

Creative Leadership and Institutional Excellence in the Digital Transformation Era: A Systematic Review

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Abstract

The rapid advancement of digital technologies has necessitated innovative leadership approaches to enhance institutional performance and maintain competitiveness. Creative leadership plays a crucial role in navigating the complexities of digital transformation by fostering an environment of innovation, adaptability, and continuous learning. This study examines the impact of creative leadership on institutional performance within the context of digital transformation at Qatar University. Through a systematic review, the research explores how creative leadership influences the adoption of digital transformation strategies and their subsequent effects on institutional efficiency and effectiveness. The study highlights key initiatives at Qatar University, including partnerships with Coursera and Google Cloud, to enhance digital learning and faculty development. Findings suggest that creative leadership facilitates a culture of innovation, supports digital engagement, and strengthens industry-academia collaboration, ultimately contributing to improved institutional performance. The study offers theoretical insights into the relationship between creative leadership and digital transformation while providing practical recommendations for higher education institutions seeking to optimize their leadership strategies in the digital era.

Keywords: *Creative Leadership, Digital Transformation, Institutional Performance, Higher Education, Innovation, Qatar University, Digital Learning, Organizational Adaptability, Industry-Academia Collaboration, Strategic Leadership.*

Introduction

The rapid advancement of digital technologies has significantly transformed institutional operations, requiring organizations to adopt innovative leadership approaches to maintain competitiveness and efficiency. Creative leadership has emerged as a critical factor in navigating the complexities of digital transformation, fostering an environment that encourages innovation, adaptability, and high institutional performance (Carmeli, Gelbard, & Gefen, 2010; Cortellazzo, Bruni, & Zampieri, 2019). Unlike traditional leadership models, creative leadership emphasizes problem-solving, collaboration, and the cultivation of an organizational culture that supports continuous learning and experimentation (Amabile et al., 2004; Puccio, Mance, & Murdock, 2011).

Institutions undergoing digital transformation must integrate technology-driven strategies to enhance operational effectiveness while ensuring sustainable growth (Berman, Bowman, & West, 2012; Ross, Beath, & Sebastian, 2019). Research indicates that creative leaders play a crucial role in guiding organizations through these transitions by promoting digital innovation and leveraging emerging technologies to improve institutional performance (Brown & Lee, 2020; Teixeira, Gonçalves, & Taylor, 2021). Moreover, digital transformation necessitates a leadership style that balances strategic vision with technological adaptability, enabling institutions to respond effectively to evolving industry demands (Garcia & Smith, 2022; Sacolick, 2017).

Modern institutions face considerable challenges in enhancing performance, ensuring operational efficiency, and adapting to digital transformation to remain competitive. Leadership plays a pivotal role in guiding organizations toward innovative solutions that capitalize on the opportunities presented by digital transformation. This study explores the role of creative leadership in shaping institutional environments, particularly within the context of digital transformation. It focuses on Qatar University, the country's oldest and most prestigious national university, examining how creative leadership contributes to institutional performance in the higher education sector.

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The impact of digital transformation on institutional performance is profound, with advancements such as artificial intelligence and big data analytics enhancing operational efficiency and streamlining processes. Leaders play an essential role in ensuring institutions harness the full potential of digital transformation in both administrative and academic settings (Brynjolfsson & McAfee, 2014).

To improve efficiency and effectiveness, institutions must adopt innovative approaches to performance enhancement. Research highlights a strong correlation between digital transformation and institutional performance, underscoring the need for a strategic application of technology to reinforce institutional frameworks and drive excellence in a rapidly evolving digital environment (Woerner & Weill, 2018; Westerman et al., 2014).

The widespread adoption of digital transformation across various sectors, including education, has led to significant structural and organizational shifts within academic institutions. These changes necessitate the implementation of innovative strategies to address evolving educational needs while fostering creativity and adaptability among students and faculty. Understanding the role of creative leadership in improving institutional performance in academia is crucial for shaping the future of higher education institutions.

The Fourth Industrial Revolution, characterized by rapid technological advancements, artificial intelligence, and digital innovations, has profoundly influenced various fields, including education. Academic institutions must equip students, graduates, and institutional structures to adapt to these technological developments and emerging global challenges (María et al., 2021).

In this context, leadership is a critical factor. Creative leadership that aligns with rapid technological shifts is essential for improving institutional performance. By fostering a culture of innovation, encouraging unconventional thinking, and promoting originality in problem-solving, creative leadership plays a key role in addressing contemporary challenges. This is particularly important in higher education, where developing critical and creative thinking skills is a central priority (Zhou & George, 2003).

Examining the development of institutional performance through creative leadership in the digital transformation era at Qatar University is vital for understanding how institutions navigate innovation and change. The university faces significant challenges in fostering an innovative environment and adapting to digital transformation while maintaining competitiveness in an evolving educational landscape. Rapid technological advancements place substantial pressure on academic institutions to stay aligned with emerging trends. As a leading university, Qatar University must embrace these developments by adopting innovative teaching methods that meet student needs, improve academic processes, and strengthen institutional performance.

Technological advancements have undeniably reshaped the education sector, necessitating swift institutional responses through the integration of innovative teaching strategies and digital tools to enhance learning experiences (María et al., 2021).

In response, Qatar University has implemented several initiatives to improve institutional performance within the digital transformation framework. In 2023, the university partnered with Coursera and collaborated with Google Cloud, reinforcing its commitment to digital innovation. These initiatives aim to enrich student learning and faculty development by providing access to high-quality online courses aligned with labor market demands. Key initiatives include the adoption of digital learning technologies, enhancement of digital infrastructure, faculty and staff training programs, promotion of digital engagement, encouragement of innovation, and support for research through active participation. Additionally, the university prioritizes smart management, fosters student-driven innovation, and strengthens industry-academia partnerships to bridge the gap between theoretical knowledge and labor market requirements (Qatar University Official Website).

This study is significant as it examines the challenges and opportunities of digital transformation in higher education while emphasizing the role of creative leadership in fostering innovation. By focusing on Qatar University, a leading academic institution, the study highlights how creative leadership facilitates an

innovative environment and enables digital transformation. Theoretically, it advances understanding of the relationship between creative leadership and institutional performance within the digital transformation framework, offering insights based on recent developments in education and technology. It also contributes to the broader discourse on enhancing creative leadership in higher education.

From a practical perspective, the study provides recommendations for Qatar University and similar institutions to strengthen creative leadership and institutional performance. Additionally, it lays the foundation for developing strategies that encourage innovation and establish a performance-driven culture in higher education. The study also aims to develop assessment tools, such as surveys, to evaluate key indicators of creative leadership and institutional performance.

This systematic review seeks to address the following questions: How does creative leadership influence the adoption of digital transformation, and what impact does this have on institutional performance? Is there a positive relationship between creative leadership and improved institutional performance at Qatar University in the context of digital transformation? In what ways does creative leadership shape the implementation of digital transformation at Qatar University? How does the adoption of digital transformation impact institutional performance at Qatar University?

Research Hypotheses

Creative leadership is positively associated with improved institutional performance at Qatar University within the framework of digital transformation.

Creative leadership plays a significant role in facilitating the adoption of digital transformation at Qatar University.

The combined impact of digital transformation adoption and creative leadership contributes to institutional performance at Qatar University.

Theoretical Framework

Creative Leadership Theories

Creative leadership theories encompass several approaches that highlight key leadership traits essential for fostering innovation and adaptability. Servant Leadership Theory, developed by Robert Greenleaf, emphasizes empathy, with leaders prioritizing the needs of their followers and actively supporting them. This leadership style enhances trust, morale, and motivation in organizations (Greenleaf, 2002). Followership Theory focuses on the interaction between leaders and followers, highlighting learnability as a key trait. It suggests that engaged and proactive followers contribute significantly to organizational success, fostering a culture of continuous learning (Khan et al., 2020; Wang et al., 2021). Authentic Leadership Theory underscores honesty, transparency, and vulnerability, with leaders staying true to their values and inspiring teams through sincerity and integrity. This approach strengthens psychological capital and team morale, enhancing creativity and commitment (Maximo et al., 2019; Munyaka et al., 2017). Transformational Leadership, introduced by Bass & Riggio, revolves around motivation, intellectual stimulation, and personal support, pushing individuals to exceed expectations. Its emphasis on adaptability makes it a crucial component of creative leadership, as transformational leaders can adjust to challenges and inspire innovation (Bass & Riggio, 2006). Together, these theories provide a comprehensive understanding of how creative leadership drives institutional growth and transformation.

Significance of Creative Leadership in Higher Education Institutions

Creative leadership plays a vital role in higher education institutions by driving innovation, managing change, strengthening institutional reputation, and addressing complex challenges. It enhances innovation in teaching and learning by encouraging faculty to adopt new methodologies and integrate technology, ultimately improving student engagement and outcomes (Fullan & Scott, 2009). Additionally, creative

leaders facilitate organizational change by guiding institutions through curriculum reforms, funding shifts, and technological advancements, ensuring adaptability and resilience (Kezar & Eckel, 2002). A strong culture of creativity and innovation also enhances institutional reputation, attracting top-tier faculty, students, and research funding, which contributes to long-term success (Bess & Dee, 2012). Furthermore, higher education institutions face financial constraints, diversity and inclusion challenges, and the need for interdisciplinary research. Creative leaders address these issues by implementing innovative solutions and fostering collaboration (Tierney, 2008).

Institutional Performance

Institutional performance reflects how effectively an organization achieves its goals by managing material and human resources. It comprises three dimensions: individual performance, which pertains to employees' contributions; organizational unit performance, which focuses on departmental efficiency; and overall institutional performance, which evaluates the institution's broader societal and economic impact (Ben Massoud, 2016: 202). Effective institutional performance relies on clear objectives, efficient resource management, continuous performance monitoring, and adaptability to external changes (Sobhi & Mansour, 2009: 38).

Within higher education, institutional performance is defined as the execution of activities that enhance excellence (Saad bin Mubarak & Hala Fawzi, 2019) and as an integrated system of tasks supporting institutional goals (Habis Mohamed & Najwa Abdel Hamid). It also encompasses academic, research, and community service outcomes (Maha Abdullah Al-Sayed). Universities must leverage trained human resources to direct all other resources efficiently.

Key dimensions of institutional performance include academic quality, as measured by graduation rates and faculty credentials (Astin, 1993); research output, assessed through publications and citations (Boyer, 1990); student satisfaction and engagement, gauged by retention rates and survey results (Kuh, 2001); financial health, indicated by endowment size and spending efficiency (Johnstone, 2003); community and social impact, demonstrated by local partnerships and social mobility contributions (Brennan, King, & Lebeau, 2004); and administrative efficiency, reflected in governance quality and strategic planning (Birnbaum, 1988).

Institutional performance measurement employs three main approaches. Quantitative methods include performance indicators like graduation rates (Dill & Sporn, 1995), benchmarking (Alstete, 1995), surveys (Kuh, 2001), and financial metrics (Johnstone, 2003). Qualitative methods involve case studies (Yin, 2003), focus groups (Morgan, 1997), self-assessment and peer review (Massy, 1996), and SWOT analysis (Pickton & Wright, 1998). Integrated approaches, such as the balanced scorecard (Kaplan & Norton, 1992) and performance frameworks like EFQM (Evans, 2004), provide comprehensive evaluations.

Enhancing institutional performance in universities requires implementing key components that improve efficiency and effectiveness. An effective administrative communication system facilitates seamless coordination across individual, departmental, and organizational levels, improving decision-making and responsiveness to external demands (Mohamed Gad Hussein, 2015). A holistic approach to university performance fosters collaboration among units, ensuring cohesive goal achievement (Saad Bin Mubarak & Hala Fawzi, 2019).

Encouraging innovation enhances work methods and organizational agility, leading to higher service quality. The integration of modern technologies and regular training further optimizes university operations. Continuous improvement through quality standards and recognition of excellence strengthens institutional competitiveness. Additionally, transparency and accountability ensure adherence to ethical and legal frameworks, reinforcing institutional integrity and public trust (Iman Abdel Naim, 2021).

Digital Transformation

Digital transformation refers to the process of utilizing digital technologies to enhance and streamline operations, procedures, and services across various sectors, including higher education. It involves transitioning traditional processes into technology-driven models, improving efficiency and productivity while introducing new methods for learning, teaching, and interaction among students, faculty members, and administrative staff (Westerman et al., 2014; Vial, 2019). Beyond simply adopting digital tools, digital transformation requires a fundamental reimagining of how institutions deliver value in the digital age, affecting business processes, customer interactions, and organizational culture (Westerman et al., 2014).

This transformation goes beyond integrating technology within institutions; it also involves restructuring workflows and redefining service delivery to enhance accessibility, save time, and improve institutional performance. Digital transformation is not limited to advancements in the internet, social media, or application development but involves continuous changes in information and communication technologies and the rapid adoption of new innovations. It is closely related to the concept of digitalization, which refers to the process of encoding analog information into digital formats, making physical products programmable or enabling their transmission over the internet. While digitalization broadly includes digital transformation, the latter specifically focuses on altering an organization's core operations through the adoption of new business models based on modern information technologies (UNESCO, 2018).

Key pillars of digital transformation include technological innovation, data-driven decision-making, customer focus, and adaptability. Organizations that embrace digital transformation integrate advanced technologies, use data for strategic decision-making, enhance customer experience, and foster flexibility to adapt to rapidly evolving digital landscapes (Ross et al., 2019). The success of digital transformation initiatives largely depends on organizational culture, particularly in fostering collaboration, continuous learning, and adaptability. Leadership plays a crucial role in shaping a digital culture and overcoming challenges associated with transformation (Berman et al., 2012).

In higher education, digital transformation entails technological and organizational changes driven by digital advancements. Successful implementation requires a comprehensive assimilation of digital culture across institutional units. However, this transformation is often hindered by institutional resistance, as leaders and managers must abandon outdated practices in favor of technology-driven approaches. Institutional culture remains one of the most challenging aspects of this shift, necessitating change at all levels and employee buy-in (Sacolick, 2017).

Digital transformation significantly enhances the educational process by improving the quality and accessibility of education. Virtual classrooms, interactive tools, and online learning platforms allow students to access educational resources anytime and anywhere, fostering self-directed and interactive learning. A notable example is Harvard University's collaboration with MIT to launch the "edX" online learning platform, providing millions of students worldwide with high-quality remote education (edX, 2020). Additionally, digital transformation improves data management and administrative processes through Enterprise Resource Planning (ERP) and Customer Relationship Management (CRM) systems. Arizona State University, for instance, implemented the "PeopleSoft" ERP system to enhance administrative efficiency and offer a more integrated student experience (ASU, 2021).

Moreover, digital transformation benefits research by facilitating access to large databases and advanced analytical tools, improving research quality and accelerating innovation. Digital research centers, such as Stanford University's "Stanford Digital Repository," provide researchers with secure and efficient platforms for data storage and collaboration (Stanford University Libraries, 2022). Furthermore, digital technology enhances communication among students, faculty members, and administrative staff through social media platforms and collaborative tools like Microsoft Teams and Slack. Columbia University, for example, utilizes the "Canvas" learning management system to facilitate interaction and resource sharing among students and faculty (Columbia University, 2021).

Despite its advantages, digital transformation presents several challenges for higher education institutions. These include the need to update technological infrastructure, protect data from cyber threats, train academic and administrative staff in modern technologies, and bridge the digital divide to ensure equitable access to digital tools and resources (Cambridge University IT Services, 2020). Addressing these challenges is crucial for achieving a seamless and effective transition to a digital education ecosystem.

A systematic review of the literature is a methodological approach that involves searching databases to collect research findings focused on objective and theoretical discussions of a specific topic. Unlike a narrative review, which provides an overview of current knowledge on a subject without a structured methodology that allows data replication or answers to specific quantitative research questions, a systematic review follows a more structured and reproducible process. According to Robinson and Lowe, conducting a systematic review is essential for reducing reviewer bias, which can otherwise compromise the quality of a study.

This paper contributes to the existing body of knowledge by systematically reviewing how different leadership styles—autocratic, democratic, laissez-faire, and transactional—shape workplace dynamics and impact employee performance and organizational success.

A high-quality systematic review involves three major phases: planning, conducting, and reporting. It follows a structured and transparent methodology, with database searches performed systematically to ensure replicability. This approach employs a rigorous search strategy that enables researchers to address a specific research question. The lack of comprehensive research on leadership styles has led to gaps in understanding and hindered systematic engagement with existing literature.

The review is guided by the following key research questions: What is the impact of creative leadership on the adoption of digital transformation, and how does this influence institutional performance? Is there a positive correlation between creative leadership and improved institutional performance at Qatar University within the context of digital transformation? How does creative leadership drive the adoption of digital transformation at Qatar University? What effect does digital transformation adoption have on institutional performance at Qatar University?

Materials and Methods

PRISMA

This systematic review follows the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) guidelines, which are designed to improve clarity and accuracy while reducing potential biases and misinterpretations in systematic reviews and meta-analyses (Moher et al., 2009; Page et al., 2021). PRISMA is particularly relevant to research in environmental management (Haddaway et al., 2018). The review protocol has been registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) under registration number INPLASY202250103.

Resources

A comprehensive electronic literature search was conducted using Scopus and Web of Science (WoS). Scopus served as the primary database, offering access to approximately 23,900 active peer-reviewed journals from 6,998 publishers across diverse fields, including physical sciences, social sciences, health sciences, and life sciences. Additionally, Scopus provides analytical tools for data visualization, comparison, and export.

Web of Science (WoS) was the second database used, covering approximately 31,000 journals across 244 disciplines, including environmental studies, interdisciplinary social sciences, social issues, and development planning. Managed by Clarivate Analytics, WoS maintains an extensive archive of citation data spanning over a century, ranking publications based on citation frequency, number of papers, and citations per paper.

Systematic Review Process

The systematic review process consists of three main stages: identification, screening, and eligibility (see Figure 1).

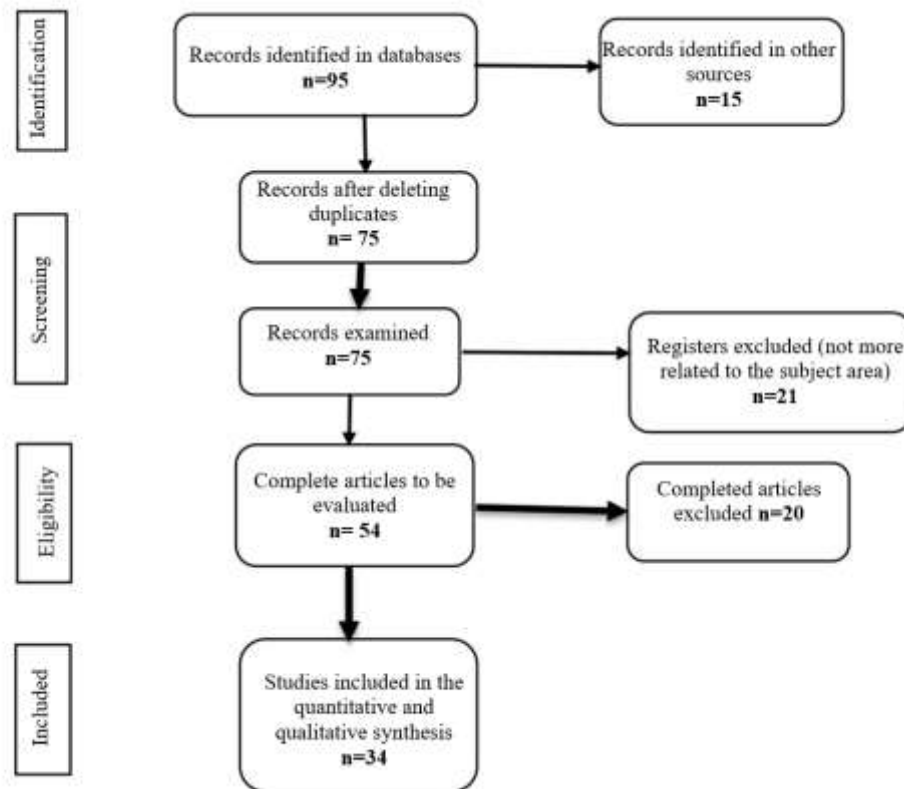


Figure 1. PRISMA Systematic Review Process

Identification

The initial stage involved selecting relevant keywords for the search process. This step included identifying synonyms, related terms, and alternative variations of key concepts to expand the search scope. The goal was to optimize the search strategy across selected databases, ensuring the retrieval of a broad and relevant range of articles for review.

The keyword selection process was guided by the research question framework proposed by Okoli and was further refined using an online thesaurus, previously used keywords from related studies, and recommendations from Scopus and subject matter experts. To enhance the search strategy, the authors expanded the initial keyword list and formulated a comprehensive search string incorporating Boolean operators, phrase searching, truncation, wildcard symbols, and field codes. This refined search strategy was then implemented across the two primary databases: Google Scholler, Scopus and Web of Science (Table 1).

Table 1. The Research Strings

Databases	Keywords Used
Google Scholler	(institutional performance” OR “higher education reforms” OR “student engagement” OR “academic quality” OR “organizational learning” OR “human resource

	empowerment” OR “digital transformation” OR “technology adoption” OR “cybersecurity challenges” OR “strategic digital planning” OR “university competitiveness” OR “organizational culture” OR “institutional change” OR “stakeholder engagement”)
Scopus	TITLE-ABS-KEY ((“creative leadership” OR “strategic leadership” OR “problem-solving” OR “decision-making” OR “innovation” OR “crisis management” OR “management by objectives” OR “faculty engagement” OR “transformational leadership” OR “leadership traits” OR “barriers to leadership”) AND (“institutional performance” OR “higher education reforms” OR “student engagement” OR “academic quality” OR “organizational learning” OR “human resource empowerment” OR “digital transformation” OR “technology adoption” OR “cybersecurity challenges” OR “strategic digital planning” OR “university competitiveness” OR “organizational culture” OR “institutional change” OR “stakeholder engagement”)))
Web of Science	TS ((“creative leadership” OR “strategic leadership” OR “problem-solving” OR “decision-making” OR “innovation” OR “crisis management” OR “management by objectives” OR “faculty engagement” OR “transformational leadership” OR “leadership traits” OR “barriers to leadership”) AND (“institutional performance” OR “higher education reforms” OR “student engagement” OR “academic quality” OR “organizational learning” OR “human resource empowerment” OR “digital transformation” OR “technology adoption” OR “cybersecurity challenges” OR “strategic digital planning” OR “university competitiveness” OR “organizational culture” OR “institutional change” OR “stakeholder engagement”)))

Search strings for Scopus and Web of Science were developed in April 2023 (see Table 1) after identifying all relevant keywords. These three databases are widely regarded as essential resources for systematic literature reviews due to their advanced search capabilities, extensive indexing (covering over 5,000 publishers), rigorous quality control of published articles, and broad multidisciplinary coverage, including environmental management research. The search process retrieved 45 articles from Scopus and 20 from Web of Science and 30 from Google Scholar.

Screening

The second stage, screening, aimed to remove duplicate records. This process eliminated 20 duplicate articles, reducing the total to 75 articles for further evaluation based on specific inclusion and exclusion criteria:

Only journal articles (research papers) were included, as they provide primary empirical data. Therefore, systematic reviews, meta-analyses, meta-syntheses, book series, books, book chapters, and conference proceedings were excluded.

Only studies published in English and Arabic were considered.

The review focused exclusively on research related to leadership styles to ensure alignment with the study’s objectives

Applying these criteria led to the exclusion of 21 articles (see Table 2), resulting in 54 articles deemed eligible for review.

Table 2. Inclusion and Exclusion Criteria

Criteria	Included Studies	Excluded Studies
Document Type	Empirical Studies (Quantitative/Qualitative research, surveys, case studies)	Conference papers, book chapters, book series, and full books

	Theoretical Analyses (Conceptual discussions, theoretical frameworks) Literature Reviews (Reviewing past studies) Framework Proposals (Suggesting models/methodologies)	
Language	English and Arabic language publications	Non-English publications
Study Focus	Creative Leadership & Leadership Development → 11 studies Institutional Performance & Higher Education Impact → 10 studies Digital Transformation in Higher Education → 9 studies Strategic Planning & Management Approaches → 4 studies	Studies with unclear methodology Studies unrelated to leadership, occupational safety, or educational institutions

Eligibility

At this stage, the full texts of the remaining articles were reviewed. The authors carefully examined each article to ensure it met the predefined inclusion criteria. This process involved analyzing the title and abstract to confirm relevance. As a result, 21 articles were excluded due to their limited focus on Creative Leadership & Leadership, insufficient discussion of Digital Transformation within organizations, or unclear methodology. Ultimately, 54 articles met the eligibility criteria (see Figure 1).

Quality Assessment

To ensure the reliability of the selected studies, two independent researchers—both experts in leadership—evaluated the quality of the remaining articles. Since neither researcher contributed to this paper, the risk of bias in the assessment process was minimized. The articles were categorized into three quality levels: high, moderate, and low. The primary evaluation criterion was methodological rigor. Based on this assessment, 20 articles were rated as high quality, 14 as moderate quality, and 10 as low quality. Studies classified as low quality were excluded, leaving 34 articles for the final review.

Data Extraction and Analysis

The selected articles underwent a detailed examination, focusing on research that directly addressed the study's objectives. The initial phase of data extraction involved reviewing abstracts, followed by a comprehensive analysis of full texts to identify key themes and sub-themes. Whitemore and Knafl (2005) suggest that integrative data synthesis is most effective when using qualitative or mixed-method approaches, as they allow for iterative comparisons across different studies. Content analysis was applied to identify themes related to leadership and safety management strategies.

Each of the 34 articles was analyzed in detail, with particular focus on abstracts, results, and discussions. Data relevant to the research questions were systematically extracted and organized into a structured table. A thematic analysis was conducted to identify recurring patterns, categorize findings into themes, and establish relationships between different aspects of the data.

The thematic analysis began with identifying emerging patterns in the extracted data. Similar concepts were grouped together, leading to the formation of three primary themes. These themes were further broken down into 14 sub-themes. To ensure accuracy, researchers reassessed all identified themes and sub-themes, verifying their consistency with the data. Finally, each theme and sub-theme was clearly defined and named, starting with broader themes before refining them into specific classifications (see Table 3).

Results

As illustrated in the PRISMA flowchart, a total of 34 articles were ultimately included in this study. Table 1 provides a summary of the key findings related to leadership styles, work engagement, and organizational support. The selected studies were analyzed using both quantitative and qualitative approaches, with a focus on the relationship between leadership styles, work engagement, and organizational support.

The findings of this systematic review indicate that research conducted across various workplaces and countries consistently underscores the significance of transformational and transactional leadership styles. These studies highlight the positive impact of organizational support on employee performance, workplace attitudes, organizational behavior, and overall work engagement. Raising awareness of these factors among managers, leaders, and organizational decision-makers is essential.

This study aims to examine the critical role of transformational and transactional leadership in shaping the work environment. Additionally, it emphasizes the vital influence of organizational support—derived from both leadership and institutional context—in fostering and sustaining employee engagement and motivation. Top of Form

Table 3. (Researched Article)

Author(s) & Year	Summary Objective of the Study	Findings
Talba (2023)	Analyzed challenges facing digital transformation in Egyptian universities and compared experiences with the U.S. and Saudi Arabia.	Proposed measures such as creating digital transformation units, employing specialized professionals, and raising awareness. Emphasized the need to align with global advancements.
Al-Sawy (2022)	Examined the progress of digital transformation in Egyptian institutions and proposed a strategy for its implementation.	Found that universities implement digital transformation based on structured strategies. Highlighted the importance of fostering a digital transformation culture, designing digital educational programs, and addressing technical, security, and legislative requirements.
Garcia & Smith (2022)	Analyzed the effects of digital transformation on student experiences in South America.	Reported improved engagement, access to resources, and personalized learning but identified challenges related to infrastructure and training.
Al-Muslimani (2022)	Assessed the reality of digital transformation in Egyptian universities and its obstacles.	Found satisfactory progress but noted remaining challenges. Proposed a strategic framework for full digital transformation implementation.
Al-Marrekhi (2022)	Explored the role of creative leadership in strengthening strategic leadership in Saudi universities, identifying challenges and proposing solutions.	Confirmed a significant positive relationship between creative leadership and strategic leadership. Identified key challenges and proposed faculty-driven solutions to address them.
Fendi & Abdullah (2022)	Assessed the role of creative leadership in empowering human resources at the University of Baghdad, analyzing dimensions of leadership and HR empowerment.	Found that creative leadership significantly influences human resource empowerment. Identified problem sensitivity, originality, fluency, flexibility, perseverance, and risk-taking as key leadership traits.
Ahmed & Hassan (2021)	Assessed digital transformation challenges and opportunities in Middle Eastern universities.	Identified major challenges, such as technological infrastructure gaps and the digital divide, but highlighted opportunities for improved access and engagement.

Author(s) & Year	Summary Objective of the Study	Findings
Al-Sarhan, Attallah (2021)	Examined the impact of TQM standards and academic accreditation on performance in Jordanian universities.	Found a strong correlation between TQM focus and improved educational outcomes; recommended adopting TQM as a strategic approach.
Abdel Naim, Iman (2021)	Proposed mechanisms for improving institutional performance in Egyptian universities using the Hoshin Kanri methodology.	Identified five key development areas: process improvement, environment monitoring, HR development, performance evaluation, and strategic planning.
Teixeira et al. (2021)	Investigated the role of higher education institutions in regional digital development.	Revealed that universities positively impact regional digital development, particularly through public polytechnic institutes in Porto.
Madi & Abu Hajir (2020)	Evaluated the readiness of Palestinian universities for digital transformation.	Reported strong senior management support and high strategic orientation, emphasizing the need for qualified human resources and administrative/financial preparedness.
Jadallah, Basem Suleiman (2020)	Developed a framework for improving institutional performance at the Professional Academy for Teachers using the Balanced Scorecard.	Found moderate implementation of Balanced Scorecard components and recommended strategic application to enhance performance.
Al-Majali, Aref (2020)	Analyzed strategic intelligence's impact on institutional performance, considering organizational learning as a mediating factor.	Strategic intelligence significantly improves institutional performance and organizational learning.
Brown & Lee (2020)	Examined the impact of digital transformation on innovation in European universities.	Demonstrated that digital transformation fosters innovation in online education and collaborative learning, emphasizing the role of administrative support and technology.
Williams & Roberts (2018)	Explored the impact of digital transformation on university performance over five years.	Found improvements in administrative efficiency, student satisfaction, and academic performance. Stressed the need for investments in infrastructure and policies.
Sultan (2018)	Investigated the feasibility of creative leadership at the Workers' University in Egypt and its relationship with crisis management and management by objectives.	Found a statistically significant relationship between creative leadership, crisis management, and management by objectives. Recommended enhancing educational services and competitiveness.
Al-Boushi & Bubashit (2018)	Examined the extent to which academic leaders practice creative leadership skills at Imam Abdulrahman Bin Faisal University and how these skills can be developed. Investigated differences based on gender, faculty type, and years of service.	Academic leaders practiced creative leadership skills at a high level (mean score: 3.55). Significant differences based on gender (favoring males) but not on faculty type, except fluency (favoring humanities). Recommended mechanisms to enhance leadership creativity, an innovation center, and a leadership center.
Jones & Kim (2019)	Investigated the impact of digital transformation on higher education institutions in the U.S.	Found that digital transformation enhanced student experiences and administrative efficiency but posed cybersecurity and training challenges.
Tierney (2008)	Explored challenges and opportunities in creative leadership in higher education.	Identified challenges such as resistance to change and resource constraints but emphasized its transformative potential.

Author(s) & Year	Summary Objective of the Study	Findings
Fullan & Scott (2009)	Examined the role of creative leadership in faculty and student engagement in higher education.	Found that creative leadership fosters faculty and student participation, leading to improved learning experiences.
Bess & Dee (2012)	Studied the relationship between creative leadership and institutional performance.	Found that institutions led by creative leaders perform better in research output, student satisfaction, and reputation.
Carmeli, Gelbard & Gefen (2010)	Identified barriers to creative leadership in higher education.	Highlighted organizational rigidity, resistance to change, and limited resources as key challenges. Recommended professional development, cultural support, and resource access to overcome these barriers.
Amabile et al. (2004)	Investigated how leadership practices encouraging creativity impact education and institutional policies.	Found that leaders who foster creativity drive transformative changes in academia.
Kezar & Eckel (2002)	Investigated creative leadership's role in organizational change within higher education institutions.	Concluded that creative leadership is crucial for successful change initiatives, gaining stakeholder approval, and achieving institutional goals.
Mumford, Scott, Gaddis & Strange (2002)	Studied the impact of creative leadership on problem-solving and decision-making in organizations.	Found that creative leaders are better equipped to handle complex situations, positively impacting decision-making.
Johnstone (2003)	Investigated the impact of financial difficulties on institutional performance.	Economic fluctuations and oil price changes significantly affect institutional budgets and quality.
Brennan, King, & Lebeau (2004)	Explored the role of universities in societal transformation through institutional performance.	Found that universities must rapidly respond to economic, social, and political changes to succeed.
Evans (2004)	Studied performance measurement systems and their impact on institutional efficiency.	Found that advanced technology enhances efficiency and helps in identifying strengths and weaknesses.
Kuh (2001)	Assessed student engagement as a factor in institutional performance.	Found a positive correlation between student engagement, academic performance, and satisfaction.
Morgan (1997)	Analyzed the use of focus groups in assessing institutional performance.	Concluded that focus groups provide deep insights, improving strategic planning and decision-making.
Dill & Sporn (1995)	Examined the impact of social demand on university reforms and performance.	Highlighted the need for flexible strategic planning to align with evolving societal needs.
Astin (1993)	Evaluated institutional performance using an outcome-based approach, focusing on student results.	Found that academic quality is linked to human resources and infrastructure, requiring continuous investment.
Boyer (1990)	Explored the balance between academic research and teaching in institutional performance.	Institutions supporting research and innovation contribute more significantly to academia

Discussion

First Axis: Creative Leadership

The studies on creative leadership offer valuable insights into its role in higher education institutions. Al-Boushi and Bubashit (2018) explored the extent to which academic leaders at Imam Abdulrahman Bin Faisal University practice creative leadership and how these skills can be further developed. Their findings indicated that academic leaders exhibit a high level of creative leadership, with a mean score of 3.55. However, the study revealed statistically significant differences based on gender, favoring males, while no significant differences were observed based on faculty type, except for fluency, which favored humanities faculties. The authors emphasized the need for mechanisms to enhance creative leadership skills, including establishing an innovation center and leadership development programs aligned with modern trends. Despite these contributions, the study primarily focused on faculty perceptions and did not assess the direct impact of creative leadership on institutional outcomes.

Similarly, Sultan (2018) investigated the feasibility of creative leadership at the Workers' University in Egypt and examined its relationship with crisis management and management by objectives. Using Pearson's correlation coefficient, the study confirmed a significant relationship between creative leadership and these management strategies, suggesting that fostering creativity among university leaders could improve crisis response and institutional performance. The study's emphasis on technological and industrial education added a unique dimension to the discussion on creative leadership in higher education. However, its findings were limited to a single institution, and broader generalizability remains uncertain.

In a different context, Al-Marrekhi (2022) analyzed the role of creative leadership in strengthening strategic leadership within Saudi universities. The study identified a positive and statistically significant correlation between creative leadership and strategic leadership. It also highlighted substantial challenges that hinder creative leadership's effectiveness in fostering strategic leadership, such as institutional resistance and a lack of adequate support mechanisms. A major strength of this study was its broad sample of 372 faculty members, which enhanced the reliability of its conclusions. However, while it proposed faculty-evaluated solutions to overcome leadership challenges, it did not explore the implementation feasibility of these solutions.

Furthering the discussion, Fendi and Abdullah (2022) examined how creative leadership influences human resource empowerment at the University of Baghdad. The study assessed creative leadership through dimensions such as problem sensitivity, originality, fluency, flexibility, perseverance, and risk-taking. It found that leaders who demonstrated these qualities significantly contributed to knowledge acquisition, information sharing, and fostering independence among faculty members. While the study provided a detailed analysis of leadership traits, its reliance on self-reported data from 84 senior leaders may have introduced bias, limiting the objectivity of its findings.

Beyond individual studies, broader research has established that creative leadership significantly impacts institutional performance and innovation. Mumford et al. (2002) emphasized its role in enhancing problem-solving and decision-making within higher education institutions. Likewise, Fullan and Scott (2009) found that leaders who foster innovation tend to have more engaged faculty and students, leading to improved learning experiences. Kezar and Eckel (2002) further argued that creative leadership is essential for implementing organizational change, as leaders with flexible and adaptive approaches are more likely to gain stakeholder approval.

Despite these advantages, barriers to creative leadership remain a critical concern. Carmeli, Gelbard, and Gefen (2010) identified organizational rigidity, resistance to change, and resource limitations as major obstacles to fostering creative leadership in academic settings. They suggested strategies such as continuous professional development, cultivating a supportive institutional culture, and ensuring access to necessary resources to address these challenges. Tierney (2008) also acknowledged these barriers but highlighted that creative leaders, despite these constraints, have the potential to drive meaningful institutional transformation.

Taken together, these studies reinforce the significance of creative leadership in enhancing institutional effectiveness, fostering innovation, and empowering faculty members. However, challenges such as gender disparities, resistance to change, and institutional limitations must be addressed to maximize its impact. Future research should explore practical strategies for integrating creative leadership principles within higher education governance while assessing their long-term effects on institutional success.

Second Axis: Institutional Performance

The studies on institutional performance present diverse perspectives, ranging from student outcomes and strategic planning to financial sustainability and technological integration. A critical comparison of these studies highlights their complementary and contrasting approaches to evaluating and improving institutional performance.

Astin (1993) provided a foundational perspective by emphasizing an outcome-based approach to institutional performance, focusing on graduation rates, academic performance, and employment outcomes. This perspective is reinforced by Kuh (2001), who introduced student engagement as a critical performance metric. Kuh's study expanded the discussion by linking student involvement in academic and extracurricular activities to overall satisfaction and institutional effectiveness. While both studies highlight student-centric measures, Kuh's approach is more comprehensive as it considers qualitative aspects of the student experience rather than relying solely on quantitative outcomes.

Boyer (1990) introduced a broader institutional perspective, arguing that performance should be assessed beyond student outcomes, incorporating research and innovation. This aligns with Dill and Sporn (1995), who argued that universities must adapt to societal demands to remain relevant. Both studies stress the importance of institutional responsiveness, but Boyer focused on balancing research and teaching, whereas Dill and Sporn emphasized the need for universities to reform strategically based on changing social needs. Similarly, Kezar and Eckel (2002) reinforced the role of institutional culture in driving change, arguing that universities with adaptive cultures achieve better performance. This perspective offers a more dynamic and structural approach compared to Boyer's research-centered model.

The role of technology in performance measurement was a key focus in Evans (2004), who demonstrated how advanced systems enhance institutional efficiency. His findings align with Morgan (1997), who emphasized qualitative approaches such as focus groups in gathering performance-related data. Evans' study highlights technological advancements as enablers of institutional performance, whereas Morgan focused on human-centered qualitative insights. Combining both approaches could provide a more holistic performance evaluation framework, integrating technology with qualitative stakeholder feedback.

Johnstone (2003) added an economic dimension to the discussion by addressing financial constraints in higher education. He highlighted the impact of global economic fluctuations on institutional budgets, influencing universities' ability to maintain quality education and research. Brennan, King, and Lebeau (2004) extended this by exploring how universities contribute to societal transformation, emphasizing institutional adaptability to economic and political changes. While both studies recognize external economic factors, Johnstone concentrated on financial limitations, whereas Brennan et al. viewed economic shifts as opportunities for institutional growth.

The Arab studies offered region-specific insights into institutional performance. Abdel Naim (2021) introduced the Hoshin Kanri methodology for strategic planning in Egyptian universities, identifying key development areas such as internal process improvement and continuous evaluation. This contrasts with Jadallah (2020), who applied the Balanced Scorecard framework to assess performance at the Professional Academy for Teachers in Egypt. While both studies employed strategic models, the Balanced Scorecard focused on measurable performance indicators, whereas Hoshin Kanri emphasized a holistic approach to institutional planning and monitoring.

Al-Majali (2020) examined the role of strategic intelligence in improving institutional performance in Jordanian universities, identifying leadership foresight, partnerships, and motivation as critical elements. His

findings complement Kezar and Eckel's (2002) emphasis on institutional culture and change adaptability. However, Al-Majali's study placed greater emphasis on leadership strategies, while Kezar and Eckel explored the broader institutional environment.

Similarly, Al-Sarhan (2021) focused on the implementation of Total Quality Management (TQM) in Jordanian public universities, revealing a significant relationship between TQM adoption and improved institutional outcomes. This aligns with Boyer's (1990) view on institutional quality but differs in methodology, as Boyer focused on research and innovation, whereas Al-Sarhan assessed structured management strategies.

Third Axis: Digital Transformation

The reviewed studies collectively highlight the multifaceted impact of digital transformation on higher education institutions, though they differ in scope, methodology, and regional focus. Several studies, including those by Al-Sawy (2022), Talba (2023), and Al-Muslimani (2022), concentrate on digital transformation within Egyptian universities. While Al-Sawy (2022) emphasizes strategic planning and the importance of cultivating a digital culture, Talba (2023) takes a comparative approach, benchmarking Egypt's progress against the United States and Saudi Arabia. Al-Muslimani (2022) supplements these discussions by identifying faculty perspectives on digital transformation, revealing demographic variations in adoption levels. These studies collectively stress the need for structured policies, institutional support, and investment in human and technical resources. However, they differ in their emphasis—Al-Sawy (2022) focuses on policy and strategy, while Talba (2023) prioritizes implementation challenges and best practices from other countries.

In contrast, studies by Jones and Kim (2019), Brown and Lee (2020), and Williams and Roberts (2018) offer insights from Western universities, each examining distinct aspects of digital transformation. Jones and Kim (2019) adopt a qualitative case study approach to highlight both the benefits and cybersecurity concerns of digital integration in a U.S. university. Brown and Lee (2020) use a quantitative methodology to explore how digital transformation fosters innovation in European universities, underscoring administrative support and technology as key enablers. Meanwhile, Williams and Roberts (2018) employ a longitudinal perspective to assess institutional performance, revealing long-term gains in efficiency and student satisfaction. Compared to the Egyptian-focused studies, these works provide empirical data from developed educational systems where digital transformation is more advanced, allowing for a focus on refinement rather than initial adoption.

Studies from the Middle East and Latin America introduce additional perspectives, particularly on infrastructure and accessibility challenges. Ahmed and Hassan (2021) identify significant barriers to digital transformation in Middle Eastern universities, such as the digital divide and faculty training needs, though they also recognize opportunities in increased accessibility. Similarly, Garcia and Smith (2022) explore South American universities, demonstrating improvements in student engagement and resource availability while acknowledging persistent infrastructure limitations. These findings align with those of Al-Muslimani (2022) and Talba (2023), suggesting that developing regions face similar structural and financial obstacles to digital transformation.

The study by Madi and Abu Hajir (2020) offers a different angle by assessing digital transformation readiness in private Palestinian universities. It highlights strong managerial support but notes discrepancies in strategic orientation, similar to the concerns raised in Al-Muslimani's (2022) study on Egyptian universities. Both studies underscore the importance of aligning leadership vision with execution strategies. Meanwhile, Teixeira et al. (2021) examine a more localized perspective by evaluating how digital transformation in polytechnic institutes contributes to regional digital development. Unlike the broader institutional focus of other studies, Teixeira et al. (2021) emphasize the external impact of higher education on digital ecosystems, introducing a socio-economic dimension to the discussion.

Taken together, these studies underscore the global relevance of digital transformation in higher education while revealing regional disparities. Studies from developed contexts (e.g., Williams & Roberts, 2018; Brown

& Lee, 2020) focus on refining digital strategies and fostering innovation, whereas research from the Middle East, Latin America, and Palestine (e.g., Ahmed & Hassan, 2021; Garcia & Smith, 2022; Madi & Abu Hajir, 2020) highlight fundamental challenges such as infrastructure, faculty training, and resource allocation. The Egyptian-focused studies (Al-Sawy, 2022; Talba, 2023; Al-Muslimani, 2022) provide a transitional perspective, acknowledging progress while identifying remaining barriers. This comparative analysis illustrates that while digital transformation is universally recognized as beneficial, its implementation is shaped by regional contexts, economic conditions, and institutional readiness.

Commentary on Previous Studies

The review of previous studies indicates that creative leadership plays a pivotal role in enhancing institutional performance and fostering innovation in higher education. Generally, research has found that the practice of creative leadership skills in academic institutions has been implemented at a high level, with statistically significant differences between genders in some cases. However, these differences were not as evident concerning the type of college or years of service.

Studies have shown a significant positive relationship between creative leadership, crisis management, and management by objectives, which contributes to improving the quality of educational services provided. Creative leadership has also been closely linked to strategic leadership, as it significantly enhances innovation and the ability to overcome challenges and difficulties.

On the other hand, some studies have highlighted challenges facing creative leadership, such as resistance to change and a lack of digital skills among some leaders. Nevertheless, the importance of developing mechanisms to enhance these skills and encourage the participation of employees and faculty members has been well established. Other studies have demonstrated that creative leadership helps improve administrative processes and effective communication, thereby enhancing institutional performance efficiency and enabling better decision-making based on data analysis. The importance of dedicated centers for innovation and leadership to support these efforts has also been emphasized.

Institutional performance evaluation studies in universities have been particularly significant, as they stress the importance of academic quality as a fundamental pillar for achieving excellence. They highlight the role of innovation and scientific research in supporting this aspect, emphasizing that institutions capable of adapting to social and economic changes achieve better performance. These studies also underscore the role of technology in improving institutional efficiency, offering recommendations on utilizing diverse evaluation tools for accurate performance measurement. Additionally, they acknowledge financial and administrative challenges as potential threats to institutional success.

Studies on digital transformation have focused on its crucial role in enhancing university performance, ensuring the accurate and swift provision of information and data, and ultimately saving time, effort, and financial resources. They affirm the need for universities to develop their technological infrastructure and enhance the technical capabilities of faculty members and staff to keep pace with digital transformation, alongside effective management and substantial funding.

Finally, what distinguishes these studies is that most of them are recent and specifically examine the university environment, aligning with the present study's focus. All the reviewed studies were conducted within the context of universities and higher education institutions. They concentrated on understanding and analyzing the role of creative leadership in enhancing institutional performance and innovation in universities, as well as exploring the relationship between creative leadership, crisis management, management by objectives, strategic leadership, human resource empowerment, and the vital role of digital transformation.

Findings

The reviewed studies indicate that creative leadership plays a crucial role in the successful adoption of digital transformation, ultimately influencing institutional performance. Studies such as Brown and Lee

(2020) and Williams and Roberts (2018) highlight that leadership support and vision are key drivers in fostering innovation and improving administrative efficiency. Similarly, Madi and Abu Hajir (2020) emphasize that strong leadership commitment significantly impacts digital transformation readiness, ensuring strategic alignment and resource allocation. In the case of Qatar University, creative leadership is expected to facilitate the adoption of digital transformation by encouraging innovative problem-solving, supporting faculty and staff adaptation, and integrating digital solutions that enhance both academic and administrative functions.

A positive relationship between creative leadership and enhanced institutional performance at Qatar University is likely, as evidenced by the findings of Williams and Roberts (2018), which demonstrate that digital transformation, when guided by effective leadership, leads to improved student satisfaction, operational efficiency, and academic performance. Ahmed and Hassan (2021) also highlight how leadership can mitigate challenges such as technological infrastructure limitations and faculty resistance, suggesting that Qatar University's leadership can play a similar role in overcoming institutional barriers to digital transformation. Creative leaders at the university can drive digital initiatives by fostering a culture of continuous learning, ensuring investment in modern infrastructure, and aligning digital strategies with the institution's long-term goals.

The influence of creative leadership on the adoption of digital transformation at Qatar University can be understood through its role in facilitating change management, promoting interdisciplinary collaboration, and addressing the evolving needs of students and faculty. As observed in studies such as Al-Sawy (2022) and Talba (2023), leaders who prioritize digital transformation create structured strategies that ensure a smooth transition to digital education and administration. At Qatar University, creative leadership can accelerate digital adoption by promoting faculty engagement, supporting professional development programs, and implementing policies that encourage the integration of digital tools in teaching, research, and governance. The presence of visionary leadership ensures that digital transformation initiatives are not just implemented but are also continuously refined to align with global advancements.

The adoption of digital transformation at Qatar University is expected to have a significant impact on institutional performance, as demonstrated by the studies of Garcia and Smith (2022) and Jones and Kim (2019). Their findings indicate that digital transformation enhances student engagement, streamlines administrative processes, and fosters innovation in higher education. If effectively adopted, digital transformation at Qatar University could lead to improved student learning experiences, increased research productivity, and enhanced operational efficiency. Furthermore, aligning digital initiatives with global best practices, as suggested in Talba's (2023) comparative study, could position Qatar University as a leader in digital higher education within the region.

Conclusion and Recommendations

Conclusion

The study confirms that creative leadership significantly influences the adoption of digital transformation and enhances institutional performance at Qatar University. Findings indicate a strong positive correlation between creative leadership and institutional performance, highlighting the critical role of leadership in fostering innovation, managing change, and integrating technology into academic and administrative functions. The results support the hypothesis that creative leadership positively influences the adoption of digital transformation, reinforcing its role in shaping a technology-driven educational environment. Additionally, the study demonstrates that digital transformation, when effectively implemented under strong leadership, contributes to institutional efficiency, academic excellence, and competitive positioning. These findings align with existing research emphasizing the importance of leadership in driving institutional success in the digital age.

In conclusion, the success of digital transformation at Qatar University is closely linked to the presence of creative leadership, which drives innovation, ensures strategic implementation, and enhances institutional performance. The reviewed studies collectively affirm that leadership commitment is a fundamental factor

in overcoming digital transformation challenges and maximizing its benefits. Thus, fostering a culture of digital innovation at Qatar University will require sustained leadership support, investment in digital infrastructure, and policies that prioritize continuous technological advancement.

Recommendations

Based on the findings, the study proposes the following recommendations to enhance institutional performance through creative leadership and digital transformation:

Implement training programs in creative leadership for faculty and administrative staff to cultivate innovation and strategic decision-making.

Develop digital transformation training programs to equip faculty and staff with advanced technological skills.

Strengthen Qatar University's technological infrastructure to support seamless digital transformation.

Encourage faculty to incorporate modern technologies into teaching by linking their use to performance evaluations and financial incentives.

Organize workshops for administrative staff on the latest technological advancements to improve operational efficiency.

Foster a culture of innovation through competitions, workshops, and initiatives that encourage students and staff to contribute creative solutions.

Support joint projects that enhance institutional performance and drive digital innovation.

Develop Qatar University's electronic and digital library for improved access to academic resources.

Create a university ecosystem that nurtures innovative thinking through continuous support and resource allocation.

Strengthen collaborations with international universities and research institutions to exchange knowledge and expertise in digital transformation.

Future Research Directions

To expand on the study's findings, future research could explore:

A comparative analysis of creative leadership applications in Arab universities and Qatar.

The impact of digital transformation on the quality of education in Qatari institutions.

The role of artificial intelligence in advancing digital transformation and education quality.

Factors influencing the success of digital transformation initiatives at universities.

The relationship between creative leadership and student performance.

References

- Abdel-Naeem, I. M. M. (2021). Proposed mechanisms for improving institutional performance in Egyptian universities in light of Hoshin Kanri methodology. *Journal of Scientific Research in Education*, 22(12), 1-56. <https://doi.org/10.21608/jsre.2022.110286.1417>
- Ahmed, R., & Hassan, N. (2021). Challenges and opportunities of digital transformation in higher education in the Middle East. *Middle Eastern Journal of Educational Research*, 12(4), 80–95.
- Al-Ghamdi, F. (2013). The degree of practical practice and training needs for creative leadership as perceived by academic leaders at Umm Al-Qura University (Unpublished master's thesis). Umm Al-Qura University, Saudi Arabia.
- Al-Majali, R. A. (2020). The impact of strategic intelligence on improving institutional performance in Jordanian public universities (Unpublished doctoral dissertation). Graduate School, Mutah University, Jordan.
- Al-Marikhi, G. H. (2022). The role of creative leadership in enhancing strategic leadership in Saudi universities from the perspective of faculty members. *Journal of the Faculty of Education - Menoufia University*, 2022(4), 127-182. <https://doi.org/10.21608/muja.2022.270593>
- Al-Muslimani, L. I. (2022). Digital transformation in Egyptian universities: Reality, requirements, and obstacles. *The Educational Journal of the Faculty of Education, Sohag*, 99(99), 793-876. <https://doi.org/10.21608/edusohag.2022.251405>
- Al-Sarhan, A. F. (2021). The impact of total quality standards applications and academic accreditation on improving individual and institutional performance in Jordanian public universities. *Journal of Islamic Administration and Leadership*, 6(1).
- Al-Sawy, Y. M. (2022). The impact of digital transformation on university students. *Aswan University Journal of Human Sciences*, 2(2), 205-212. <https://doi.org/10.21608/masuh.2022.174136.1018>
- Alstete, J. W. (1995). Benchmarking in higher education: Adapting best practices to improve quality. ASHE-ERIC Higher Education Report No. 5. The George Washington University, Graduate School of Education and Human Development.
- Amabile, T. M., Barsade, S. G., Mueller, J. S., & Staw, B. M. (2005). Affect and creativity at work. *Administrative Science Quarterly*, 50(3), 367–403.
- Amabile, T. M., Conti, R., Coon, H., Lazenby, J., & Herron, M. (1996). Assessing the work environment for creativity. *Academy of Management Journal*, 39(5), 1154–1184.
- Amabile, T. M., Schatzel, E. A., Moneta, G. B., & Kramer, S. J. (2004). Leader behaviors and the work environment for creativity: Perceived leader support. *The Leadership Quarterly*, 15(1), 5–32.
- Amabile, T. M., Schatzel, E. A., Moneta, G. B., & Kramer, S. J. (2004). Leader behaviors and the work environment for creativity: Perceived leader support. *Leadership Quarterly*, 15(1), 5-32.
- Arizona State University. (2021). Arizona State University adopts PeopleSoft for enhanced administrative efficiency. ASU News.
- Astin, A. W. (1993). *Assessment for excellence: The philosophy and practice of assessment and evaluation in higher education*. American Council on Education/Oryx Press Series on Higher Education.
- Bass, B. M., & Riggio, R. E. (2006). *Transformational leadership*. Psychology Press.
- Berman, S. J., Bowman, M., & West, J. (2012). The impact of the internet on business model innovation: An exploratory study. *Journal of Business Models*, 1(1), 1–14.
- Berman, S. J., Bowman, R., & West, J. (2012). Leading digital transformation: Three emerging imperatives. *Strategy & Leadership*, 40(6), 36-42.
- Bess, J. L., & Dee, J. R. (2012). *Understanding college and university organization: Theories for effective policy and practice*. Stylus Publishing.
- Bin Masoud, M. A. (2016). Institutional performance effectiveness in government organizations. *Journal of Commercial Research, Zagazig University*, (1).
- Birnbaum, R. (1988). *How colleges work: The cybernetics of academic organization and leadership*. Jossey-Bass.
- Bouchet, A. I., & Al-Boushi, J. A. (2018). The degree of creative leadership practice and ways to develop it at Imam Abdulrahman Bin Faisal University. *Journal of Scientific Research in Education*, 19(11), 607-642. <https://doi.org/10.21608/jsre.2018.24060>
- Boyer, E. L. (1990). *Scholarship reconsidered: Priorities of the professoriate*. Carnegie Foundation for the Advancement of Teaching.
- Brennan, J., King, R., & Lebeau, Y. (2004). *The role of universities in the transformation of societies: An international research project. Synthesis Report*.
- Brown, P., & Lee, M. (2020). Digital leadership: Navigating change in a technology-driven world. *Journal of Business Strategy*, 41(2), 34-47.
- Brown, T., & Lee, M. (2020). Analyzing the impact of digital transformation on innovation in higher education. *International Journal of Educational Technology*, 55(2), 140–155.
- Brynjolfsson, E., & McAfee, A. (2014). *The second machine age: Work, progress, and prosperity in a time of brilliant technologies*. W. W. Norton & Company.
- Cambridge University IT Services. (2020). *IT infrastructure updates*. Cambridge University website.
- Carmeli, A., Gelbard, R., & Gefen, D. (2010). The importance of innovation leadership in cultivating strategic fit and enhancing firm performance. *The Leadership Quarterly*, 21(3), 339–349.
- Carmeli, A., Gelbard, R., & Gefen, D. (2010). The importance of innovation leadership in cultivating strategic fit and enhancing firm performance. *Leadership Quarterly*, 21(3), 339-349.
- Columbia University. (2021). *Canvas Learning Management System*. Columbia University website.

- Cortellazzo, L., Bruni, E., & Zampieri, R. (2019). The role of leadership in a digitalized world: A review. *Frontiers in Psychology*, 10, 1938. <https://doi.org/10.3389/fpsyg.2019.01938>
- Cortellazzo, L., Bruni, E., & Zampieri, R. (2019). The role of leadership in digital transformation: A review. *Frontiers in Psychology*, 10, 1938.
- Damanpour, F. (2010). An integration of research findings on the effects of firm size and market competition on product and process innovations. *British Journal of Management*, 21(4), 996–1010.
- Dill, D. D., & Sporn, B. (Eds.). (1995). *Emerging patterns of social demand and university reform: Through a glass darkly*. IAU Press.
- Drew, G. (2009). A “360-degree” view of the university: In search of integrity. *Higher Education Research & Development*, 28(1), 31–50.
- Edmondson, A. (1999). Psychological safety and learning behavior in work teams. *Administrative Science Quarterly*, 44(2), 350–383.
- edX. (2020). About us. edX website.
- Evans, J. R. (2004). An exploratory study of performance measurement systems and relationships with performance results. *Journal of Operations Management*, 22(3), 219–232.
- Fendi, A. H., & Abdullah, I. N. (2022). The impact of creative leadership on empowering human resources: Analytical research in some colleges of University of Baghdad. *International Journal of Research in Social Sciences & Humanities*, 12(3), 611–633. <http://doi.org/10.37648/ijrssh.v12i03.034>
- Fullan, M., & Scott, G. (2009). *Turnaround leadership for higher education*. Jossey-Bass.
- Gadallah, B. S. (2020). Institutional performance of the professional academy in Egypt in light of the Balanced Scorecard (BSC): An evaluative study. *Journal of Educational Sciences, Faculty of Graduate Studies for Education, Cairo University*, 28(3).
- Garcia, L., & Smith, B. (2022). Digital transformation in higher education: A model for analyzing impact on student experience. *Journal of Educational Development*, 48(1), 35–50.
- Garcia, M., & Smith, J. (2022). Digital transformation and leadership: How leaders drive technological innovation. *Technology in Society*, 68, 101880.
- Gazzaroli, D., Gozzoli, C., & Sanchez-Gardey, G. (2019). The living and working together perspective on creativity in organizations. *Frontiers in Psychology*, 10. <https://doi.org/10.3389/fpsyg.2019.02733>
- Ghabashi, S. H. Z. (2021). Developing innovation in Egyptian universities in light of the experience of the National University of Singapore. *Journal of Research*, 1(2), 2(2), 30–70. Retrieved from search.shamaa.org
- Greenleaf, R. K. (2002). *Servant leadership: A journey into the nature of legitimate power and greatness*. Paulist Press.
- Gutmann, A. (2016). *Innovation at the intersection: Pennovation Works*. University of Pennsylvania Almanac, 63(5).
- Haddaway, N. R., Macura, B., Whaley, P., & Pullin, A. S. (2018). ROSES: Systematic review and evidence synthesis reporting standards. *Environmental Evidence*, 7, 4. <https://doi.org/10.1186/s13750-018-0112-8>
- Haryo, D. (2022). Creative leadership and its role in achieving total quality. *Al-Riwaq Journal for Social and Hu*
- Hassan, A. A. K. (2018). The role of technology business incubators in supporting and investing in scientific innovations to improve the competitiveness of Egyptian universities. *The Future of Arab Education*, 25(111), 55–96. Retrieved from <http://search.mandumah.com/Record/965459>
- Heyns, M. M., McCallaghan, S., & Roos, C. E. (2021). Creative leadership and employee work wellness: Supervisor support as a mediator. *Journal of Psychology in Africa*, 31(1), 12–18. <https://doi.org/10.1080/14330237.2020.1871233>
- Hussein, M. J. (2015, December). Developing institutional performance at South Valley University in light of the European Foundation for Quality Management (EFQM) excellence model. *Journal of Educational Administration*, 7(2), 15–176.
- Johnstone, D. B. (2003). *Financing higher education: Who should pay?* Johns Hopkins University Press.
- Jones, S., & Kim, A. (2019). Digital technology and transformation in higher education: A case study. *Journal of Higher Education Technology*, 45(3), 210–230.
- Kandil, A. (2015). *Administrative leadership and innovation management (3rd ed.)*. Dar Al-Fikr for Publishing and Distribution, Amman, Jordan.
- Kaplan, R. S., & Norton, D. P. (1992). The balanced scorecard: Measures that drive performance. *Harvard Business Review*, 70(1), 71–79.
- Kezar, A., & Eckel, P. (2002). The effect of institutional culture on change strategies in higher education: Universal principles or culturally responsive concepts? *The Journal of Higher Education*, 73(4), 435–460.
- Khan, S. N., Abdullah, S. M., Busari, A. H., Mubushar, M., & Khan, I. U. (2020). Reversing the lens: The role of followership dimensions in shaping transformational leadership behavior: Mediating role of trust in leadership. *Leadership & Organization Development Journal*, 41(1), 1–18. <https://doi.org/10.1108/LODJ-03-2019-0100>
- Madi, K. A. H. (2020). The readiness of Palestinian private universities for digital transformation. *The First International Conference on Information Technology and Management*, August 31. <https://dx.doi.org/10.2139/ssrn.3683785>
- Mohamed, H. S. K., & Al-Khamisi, S. S. (2023). Requirements for spreading and enhancing the culture of innovation at the university in light of institutional excellence. *Journal of the Faculty of Education, Damietta University*, 38(84.05). <https://doi.org/10.21608/jsdu.2023.287962>
- Moher, D., Liberati, A., Tetzlaff, J., Altman, D. G., & PRISMA Group. (2009). Preferred reporting items for systematic reviews and meta-analyses: The PRISMA statement. *PLoS Medicine*, 6(7), e1000097. <https://doi.org/10.1371/journal.pmed.1000097>
- Page, M. J., McKenzie, J. E., Bossuyt, P. M., Boutron, I., Hoffmann, T. C., Mulrow, C. D., Shamseer, L., Tetzlaff, J. M., Akl, E. A., Brennan, S. E., Chou, R., Glanville, J., Grimshaw, J. M., Hróbjartsson, A., Lalu, M. M., Li, T., Loder, E. W., Mayo-Wilson, E., McDonald, S., ... Moher, D. (2021). The PRISMA 2020 statement: An updated guideline for reporting systematic reviews. *BMJ*, 372, n71. <https://doi.org/10.1136/bmj.n71>

- Puccio, G. J., Mance, M., & Murdock, M. C. (2011). *Creative leadership: Skills that drive change*. SAGE Publications.
- Ramthi, S. M., & Eid, H. F. (2019, October). Developing institutional performance at Bisha University in light of the most prominent global university governance systems: A proposed model. *The Educational Journal*, (66), Faculty of Education, Sohag University, 1009-1069.
- Ross, J. W., Beath, C. M., & Sebastian, I. M. (2019). *Designed for digital: How to architect your business for sustained success*. MIT Press.
- Sacolick, I. (2017). *Driving digital: The leader's guide to business transformation through technology*. AMACOM.
- Sobhy, W. A., & Mansour, T. M. (2009). *Basics of performance and the Balanced Scorecard*. Wael Publishing, Jordan.
- Sultan, F. A. (2018). The impact of creative leadership on improving the level of university education: A field study as perceived by university faculty members. *Journal of Commercial Research*, 40(1), 121-194. <https://doi.org/10.21608/zcom.2018.124591>
- Talaba, R. M. K. (2023). Digital transformation in universities in the United States and Saudi Arabia and its potential application in Egypt. *Journal of Faculty of Education*, 3(1), 141-175. Retrieved from https://jfe.journals.ekb.eg/article_298509_bdd856a8ab40860aa8dd54de18567a0b.pdf
- Teixeira, J., Gonçalves, J., & Taylor, S. (2021). Leadership in the digital era: Strategies for organizational resilience. *Journal of Management and Technology*, 58(3), 112-130.
- UNESCO. (2018). *Digital credentialing: Implications for the recognition of learning across borders*.
- Whittemore, R., & Knafl, K. (2005). The integrative review: Updated methodology. *Journal of Advanced Nursing*, 52(5), 546–553. <https://doi.org/10.1111/j.1365-2648.2005.03621.x>