

# The Affect of Digital Transformation on Leadership in Shariah Bank: A Literature Review

**Nila Astiti**

Department of Management  
Faculty of Economics and Business  
Padjajaran University  
Bandung, Indonesia  
[nila20004@mail.unpad.ac.id](mailto:nila20004@mail.unpad.ac.id)

**Yudi Ahmad Faisal**

Department of Management  
Faculty of Economics and Business  
Padjajaran University  
Bandung, Indonesia  
[yudi.ahmad@unpad.ac.id](mailto:yudi.ahmad@unpad.ac.id)

## Abstract

In this paper, the literature on digital transformation and leadership in Shariah Bank was surveyed. The aim derived from doing the relevant literature review is to develop a research model to guide empirical studies. Shariah bank has comparative advantages compared to the conventional bank which is presented by the unique product, different structure, and different concept. Shariah bank has unique products such as products without riba which is defined as interest, investment prohibits goods or services that are contrary to shariah laws. The financial transaction in shariah bank demand that risk must be shared. The symmetrical risk and return distribution on participants must be applied. All activities in shariah bank must be monitored and advised by a board of shariah experts to ensure shariah bank activities are in line with shariah laws. Eventhough have comparative advantages, in reality, shariah bank can not be a leader in the banking market compared to conventional bank. In terms of total assets, market share, literacy, and inclusion index, shariah bank still left behind the conventional bank. In the digital area, eventhough shariah banks already have digital banks but overall in the competition of digital banks, the conventional bank still stays ahead compared to shariah banks. This study describes and analyzes this phenomenon from the source factor of competitive advantage of shariah bank which are digital transformation and leadership. The phenomenon of leadership in shariah bank can be shown through the composition of the board of directors in shariah bank. Most shariah bank BOD is from the conventional bank which impacted the decision or business strategy of shariah bank. To investigate these phenomena, this study collects and analyzes the issues from literature (research journal, models, concept, and theory). The result of this literature review demonstrates a significant relationship between digital transformation and leadership as the source of competitive advantage in shariah bank. As for originality this paper as the best of authors' knowledge that the study on digital transformation in shariah bank is limited.

## Keywords

Digital Transformation, Leadership, Competitive Advantage, Shariah Bank, Islamic Bank

## 1. Introduction

The Covid-19 pandemic has changed the shariah bank business landscape due to customer behavior change. Shariah bank was pushed to operate in new services and processes by accelerating digital transformation. Digital transformation has many impacts and effects on not only the internal process but also the environment. The change of speed, the uncertainty, and the complexity of digital transformation need continuous adaption and implementation. Factors that influence the process of adaption and implementation are the integration process between company strategy and technology, leadership and education, infrastructure, and organizational culture (McDermott and Stock

1999). Leadership is required to drive the transformation. The skills required to have by leadership in the digital transformation process are digital competence skills, a key skill to face change management, digital-savvy skills, and how to integrate technology with relevant aspects in the firm (Verhoef et al. 2021).

Leadership is a key enable to support the successful digital transformation. In addition, there are two main areas of leadership. First, end to end process of digital transformation. Second, the competencies (Imran et al. 2021). In addition, Imran et al. (2021) provide the framework of leadership to achieve performance outcomes to support the implementation of digital transformation.

While Berman (2012) notes that employees' participation in online forums can bring a range of opinions into the organization and generate conducive ground for creativity and business growth in a company where business executives lead by example.

Transformation means the cumulative activity was done by the firm when involved with new technologies which in digital transformation, the new technologies are mobile analytics, cloud computing, and the Internet of Things (IoT). Digital transformation is a complex process that has a failure risk. As mentioned by Sailer et al., (2019) the failure rate of digital transformation is 60%-85. Hence further investigation is required to determine the factors that relate to and create success for the digital transformation process. Referring to Sociotechnical System Theory (STS) as described by Imran et al. (2021) that digital transformation can be influenced by two factors: technical system and social factors. Technical systems refer to digital technologies for example big data, social media/digital platforms, IoT, cloud computing. The social system refers to human activity related (organizational structure, target achievement, culture, people)

Moreover, new ICT (Information, Communication, and Technology), known as digital technologies, support digitally enable organizations that increasingly provide huge growth opportunities. Deployment of ICT systems empowered digital enterprises which incorporate three important technologies, (1)virtualization platforms, such as cloud technology, (2) mobility technologies such as social media, Internet - Of - Things, and (3) detailed analytics systems such as big data (Loonam et al. 2018).

## 1.1 Objectives

Previous literature has linked digital transformation and leadership (Imran et al. 2021) however, it was a separate discussion. A lack of literature discusses the impact of digital transformation on leadership in shariah bank. This study conducts and investigates the impact of leadership on the digital transformation process in shariah bank. A conceptual framework will be built by reviewing literature linked to two variables: digital transformation and leadership.

Through a systematic review, we collect related literature, review, summarize, and synthesize the concept, the method, and the finding from each literature. The result of the systematic review is the dimensions to be used as measurement tools to create the framework

## 2. Literature Review

### *Digital Transformation*

According to Fitzgerald et al. (2013), digital information can be referred to as new digital technology to enable major company gains

Berman (2012) discovered if firms want to undertake digital business model transformation then the firm should employ four essential themes: strategy centricity, customer centricity, organization centricity, and technology centricity. Meanwhile, Matt, Hess, and Benlian (2015) elaborated Digital Transformation Strategies into four dimensions: the application of technology, changes in value generation, fundamental changes, and financial matters. In addition, Porfirio et al. (2021) believe that a digital strategic plan is a collaborative effort total of strategic activities in Leaders' decisions to use existing infrastructures promote advances in information systems (IS) and information technology (IT).

According to management, Westerman (2016) said that the character of management is being transformed by three technological forces, namely (1) Automation where companies are increasingly able to complete tasks without the involvement of humans. (2) Data and experimentation are used to enhance intuition and experience in data-driven

management. (3) Resource fluidity links duties to the individuals who can best execute them, either inside or outside of the business. However, for a traditional company, these three technological forces might have a negative impact on management.

Furthermore Fitzgerald et al. (2013) stated that in recent years, the phenomenon of digitalization has been described in the context of digital transformation in utilized managerial literature, with the definition of digital transformation as "the use of new digital technologies (social media, mobile, analytics, or embedded devices) to enable major business improvements (such as improving customer experience, streamlining operations, or creating new products)."

### ***Leadership***

According to Iriqat and Khalaf (2017) when new technology is implemented in a business, it causes shifts in thinking, direction, and business performance. E-leadership and virtual teams are two new ideas. E-leadership is defined as a technologically mediated social influence procedure. E-leadership is intended to influence receivers' performance, attitude, emotions, and behavior to help them achieve a corporate goal. As a result, Iriqat and Khalaf (2017) stated in their research that e-leadership have a strong relationship with organizational commitment which is described in six different dimensions Envision, Engage, Energize, Empower, Execute, and Elastic

While Westerman (2016) state that leaders in every industry should aim to transform all aspect of their firm in this digital innovation period, from customer experience to operational management and also business models

Top management is in charge of getting things started. Organizational changes must be persuaded of the importance of the necessity as well as the advantages of change. As a result of this, executives in organizations adopt digital transformation initiatives just to get away from incumbent routines and paradigms, as well as competing to run a digital corporation. It would be impossible to achieve without a leader who creates the foundation for digital transformation and pushes stakeholders to take action. (Sainger 2018).

## **3. Methods**

We conduct this literature review following guidance from Ridley (2012) in three big stages: Searching, Reading, and Writing. To summarize the literature review process, research questions are developed. Finding past research in the field, Investigating concepts related to the subject, Recognizing theories, terms, ideas, policy, and methods Creating themes and categories for reading, Choosing a title and heading for the literature review, Writing and revising any review drafts, Extending that argument: Identifying sources to back up each phase of the case, Justifying the research problem or subject to be studied, Taking notes, summarizing, and informal writing

Keywords used in searching the web are variable as the focus in this research: "digital transformation", "leadership", "digital transformation and leadership", and "shariah bank". Time of searching web was limited for the latest ten years (2011-2021) of research that represented in the journal. The searching web used Google Scholar found 67 articles. We do further analyze and filter from 67 to 30 which for 37 are excluded based on related topic, the similarity idea, and how far the author analyzes and discusses digital transformation, digital transforming capability, and leadership.

## **4. Results and Discussion**

### ***4.1. Relationship between leadership and digital transformation***

Leadership is a key to enabling and has power for the effective digital transformation process. We have found some researchers have looked into the impact of leadership on the digital transformation process. However, despite rising most people recognize the need for digital transformation, most firms are still struggling to see measurable new technology commercial advantage. Both the management approach and the relevant experience cannot properly drive technological transformation. The firm leaders may face difficulties with new technology eventhough they have shown their ability to use technology efficiently. (Fitzgerald et al. 2013)

Several relevant research on the relationship between leadership and digital transformation are presented in this study as Tabel 1 below :

Table 1. List of research findings related to Leadership

NO	TITLE & AUTHOR	FINDINGS
1	Digital Transformation of Industrial Organizations: Toward an Integrated Framework (Imran et al. 2021)	Indicating Leadership, structure, and culture are critical enablers of digital change. Provide a framework for each factor that impacts digital transformation and highlight the need for the social and technical system to support the digital transformation process.
2	Using E-Leadership as a Strategic Tool in Enhancing Organizational Commitment of Virtual Teams in Foreign Commercial Banks in North West Bank -Palestine (Iriqat and Khalaf 2017)	The resulting e-leadership and its six aspects have a strong positive correlation with organizational commitment in the virtual team as part of the digital transformation phase.
3	Leadership characteristics and digital transformation (Porfirio et al. 2021)	Analyzing firm and management characteristics to support the Digital Transformation process. Identifying the role of leadership particularly for the management alignment with the company's objective to develop digital transformation phases
4	Effects of Leadership and Psychological Climate on Organizational Commitment in the Digitization Era (KAWIANA et al. 2021)	Analyzing the impact of leadership on organizational commitment in the digital area as part of the digital transformation process.
5	Leadership matters in crisis-induced digital transformation: how to lead service employees effectively during the COVID-19 pandemic (Bartsch et al. 2021)	Studying leadership effectiveness concerning employee's job performance in the virtual environment as part of digital transformation in the epidemic of COVID-19 The results demonstrated that maintaining service personnel's job performance in a virtual environment under crisis scenarios necessitated task-oriented and relation-oriented leadership behavior.
6	Rapid Adaptation in Digital Transformation: A Participatory Process for Engaging IS and Business Leaders (Hansen and Mathiassen 2011)	Explaining how the leaders from 2 companies were involved in the process, and making ideas for how other organizations might leverage the Participatory Process Model (PPM) to quickly modify their digital transformation strategies through more effective IS leadership positions
7	Towards SMEs' digital transformation: The role of agile leadership and strategic flexibility an empirical study from Indonesia and Malaysia (Fachrunnisa et al. 2020)	The purpose of this research is to determine how the digital revolution affects SMEs among ASEAN countries can be supported by agile leadership and firms' strategic flexibility
8	Viewing Digital Transformation through the Lens of Transformational Leadership (Philip 2021)	This study analyzes how external crises and occurrences may drive the firm to change, either voluntarily or aggressively. This study suggests two classifications for planned and forced digital transformation, which the firm leaders must identify and use TLB dimensions for effective transformations.
9	Indonesian Sharia Banking Law Politics Through	The aim of this study is to analyze the mergers process and impact of digitalization of Islamic banking in Indonesia. One of the result is the

NO	TITLE & AUTHOR	FINDINGS
	Mergers and Digitalization of Sharia Banking (Azizah 2021)	optimal management of the quality of human resources as part of business model strengthening in Industrial Era 4.0.

Besides the findings as summarized in Table 1, the study also focuses on what dimension of leadership to build the model or framework. From table 2, the dimension was described as the result of a review of the literature related to leadership.

Table 2. Dimension of Leadership

NO	AUTHOR	DIMENSION
1	Imran et al. (2021)	Leadership role, Competencies, Performance outcomes
2	Iriqat and Khalaf (2017)	Envision, engage, energize, empower, execute, and elastic
3	Porfirio et al. (2021)	Type of firm, Size, sales, leader, mission, strategic
4	KAWIANA et al. (2021)	Ideal behavior, motivational inspiration, intellectual stimulants, individual considerations, ideal attributes
5	Bartsch et al. (2021)	ELB(enable leadership behavior), MLB (Management leadership behavior), individual job autonomy, individual job tension, teamwork tension, individual work performance, digital maturity
6	Hansen and Mathiassen (2011)	The dimensions to measure IS leader role are strategic decision-making authority and leadership capability.
7	Fachrunnisa et al. (2020)	Share responsibility, effective decision making and problem-solving ability, adaptable system, and flexible framework
8	Philip (2021)	satisfaction, commitment to the organization, ability to identify, individual achievement

## 4.2. Proposed Improvements

### *Proposed theoretical model*

By offering a theoretical model of digital information and leadership, this literature review gives a study scope viewpoint. The model was developed by merging data from the literature review and summarizing the concentration and purpose of research from the literature from 2011 to 2021 in terms of leadership and customer experience to be used as the independent variable to support digital transformation (Purwanto et al. 2021).

Digital transformation is all about change. This study provides the opinion that leadership has an important role to serve as an innovator to support the digital transformation process in the organization and to prepare the readiness of the organization for these changes. The relationship between leadership and digital information is described in Figure 1.

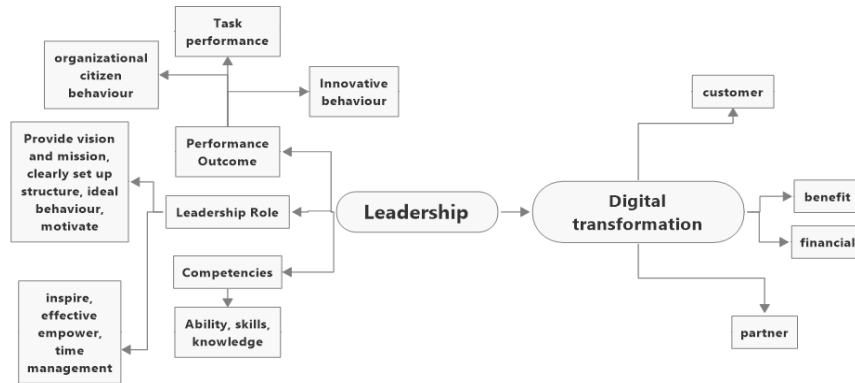


Figure 1. The Theoretical Model of Digital Transformation

Furthermore, this study provides the third proposition as detailed below.

**First Proposition:** Leadership in the firm can be built through three-view dimensions namely: Leadership role, competencies, performance outcome

A leadership dimension was constructed from three perspectives based on a theoretical model developed by an examination of the literature. The first dimension is based on leadership roles, with leadership roles defined as the ability to provide a vision and mission, clearly set up the organizational structure, demonstrate ideal behavior, motivate, inspire, effective delegation/ empowerment, and effective time management (Imran et al.,2021; Iriqat and Khalaf, 2017; Porfrio et al.,2021; The second dimension is driven by competencies where the leadership competencies are a set of ability, skills and knowledge that represent effective leadership within an organization (Wren and Dulewicz, 2005) such as Competencies for leading people, self-leadership, and strong leadership ((SHRM) 2008), Imran et al.,2021; Iriqat and Khalaf, 2017; Porfrio et al.,2021; KAWIANA et al.,2021; Bartsch et al.,2021; Hansen and Mathiassen,2011; Fachrunnisa et al.,2020; Philip,2021. Moreover, the third dimension is based on the achievement of the leader where leader performance outcomes are Task performance (TP), Organizational citizenship behavior (OCB), Innovative behavior (IB) (Imran et al.,2021; Porfrio et al.,2021; Bartsch et al.,2021; Hansen and Mathiassen,2011; Fachrunnisa et al.,2020; Philip,2021

**Second Proposition:** Digital transformation in the firm is determined by leadership

Several previous research explained the relationship between leadership and digital transformation, as shown in Table 1. These studies all concur that leadership can be used to predict the effectiveness of the digital transformation process. They agree that leadership is a key enabler of digital transformation. Digital transformation opens up new possibilities for the firm with innovative processes and products, better methods of working, and a new business model. However digital transformation possibly failed due to the firms placing too much emphasis on technology and not focusing on people. In this study, the literature shows how to approach digital transformation by uniting leadership and the digital transformation process.

**Third Proposition:** Digital transformation in the firm can be developed through four view dimensions namely: customer, benefit, partner, financial

According to Schallmo, Williams, and Boardman (2017), digital transformation of business models can be divided into four categories: customer (segments, customer channels, customer relationship), advantage (product, services, values), value added (resources, skills, and process), partner (partner channels, partner relations), and financial (revenues and expenses). According to D. R. A. Schallmo and Williams (2018), the DT degree comprises both incremental (marginal) and radical (fundamental) changes in a business model. Time, money, space, and quality are all impacted dimensions.

## 5. Conclusion

This study has reviewed the last ten years' research about digital transformation and leadership. From the systematic literature review, we identify how far leadership has a relationship and impact on the digital transformation process. Specifically, we have proposed a theoretical model in the scope and conceptualization by presenting dimensions for each variable (digital transformation and leadership)

Due to the amount of literature that we found and examined, This study examines how firms organize and manage their digital transformation through a multiple-case study. . The findings offer insight on the most significant social components in terms of leadership play a crucial role in incumbent firms' digital transition. The findings shed more light on how each identified social factor contributes to the achievement of performance outcomes for effective digital transformation. In the end, this research presents a comprehensive framework to start digital transformation journeys.

It is also worth noting that this study has limitations. The study only analyzes one variable that impacts to digital transformation process which needs more empirical studies to get a better result. An additional interview is also suggested for future research. Furthermore, we call for further studies to investigate other variables such as culture, structure, combined with leadership, and customer experience.

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