

# The Role of Governance of Digital Transformation on Improving Small Enterprises' Performance in Saudi Arabia

Dr. Nahla Al-Nour Muhammad Al-Makki, Dr.Amina Mohammed Solyman  
Hussein

Assistant Professor, Department of Applied Accounting, Applied College, King Khalid,  
University, Saudi Arabia

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## Abstract

The study investigated the role of governance of digital transformation on improving small enterprises' performance in the Kingdom of Saudi Arabia. The study aimed to study the characteristics of governance of digital transformation and the enhancement of performance efficiency of small enterprises and to investigate the toolkit of applying the governance of digital transformation and their impact on performance efficiency of small enterprises and to investigate the digital governance in small enterprises and its relationship with performance improvement. The study problem was represented in that small enterprises face a decline in performance levels, increase in production cost and lack of continuity, excellence and creativity in performance. The study significance rises from the importance of investigating the digital governance and its role in improving small enterprises' performance. The study significance is also represented in the importance of investigating the characteristics of governance of digital transformation, the enhancement of performance efficiency of small enterprises and investigating the toolkit of applying the governance of digital transformation and its impact on small enterprises' performance efficiency. The study adopted the Statistical Package for Social Science (SPSS) to test the hypotheses: There is a statistically significant relationship between digital governance and the reduction of challenges facing small enterprises. There is a statistically significant relationship between the characteristics of governance of digital transformation and the enhancement of performance efficiency of small enterprises. The study concluded that there is a statistically significant relationship between digital governance and the reduction of challenges facing small enterprises. There is a statistically significant relationship between the characteristics of governance of digital transformation and the enhancement of performance efficiency of small enterprises.

**Keywords:** Digital transformation, small enterprises' performance.

## 1. Introduction

Digital transformation enables to create new business considering the surrounding environment and thinking of its insufficiency through gathering accumulated experience related and then coordinating it and identifies the priorities such as the taxi experience "Ober". Thus, the digital

transformation provides great potential for building effective and competitive sustainable communities through achieving radical change in services of various parties consumers, employees and users, improving their experience and productivity through a process chain appropriate and accompanied with formulating procedures necessary for the activation and execution.

Digital transformation also enables to improve the efficiency, reduce spending and to apply new service quickly and flexibly. Today, digital transformation represents a challenge for institutions to turn to intelligent adoption of technology and investigate the impact of new business models on their activities.

Institutions intelligence will challenge how to build and operate technology and its infrastructure as one of the factors that identifies their future. There are companies deteriorated because they to keep up pace with digital transformation. Hence, institutions today face many options of access in their industry as well as inevitability of investing in digital transformation starting at using a natural interactive language and finding new ways of communication finishing at building artificial intelligence that provides consultancy and feedback (Mohammed Shalan, 2016).

### Study problem

The neglance of applying the toolkit of digital governance and information technology led to that small enterprises face a decline in performance levels (rates), increase in production cost and lack of continuity, excellence and creativity in performance. Aseel Almwagida (2019) pointed out that there is a relationship between information technology and performance as there is a strong correlation between them. This means that the change in performance results from changes in information technology in electronic business organizations. This means that information technology has an impact on supporting performance in electronic business organizations. Organizations increasingly execute their commercial works through their own information technology and hence organizations' works become electronic. This gives organizations significance in terms of achieving an actual time in performing works, quick communication and low production cost and helping organization grow, identifying new markets and outperforming their competitors (Bi et al, 2017).

### Study hypotheses

The study tests the following hypotheses:

1. There is a statistically significant relationship between the characteristics of governance of digital transformation and enhancing performance efficiency of small enterprises.
2. There is a statistically significant relationship between the toolkit of applying the governance of digital transformation and the performance efficiency of small enterprises.
3. There is a statistically significant relationship between the digital governance and the reduction of challenges facing small enterprises.

## Study objectives

The study aims to investigate the characteristics of governance of digital transformation and their relationship with the enhancement of performance efficiency of small enterprises. The study also aims to investigate the toolkit of applying the governance of digital transformation and their impact on the performance efficiency of small enterprises. It also aims to study the digital governance in small enterprises and its relationship with the improvement of performance.

## Study significance

The study significance is represented in the following: The importance of investigating the digital governance and its role on improving the performance of small enterprises, the importance of investigating the characteristics of governance of digital transformation and the enhancement of small enterprises performance and studying the toolkit of applying the governance of digital transformation and their impact on the performance efficiency of small enterprises.

## 2. Literature review

### 2.1 Previous studies

Wahba (2023) study investigated the digital transformation and its relationship with the digital government and financial reporting to achieve the sustainable development. The study aimed to identify the impact of using the toolkit of digital transformation on governance process and their impact on the sustainable development. The study adopted the Statistical Package for social Science (SPSS) in the data analysis. The study concluded that there is positive impact of using the toolkit of digital transformation on the governance. There is a positive impact on information quality of the financial reporting issued by institutions as result of using the toolkit of digital transformation. also, there is a positive impact on the sustainable development process as result of the quality digital governance process and the quality of financial reporting.

Rashwan & Abu Arab (2022) study investigated the role of digital transformation on improving the quality of internal auditing quality. the study aimed to identify the role of digital transformation on improving the quality of internal auditing. The study adopted the Statistical Package for social Science (SPSS) in the data analysis. The study concluded that using digital transformation contributes to ensuring the quality of internal auditor's performance and ability to use electronic data to facilitate performing and executing the auditing process very accurately and this makes significant changes in organizing and planning the auditing process very accurately.

Alalaga Rahli (2022) study investigated the impact of digital transformation on improving the quality of financial reporting. The study aimed to investigate the impact of digital transformation on improving the quality of financial reporting. The study adopted the Statistical Package for social Science (SPSS) in the data analysis. The study concluded that digital transformation responds to the needs of various stakeholders and cope pace of their expectations in agreement with the technological development and potential available. Digital transformation imposes on

institutions to benefit from modern technologies so as to be more aware and flexible in working and more predictable in planning for the future.

## 2.2 Theoretical framework

### 2.2.1 Digital governance:

Digital governance is one of means and methods on which institutions depend to ensure continuity under an environment that is characterized by technological development and riskiness and unstableness. Institutions became committed to ensure good governance for their structures by emphasizing the commitment to controlling policies and procedures to achieve better performance levels. Control, developing performance level, improving administrative decisions, Simplifying procedures, optimal employing human capital and experience through information technology contribute to developing many procedures and changes in the organization especially organizational structure, commercial process and organization management as a whole. Training employees on using information technology ensures achieving effective performance standards the organization attempts to achieve (Alarabi, 2012).

Allami (2013) study emphasized that experience is one of most important information technology components as the human resource is responsible for control managing and operating the other components. An organization's superiority is measured by information, experience and skills it owns in applying information technology. Some people called them competitive assets , other named them intelligent assets while third described them intangible assets (Alalaga Rahli, 2022).

### 2.2.2 Characteristics of digital transformation governance & enhancement of small enterprises performance efficiency:

Governance of digital transformation has characteristics that are significant in enhancing performance efficiency of small enterprises including:

1. Digital transformation responds to the needs of various stakeholders and cope pace with their expectations compatibly to the technological development and potential available.
2. Digital transformation imposes institutions benefit from modern technologies so as to be more aware and flexible in working and more able to predict and plan for the future.
3. Enable to innovate and adapt quickly to achieve the desired results and success.
4. Digital transformation support digital transformation transition process from one state to another in a linear, periodic, ascending or regressive which requires a space in which to move and a time in which to accomplish that transformation and transition. Thus, digital transformation has a beginning and stages in which it develops while the interactive relationships between the driving elements, whether internal or external, are followed up.

### 2.2.3 Toolkit of applying governance of digital transformation and their impact on performance efficiency of small enterprises:

Governance of digital transformation is performed through applying governance on technology, data, human resource and process.

**Technology:** Governance is built using a system of devices, data, storing, software that operate within technological environments and information centers that allow to use all assets at an operating efficiency unbrokenly. It also requires ensuring a service level that suits the institution employees and customers and suppliers through professional teams responsible for managing the technological system and infrastructure of the network whether the system local or cloud. (Afthanorhan, 2013).

**Data:** Institutions have to exert effort on governing, managing and analyzing data regularly and effectively in order to provide full quality trusted data as well as to provide and develop tools appropriate to statistical analysis and to search data and predict the future. The data should be followed-up continuously to ensure its continuous flow and benefit from it in agreement with the institution's objectives and expectations.

**Human resources:** Human resources represents a vital aspect without which institutions can not apply governance of digital transformation. There should be employees qualified and able to use and analyze data for effective decision making. Planning and execution of visions requires human competencies and scientific and practical expertise with believe in change and development.

**Process:** Institutions should establish an effective technological infrastructure that allow to develop performance on both internal and external aspects in order to ensure the optimal applying digital transformation including establishing technological infrastructure of policies and procedures that cover all of organization's activities and processes correlated with the technology necessary and applications developed and data processed (Alaeddini, 2013).

The researcher believes that the toolkit of digital governance has a positive impact on the performance efficiency of small enterprises.

There are challenges that face applying digital governance in small enterprises:

1. They do not set strategic objectives for digital transformation.
2. They do not plan well for change period.
3. There is an internal opposition by employees and managers' opinions are contradicted.
4. Insufficiency of modern technology.
5. There is no attention given to the fulfillment of customers' needs.
6. There is cultural opposition.

### 3. Study methodology

#### 3.1 Study method and tools

The analytical descriptive approach was used to identify the relationship between the study variable represented in (governance of digital transformation, small enterprises' performance). A questionnaire was designed as study tool for data collection. The validity and reliability of the tool was confirmed using the Cronbach Scale. The Statistical Package of Social Science (SPSS) was adopted using the regression analysis to identify the relationship between the study variables.

#### 3.2 Study population

The population of the study consisted of a number of the small projects operating in the city of Khamis Mushait.

#### 3.3 Study sample

The study sample was randomly selected of (53) employees who work in the small projects in the city of Khamis Mushait. A questionnaire was distributed to the study sample individuals and then their answers were collected.

#### 3.4 Study tools

Primary studies: They include a field study and a questionnaire.

Secondary studies: They include previous studies, books, periodicals, blogs, the Internet.

#### 3.5 Study limits

Spatial limits: Khamis Mushait city.

Time limits: 2024.

### 4. Study results

#### 4.1 Statistical tools used in the analysis

Table (1): Five-point Likert scale

Classification	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
Degree	5	4	3	2	1

Source: prepared by the researcher based on the study field data using SPSS-2023

The table (1) according to the Five-point Likert scale above shows that

the hypothesized mean is  $\frac{1+2+3+4+5}{5} = 3$ .

#### 4.2 Descriptive analysis of the questionnaire statements

Hypothesis one: There is a statistically significant relationship between the characteristics of digital transformation and the enhancement of small enterprises' performance.

Table (2): frequency and percentage distribution of the respondents' answers for the hypothesis statements

Statements	Strongly agree	Agree	Neutral	Disagree	Strongly disagree	Mean
Digital transformation responds to stakeholders' various needs continuously.	22 41.51%	19 35.85%	11 20.75%	1 1.89%	0 0.00%	٤,٣١
Governance of digital transformation imposes institutions to benefit from modern technologies.	31 58.49%	12 22.64%	7 13.21%	2 3.77%	1 1.89%	٤,١٣
Digital transformation keep pace with their expectations in agreement with the technological development and potential available.	14 26.92%	22 42.31%	8 15.38%	5 9.62%	3 5.77%	٤,٢٠
Digital transformation enables to innovate and adapt quickly to achieve results desired	19 35.85%	25 47.17%	2 3.77%	4 7.55%	3 5.66%	٤,٠١
Governance of digital transformation has a start and stages of development the interactive relations between driver elements whether they are international or external forces to be followed-up.	32 60.38%	15 28.30%	0 0.00%	5 9.43%	1 1.89%	٣,٨٩
Governance of digital transformation is more aware and flexible in working and more predictable and able to planning for the future .	15 28.30%	18 33.96%	8 15.09%	7 13.21%	5 9.43%	٤,٣٠
Governance of information technology has an impact on supporting sustainable performance in electronic business organizations.	33 52.38%	19 30.16%	0 0.00%	7 11.11%	4 6.35%	٣,٩٩
Digital transformation enables to improving the efficiency, reducing spending and implementing new service quickly.	12 22.64%	25 47.17%	5 9.43%	11 20.75%	0 0.00%	٣,٤٨
Digital governance contributes to achieving actual time in performing work and quick communication, reducing process cost and supporting organization growth.	35 66.04%	15 28.30%	3 5.66%	0 0.00%	0 0.00%	٣,١٦
Digital governance identifies new markets and outperforming competitors.	15 28.30%	20 37.74%	10 18.87%	7 13.21%	1 1.89%	٤,١١
Total	228 42.30%	190 35.25%	54 10.02%	49 9.09%	18 3.34%	٤,١٢

Source: prepared by the researcher based on the study field data using SPSS-2023

The table (2) above shows the relationship between the characteristics of digital transformation and the enhancement of small enterprises' performance, according to the study sample respondents opinion as follow:

(42.3%) of the study sample respondents strongly agree, (35.25%) agree while (10.02%) neutral, (9.09%) disagree and (3.34%) strongly disagree with the questionnaire statements; therefore, most of the study sample respondents agree with the questionnaire statements. Also, the mean for all statements was (4.12) which is greater than the hypothesized mean (3); this indicates that the study sample respondents agree with the statements.

Hypothesis two: There is a statistically significant relationship between the digital governance and the reduction of challenges facing small enterprises.

Table (3): frequency and percentage distribution of the respondents' answers for the hypothesis statements

Statements	Strongly agree	Agree	Neutral	Disagree	Strongly disagree	Mean
Digital governance sets the strategic objectives for the digital transformation.	32 60.38%	14 26.42%	4 7.55%	2 3.77%	1 1.89%	3.91
Digital governance contributes to planning for the period of change well.	27 50.94%	17 32.08%	5 9.43%	3 5.66%	1 1.89%	4.01
Digital governance reduces the internal employees' opposition and managers opinions contradiction.	29 54.72%	18 33.96%	2 3.77%	0 0.00%	4 7.55%	4.16
Digital governance makes the digital transformation quickly.	19 35.85%	19 35.85%	9 16.98%	2 3.77%	4 7.55%	4.23
Digital governance increases attention given to fulfill customers' needs and expectations .	19 35.85%	17 32.08%	12 22.64%	1 1.89%	4 7.55%	3.66
Total	126 47.55%	85 32.08%	32 12.08%	8 3.02%	14 5.28%	4.10

Source: prepared by the researcher based on the study field data using SPSS-2023

The table (3) above shows the relationship between digital governance and the reduction of challenges that face small enterprises, according to the study sample respondents opinion as follow:

(47.55%) of the study sample respondents strongly agree, (32.08%) agree while (12.8%) neutral and (3.02%) disagree with the questionnaire statements; therefore, most of the study sample respondents agree with the questionnaire statements. Also, the mean for all statements was (4.15) which is greater than the hypothesized mean (3); this indicates that the study sample responses agree with the statements.



#### 4.3 Verification of the study hypotheses

Table (4): Hypothesis one: There is a statistically significant relationship between the characteristics of digital transformation and the enhancement of small enterprises' performance.

	Coefficients of Regression	(t) Test	P.Value	Interpretation
B <sub>0</sub>	.889	2.514	.013	Significance
B <sub>1</sub> Using modern technologies	.618	7.244	.000	Significance
(R) Coefficient of correlation	.465			
(R <sup>2</sup> ) Coefficient of determination	.216			
(f) Test	2.474	0.000 model is significant		

Source: prepared by the researcher based on the study field data using SPSS-2023

Table (4) above shows the following:

1. The estimation results showed that there is a direct correlation between the governance of digital transformation as an independent variable and the performance efficiency of small enterprises as a dependent variable; the value of simple coefficient of correlation was (0.465).
2. The value of the coefficient of determination was (0.216); this value indicates that the governance of digital transformation contributes by 21.6% to the performance efficiency of small enterprises as a dependent variable.
3. The mean of the performance efficiency of small enterprises was 0.889 when there was no governance of digital transformation.
4. The performance efficiency of small enterprises increases by 0.618 when the governance of digital transformation increase by one unit.

Accordingly, the study concluded that the hypothesis is achieved; this means that there is a statistically significant relationship between the governance of digital transformation as an independent variable and performance efficiency of small enterprises.

Table (5): Hypothesis two: There is a statistically significant relationship between digital governance and the reduction of challenges facing small enterprises.

	Coefficients of Regression	(t) Test	P.Value	Interpretation
B <sub>0</sub>	1.123	5.410	.000	Significance
B <sub>3</sub> Electronic auditing	.666	11.334	.000	Significance
(R) Coefficient of correlation	∕.∕3∕			
( R <sup>2</sup> ) Coefficient of determination	∕.4∕2			
(f) Test	∕28.4∕3	0.000 model is significant		
Model	y <sub>1</sub> = 0.959 + 0.589X <sub>1</sub>			

Source: prepared by the researcher based on the study field data using SPSS-2023

Table (5) above shows the following:

1. The estimation results showed that there is a direct correlation between the digital governance as an independent variable and the challenges that face small enterprises as a dependent variable; the value of the simple coefficient of correlation was (0.635).

2. The value of the coefficient of determination was (0.203); this value indicates that digital governance contribute by 40.3% to the challenges that face small enterprises as a dependent variable.

3. The mean of the challenges that face small enterprises was 1.123 when there was no governance of digital transformation.

4. The challenges that face small enterprises increases by 0.666 when digital governance increases by one unit.

Accordingly, the study concluded that the hypothesis is achieved; this means that there is a statistically significant relationship between digital governance as an independent variable and the challenges that face small enterprises as a dependent variable.

## **5. Findings:**

The study came up with following:

1. There is a statistically significant relationship between the digital governance and the performance efficiency of small enterprises.

2. There is a statistically significant relationship between the digital governance and the reduction of challenges facing small enterprises.

## **6. Recommendations:**

Based on the findings, the study recommends the following:

1. Digital governance should be used in business because it contributes to achieving actual time in performing works and quick communication, to reducing process cost and to helping organization grow.

2. Using digital transformation should be encouraged because it enables to improving efficiency, reducing spending and implementing new service quickly.

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