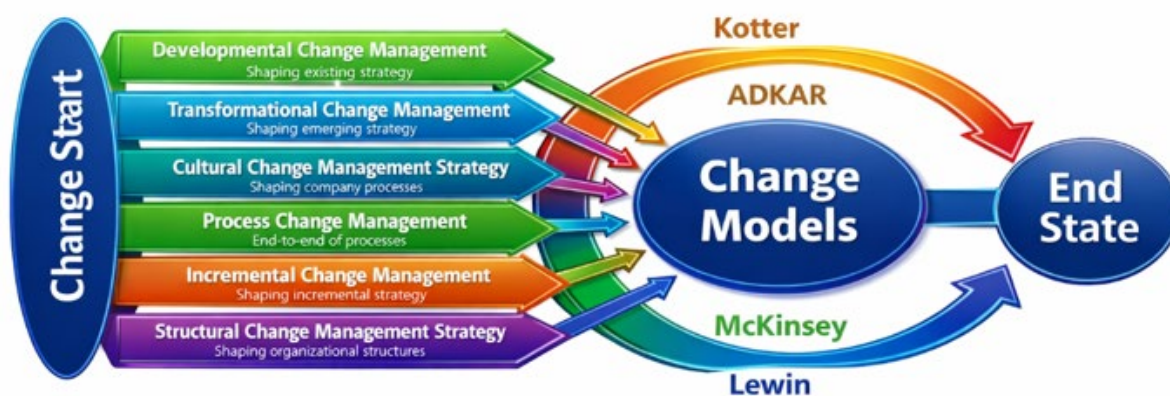


Figure 1. Author Derived - Link Between Change Management strategies and change models

Through the careful selection and application of the appropriate strategy and model, organizations can adopt new technologies effectively, improving both competitiveness and overall effectiveness. The figure highlights structured frameworks that provide direction and guidance, ensuring organizations move from their current state to a sustainable future state.

The most critical element of any change management strategy is the organization's ability to understand and define the nature of the change being implemented. Effective change management requires communication that prioritizes stakeholders and manages the transition process within the organization.

Kotter's 8-Step Model emphasizes urgency, coalition building, vision creation, and anchoring change in culture (Sarran & Mendonca, 2019).

ADKAR Model focuses on individual adoption through Awareness, Desire, Knowledge, Ability, and Reinforcement (Patel, 2015). Developed by Jeffrey Hiatt of Prosci, ADKAR clarifies why communication is essential, why executive support is required, and why training and upskilling employees are critical for successful implementation.

McKinsey 7-S Model highlights alignment across strategy, structure, systems, shared values, skills, style, and staff (McKinsey, 2017). Introduced in the early 1980s, it provides a common framework for analyzing and managing organizational change.

Lewin's 3-Step Model simplifies change into Unfreeze, Change, and Refreeze, ensuring stability after transformation (Leedy, 1997). Developed in the 1940s, it remains a foundational model for guiding organizations through change events.

Together, these strategies (vertical progression) and models (circular flow) provide both direction and structure, enabling organizations to embed digital transformation sustainably.

4. Research Design and Methodology

This paper adopts a pragmatism paradigm, emphasizing flexible and dynamic methodologies to address practical organizational challenges ((Maarouf, 2019); (Kivunja & Kuyini, 2017); (Patel, 2015)). Pragmatism allows for the strategic selection of research tools that capture the complexities of change management and digital transformation. By integrating qualitative and quantitative methods, the study ensures a comprehensive evaluation of how change management strategies facilitate digital transformation.

4.1 Ontology and Epistemology

Organizational reality is subjective, shaped by individual experiences and shared perceptions. Knowledge is constructed through a balanced exploration of qualitative insights and quantitative measurements ((Patel, 2015); (Maarouf, 2019)).

- **Mixed-Methods Approach:** Structured interviews with CEOs and senior management provide insights into leadership priorities and organizational readiness. Questionnaires distributed to employees assess experiences with change, digital adoption, and workplace adaptation (Leedy, 1997).
- **Data Collection:** Employee questionnaires (Likert-scale and closed-ended) measure readiness, literacy, and training needs. Senior management interviews explore leadership strategies, resource allocation, and barriers. Supplementary research identifies existing technologies and their impact.
- **Data Analysis:** Quantitative data are analyzed using descriptive statistics; qualitative data are thematically coded to extract leadership priorities and organizational barriers (Leedy, 1997).
- **Ethical Considerations:** Guided by beneficence, autonomy, and justice. Confidentiality and informed consent are prioritized. Data storage protocols safeguard raw data as an asset for future projects ((Maarouf, 2019)).
- **Research Objectives:** Examines whether digital transformation enhances organizational effectiveness by influencing culture, leadership, skills development, and training, while identifying barriers to adoption (Christensen, 2016); (McKinsey, 2017).

5. Findings and Implications

The findings highlight that digital transformation is not simply a matter of adopting new technologies; it requires holistic integration of organizational structures, leadership styles, culture, and human capital. Artificial intelligence, CRM systems, cloud-based services, and augmented reality all have the potential to enhance organizational effectiveness, but their impact depends on organizational readiness and adaptability (Christensen, 2016); (McKinsey, 2017)). Flexible structures and transformational leadership provide the foundation for successful integration. A supportive culture that embraces learning and feedback strengthens adoption, while investment in human capital

ensures employees possess the skills and resilience required to manage continuous technological change (Bradley & Coleman, 2001; (Memon, Ahmed & Rohra, 2009)).

Resistance to change remains a critical barrier. Employees often express fear, uncertainty, or mistrust when faced with transformation initiatives. Effective change management strategies whether cultural, developmental, incremental, process based, structural, or transformational offer pathways to address these concerns. Communication, stakeholder engagement, and incremental implementation are particularly effective in reducing resistance and fostering acceptance ((Sarran & Mendonca, 2019); Chaumon, 2021).

The implications are clear: organizations must prioritize leadership development, cultural adaptation, and human capital investment alongside technological adoption. Practical recommendations include embedding transformational leadership practices, designing flexible structures aligned with strategic goals, creating cultures of continuous learning, implementing tailored change management strategies, and investing in recruitment, training, and retention (Jogulu & Wood, 2007); (Brown & Harvey, 2006).

The following subsections expand on three critical dimensions of these findings, leadership, culture, and human capital, and it is important to note these critical dimensions shape the organization to achieve the successful implementation and adoption of digital transformation initiatives.

5.1 Leadership

Leaders and managers play a pivotal role in the successful implementation of new technologies within organizations. To achieve this, management must move beyond traditional methods of control and discipline, adopting modern approaches that inspire and motivate employees to embrace digital transformation. Jogulu and Wood (2007) identify two fundamental leadership styles that influence organizational success: transformational leadership and transactional leadership.

Transformational leadership fosters respect, trust, inspiration, empathy, and mentorship. Managers who adopt this style prioritize the development and growth of employees' skills and capabilities, creating an environment that supports innovation and adaptability. In contrast, transactional leadership reinforces hierarchy and authority, often summarized by the stance "I am the boss." Success in this model depends on establishing a power-driven environment where employees are rewarded or disciplined strictly according to performance standards defined by the manager.

Figure 2, adapted from Jogulu and Wood (2007), illustrates the conceptual framework distinguishing these two leadership styles. It highlights that transactional managers focus on compliance and performance measurement, while transformational leaders cultivate trust and empowerment to drive sustainable change.

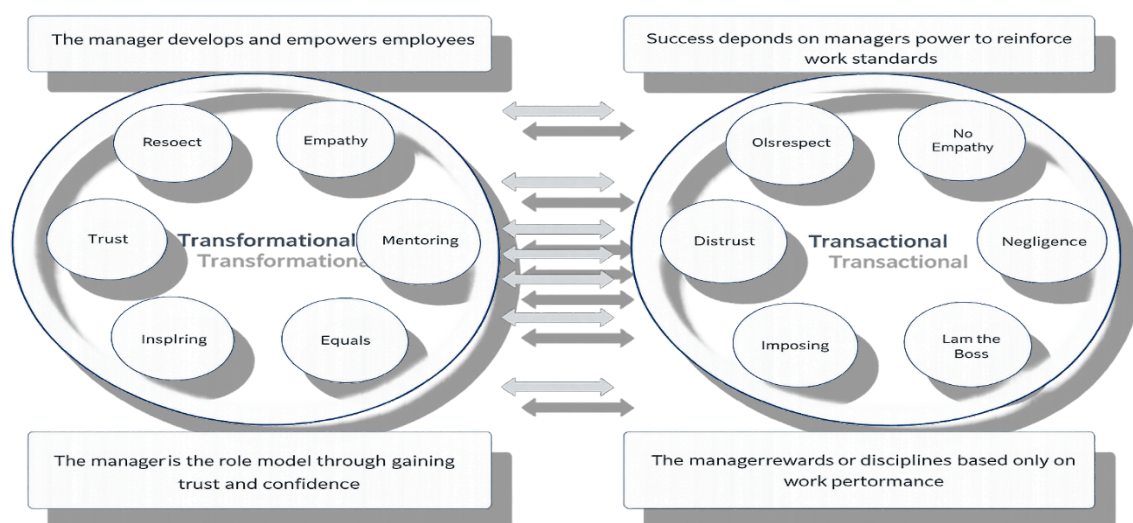


Figure 2. Adapted - Jogulu and Wood (2007) (Author Derived)

Managers must trust and encourage employees to take ownership of digital transformation technologies within the organization. Employees should be responsible and accountable for adopting these advances as part of their daily tasks and deliverables. While managers hold the authority to modify business processes to support transformation, involving employees in redesign is essential. Employees possess firsthand knowledge of operational barriers, making their input critical to successful implementation. Leaders must therefore empower employees to drive organizational effectiveness and success.

The success or failure of digital transformation depends heavily on leadership and management. To achieve success, organizations must attract, train, and retain key employees capable of executing implementation projects. Molleman, Van Delft, and Slomp (2001) identify four leadership styles that can be applied to navigate challenges associated with digital transformation:

- Directive leadership – The leader determines what needs to be done and how to support new technologies. Decisions are presented to employees who may ask questions and provide feedback. Motivation is achieved by persuading employees of the validity of managerial decisions.
- Supportive leadership – The leader is approachable and friendly, demonstrating genuine concern for employees.
- Participative leadership – The leader actively drives implementation while soliciting suggestions and ideas from employees. Decisions and feedback are communicated transparently.
- Achievement-oriented leadership – The leader sets challenging goals for employees regarding digital transformation, demonstrating confidence in achieving organizational objectives.

Selecting the appropriate leadership style is crucial to ensuring successful adoption of digital transformation technologies. Effective leadership enables organizations to meet transformation goals, enhance effectiveness, and align change events with dependencies across processes and systems (Molleman, Van Delft, & Slomp, 2001). Organizations that prioritize quality and performance excellence must employ leaders who understand, enforce, and manage digital transformation effectively. Leadership thus plays a fundamental role in institutionalizing new technologies and ensuring their long-term success.

5.2 Culture

Organizational culture consists of the shared values and beliefs established by employees. This culture can significantly enhance effectiveness, particularly in the context of digital transformation. The first step in adopting new technologies is fostering a culture that supports and embraces change. Brown and Harvey (2006) emphasize that organizations must create new tasks that facilitate adoption.

They identify five key factors that should be reviewed and redesigned to shape this culture:

- Task identification – Clearly defining responsibilities to align with organizational objectives.
- Task significance – Evaluating how new tasks impact daily activities and deliverables.
- Skills and competencies – Determining the capabilities employees need to support evolving technologies.
- Autonomy and mandate – Empowering employees to make relevant decisions within their roles.
- Feedback structure – Implementing systems that enable managers to guide and support employees effectively.

Successful implementation of digital transformation depends on embedding a shared vision within organizational culture. As McKinsey (2017) notes, “Many companies perform below their full potential not because of structural disadvantages but due to poor leadership, a deficient culture, misaligned capabilities, and ineffective incentives.”

Organizations can institutionalize a strong culture by integrating key elements into their design, including a well-defined structure, effective leadership, strategic recruitment, and a continuous learning environment. Aligning these factors with digital transformation ensures employees actively support and drive adoption, ultimately enhancing organizational effectiveness.



Figure 3. Organizational Cultures (O'Reilly, and et al) (1991).

In Figure 3, O'Reilly, Chatman, and Caldwell (1991) outline several types of organizational cultures. Selecting the appropriate culture is essential for supporting digital transformation technologies.

- Innovative culture – Flexible and adaptable, fostering experimentation with new ideas.
- Aggressive culture – Focused on competitiveness and outperforming market rivals.
- Outcome-oriented culture – Emphasizes achievement, results, and action as core organizational values.
- Stable culture – Prioritizes predictability, bureaucratic structures, and rule-based operations.
- People-oriented culture – Values fairness, support, and respect for individuals.
- Team-oriented culture – Encourages collaboration and cooperation to achieve strategic goals.
- Detail-oriented culture – Emphasizes precision and attention to detail in assigned roles.
- Service culture – Highlights the importance of the retail sector and its impact on organizational success.

Implementing the right organizational culture is critical for digital transformation initiatives. Establishing a culture aligned with new technologies ensures effective adoption and long-term sustainability.

5.3 Employees: Human Capital

For organizations to survive and successfully implement new technologies, they must focus on human resources. Human capital is the most critical factor in managing future challenges and serves as the foundation for organizational success. Developing human capital enables organizations to adopt digital transformation technologies and methodologies that enhance effectiveness, efficiency, and competitiveness.

To equip employees with the necessary skills and knowledge, organizations can adopt the human capital development chain model. This begins with attracting and recruiting the right talent, followed by upskilling employees through knowledge-building and capability enhancement, and ultimately ensuring retention. As Bradley and Coleman (2001) note, “A high-tech world and associates of high-tech professionals to run it has reached a critical stage.”

Memon, Mangi, and Rohra (2009) propose models for acquiring, maintaining, and sustaining human capital. Similarly, Brantley and Coleman (2001) emphasize the importance of effective recruitment in attracting young, skilled talent to support digital transformation. Their framework outlines key steps:

- Talent hunting tactics – Identifying factors that attract top talent. Hiring a standout candidate can draw other high performers. Financial investment in key talent should not be a barrier, as securing the right individuals is crucial.
- Campus recruiting – Leveraging charismatic recruiters to attract university students with the message: “Come and learn from us.”

- Organizational branding and marketing strategy – Communicating a clear commitment to growth and innovation in digital technologies.
- Effective recruitment – Ensuring seamless communication between internal departments, external recruiters, and organizational channels.

McKinsey (2017), in Figure 4, illustrates the necessary focus organizations should adopt to attract and develop talent. Companies that successfully recruit and retain skilled employees should consider leadership development programs that foster management capabilities across functions. Coaching and development initiatives can further support employees and identify the skills required to deliver digital products and technologies.

To attract the right talent, organizations must establish clear criteria and goals for recruitment, specifying required knowledge and capabilities. Benchmarking existing skills against future requirements helps define necessary upskilling initiatives. Designing in-house training curricula ensures employees acquire the expertise needed to facilitate the adoption of new technologies.

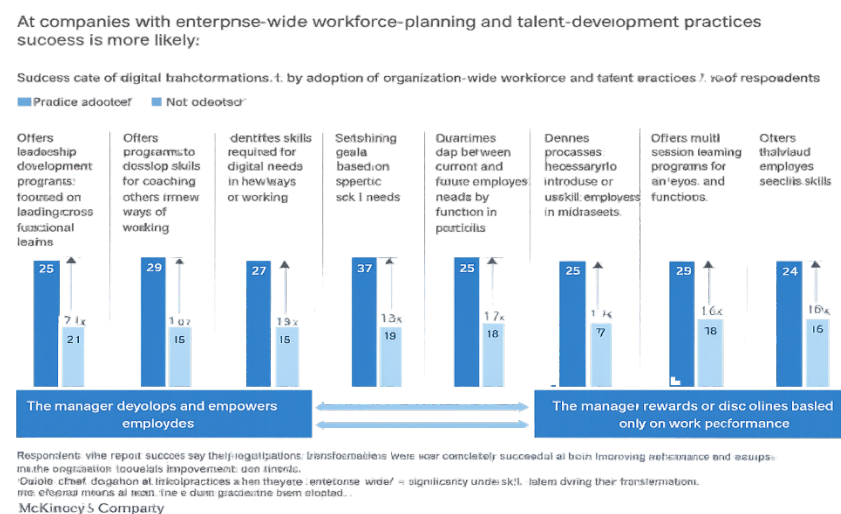


Figure 4. Workforce-planning and Talent-development - McKinsley (2017)

The most critical element of the human development chain model, as defined by Bradley and Coleman (2001), is employee retention. Organizations must establish a well-defined compensation strategy to ensure employees remain engaged and committed. Fostering a strong learning culture is equally essential, aligning employees with technological advancements and supporting successful implementation. A final aspect of retention is enabling employees to grow and develop professionally within the organization.

Brantley and Coleman (2001) emphasize that improving organizational effectiveness requires selecting the right employees, implementing effective compensation strategies, cultivating a learning-oriented culture, and establishing retention mechanisms to maintain top talent. A well-executed recruitment process not only attracts skilled employees but also enhances overall organizational performance through the contributions of talented individuals.

In conclusion, the findings presented in this chapter highlight the interconnected nature of leadership, organizational culture, and human resources in shaping sustainable success. Together, these dimensions provide a comprehensive view of how trust, empowerment, workforce development, and cultural alignment contribute to organizational performance. This synthesis of insights sets the stage for the upcoming conclusions section, where the implications of these findings will be drawn together to inform strategic direction.

6. Conclusion

This study concludes that digital transformation technologies present both opportunities and challenges. Their successful adoption requires more than technical integration; it demands structural alignment, cultural adaptation,

leadership commitment, and robust change management strategies (Brown & Harvey, 2006); (Jogulu & Wood, 2007); Bradley & Coleman, 2001). Artificial intelligence, CRM, cloud services, and augmented reality can redefine business processes and customer engagement, but their benefits are realized only when supported by strong organizational foundations (Christensen, 2016); (McKinsey, 2017)).

The research contributes to knowledge by demonstrating the applicability of change management frameworks and Lean Six Sigma principles in digital transformation projects (Sarran & Mendonca, 2019). It provides evidence that organizations must integrate technology with leadership, culture, and human capital to achieve sustainable effectiveness (Memon, Ahmed & Rohra, 2009).

Ultimately, digital transformation is a journey rather than a destination. Organizations that embrace adaptability, foster supportive cultures, and invest in their people will be best positioned to thrive in dynamic, high-risk environments. Transformation is not just about adopting new tools, but about reshaping the fabric of the organization to secure its future (O'Reilly, Chatman & Caldwell, 1991).

In conclusion, the correct leadership style is critical for successfully implementing and institutionalizing digital transformation technologies. Effective leadership ensures that organizations meet transformation goals, enhancing effectiveness and efficiency. Organizational culture plays a vital role in reinforcing adaptability, shaped by shared values and beliefs that support technological change. The three foundations reviewed leadership, culture, and human capital demonstrate a synergy with change management. Effective communication, appropriate leadership, and employee training foster adaptability and ensure successful implementation of digital transformation technologies.

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