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# Digital Transformation Significance in Enhancing Sustainable Entrepreneurship

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## **Abstract**

The problem of the study was represented in that business organizations face problems related to the performance such as low efficiency, high cost, errors and low productivity. The study aims to identify the relationship between digital governance and enhancing sustainable entrepreneurship companies business and to clarify the role of digital governance on achieving competitive advantage. The study significance rises from the importance of digital governance in enhancing sustainable entrepreneurship companies business and achieving competitive advantage. The study adopted the descriptive analytical approach using the regression analysis to investigate the relationship between the variables and to verify the hypotheses; there is a statistically significant relationship between digital governance and enhancing sustainable entrepreneurship companies business, there is a statistically significant relationship between digital governance and achieving competitive advantage.

**Keywords:** Governance of digital transformation, entrepreneurship.

#### 1. Introduction

Digital transformation is the process of transformation of the model of government institutions or private sector into a model that depends on digital technology in providing service, manufacturing products and managing human resources (Hammad, 2020).

Digital transformation is the transformation of the way companies work so that monotonous work is reduced and time to think about development increases. Digital transformation is accelerating the way daily work is done, so that the great technological development that has occurred is exploited to conduct business faster and better. Digital transformation is increasing efficiency in workflow so that errors decrease and productivity increases. Digital transformation is increasing the number of your team without the need to hire. Digital transformation represents a process of change in the infrastructure of institutions and companies. Digital transformation is using technology and facilitating the digital environment to modify internal and external processes and improve the experience (Nosair, 2021). This transformation is limited to companies that sell digital products or focus on the Internet and technology, but rather affects all fields, departments, commercial services, ministries and government organizations.

# Study problem:

Business organizations face problems that relate to performance such as low efficiency, high cost, errors and low productivity. Rapid changes in the business environment and achieving competitive advantage require companies to continuously innovate in order to improve and develop their flexibility and competitive capabilities. Entrepreneurship as an organizational behavior and strategic direction of entrepreneurs in order to improve organizations' work, to speed up work performance, overcome monotony and unemployment and increase production.

## Study objectives:

## This study aims to:

- 1. Identify the relationship between digital governance and enhancing sustainable entrepreneurship companies business.
- 2. Clarify the role of digital governance on achieving competitive advantage.
- 3. Identify the relationship between digital governance and enhancing entrepreneurship decision making.

# Study significance:

The significance of the study is represented in the importance of digital governance in enhancing sustainable entrepreneurship companies business, the importance of the role of digital governance on achieving competitive advantage, the importance of the role of digital governance on enhancing entrepreneurship decision making and the role of digital governance on improving small enterprises' performance.

## Study hypotheses:

The study verifies the following hypotheses:

- 1. There is a statistically significant relationship between digital governance and enhancing sustainable entrepreneurship companies business.
- 2. 1. There is a statistically significant relationship between digital governance and achieving competitive advantage.
- 1. There is a statistically significant relationship between digital governance and enhancing entrepreneurship decision making.

## Study limits

Spatial limits: Khamis Mushait city.

Time limits: 2023/2024.

## 2. Literature review:

#### Previous studies:

Al-Hueidi & Taha (2022) study entitled: The role of digital transformation on supporting organizational entrepreneurship. The study mainly aimed to investigate the role of digital transformation on supporting organizational entrepreneurship. The research contained five parts a general framework, a theoretical framework of digital transformation, a theoretical framework of organizational entrepreneurship and the relationship between digital transformation and organizational entrepreneurship. The study adopted the Statistical Package for Social Science (SPSS). The study results showed the concept and dimensions of digital transformation, the concept and dimensions of organizational entrepreneurship and the relationship between digital transformation and organizational entrepreneurship.

Abd-Alaziz & Nabeel (2021) study entitled: The reflections of integration between entrrprise resources planning (ERP) and resource consumption accounting (RCA) under the digital transformation for supporting competitiveness. The study mainly aimed to investigate and analyze the impact of integration between the system of institution's resource planning and resource consumption accounting under the digital transformation for supporting organization's competitiveness. The study also aimed to explain the role of resource consumption accounting for determining modern cost system on supporting statistical methods used in the study. The researcher adopted the Statistical Package for Social Science (SPSS). The researcher concluded the following results; the organization's competitive advantage is affected by two factors the competition it faces and its competitive position. The organization's resource planning system and the organization's resource consumption accounting system can contribute to increasing and improving the efficiency of products' quality and the good cost management, and therefore, increasing the capacity of operational processes of the organization. The field study also confirmed that there is a significant relationship between the integration between both organization's resource planning system and resource consumption accounting system under digital transformation for supporting industrial organizations' competitiveness.

Rshwan & Abu Arab (2022) study entitled: The role of digital transformation on improving the quality of internal auditing process. The study aimed to identify the role of digital transformation on improving the quality of internal auditing process. The study adopted the Statistical Package for Social Science (SPSS). The researcher concluded the following results; using digital transformation contributes to ensuring the quality of internal auditor's performance, ability to use electronic data facilitates accomplishment and execution of auditing process at a high accuracy and makes vital changes in organizing and planning of the auditing process at a high accuracy.

## Theoretical framework:

# Nature of digital transformation:

Nafiee et al (2021) pointed out that commercial and service business organizations starting with traditional institutions which operate on healthcare and education ending at those which produce

software programs and applications need to be aware how to utilize technological resources for sustainable business. The further stated that workers and people understood the consumptive advantages of organizations that integating the digital development into their operations and required that insistently (Munsour, 2021).

Concept and importance of entrepreneurship:

Researchers did not describe a unit concept of entrepreneurship; it was defined as follow:

- 1. It is an initiative of establishing a new project or expanding an existing project by an individual or a group of individuals or of sustaining an existing project (Katana & Ahmed, 2012: 104).
- 2. It is an organization that has the ability to create something new and valuable on the appropriate time, considering financial and nonfinancial resources, social risks and providing employees with incentives and independence so as to achieve their convictions. (Al-Skarna, 2010: 24).
- 3. Some literature related to project organizing identified individual and social characteristics that characterize the project owner including the desire for achieving personality, need for power and wealth and the desire for independence, self-determination and improving cultural and social position of the family. The most important individual characteristics relate to the project owner's tendency to transact by open forms with the environment, external challenges, readiness for risks, knowledge capabilities and creativity (Baum J R & Bird B J, 2010: 397-412).

Today, governance became more important in business world as it is an instrument of measuring and delivering information in order to rationalize decisions. The International Accountants Union, through the financial reporting standards it issues, attempts to provide the international capital markets with very detailed and advanced information on large companies' performance and to prepare other projects for small and medium enterprises.

The role digital governance plays on achieving entrepreneurship for small enterprises and economic development showed by the figure below:

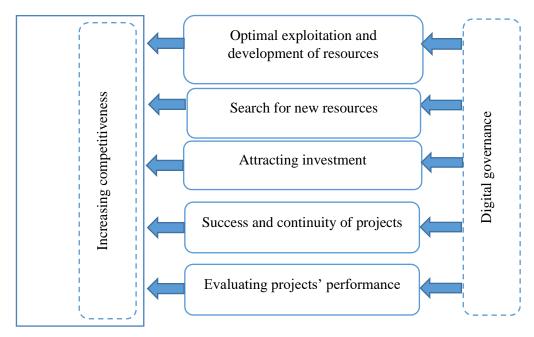
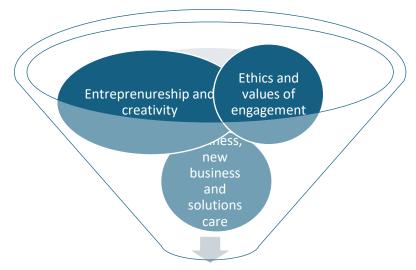


Figure (1): Digital governance role in small entrepreneurship companies

The International Accountants Union identified the importance of digital governance of small enterprises as follows: (Arab Legal Accountants Academy, 2009: 1)

- 1. When financial institutions that work at international level and on most iextents, provide lawns in several countries, to small, medium and very small enterprises, accountants depend on the financial data in lending decision making and setting conditions and prices of interest.
- 2. When sellers wish to evaluate the financial ability of purchasers in the other countries before selling commodities or services on credit.
- 3. Credit description agencies attempt to formulate unit descriptions among countries and banks and other institutions that operate in several countries set similar descriptions and consider the financial information reported is significant for description process.
- 4. Many small and medium enterprises have external suppliers and they use the financial data of the supplier in evaluating the aspects of long term vital business relationship.
- 5. Capital companies evaluate financing risk of small and medium enterprises in several countries.
- 6. Many small and medium enterprises have external investors who do not participate in everyday management of the organization.

- 7. Reducing and saving effort, power and cost and organizing and improving operational efficiency.
- 8. Digital procedures outperform the traditional procedures and therefore these procedures will be easy and quick for the beneficiaries.
- 9. Opening the way for creativity in providing service presented to workers.
- 10. Facilitating administrators' monitoring workflow.
- 11. Digital transformation contributes to the rapid spread and expansion of companies and institutions and their delivery to great numbers of audience and increasing profit.
- 12. Digital transformation enables possible customers know the commercial activity and sale and purchase processes procedures everywhere.
- 13. One of the most important advantages of digital transformation is the possibility of tracking, monitoring and analyzing data that can be obtained through the digital marketing; these data can be used in improving and developing the quality of work so as to reach better results. (Christina W & Fischler, 2014: 2).



Sustainable entreprenureship

(Christina Weidinger, F. Fischler, Sustainable Entrepreneurship Business Success through Sustainability, Springer-Verlag Berlin Heidelberg, 2014

Importance of digital governance in small enterprises entrepreneurship decision making:

The role of digital governance on decision making in entrepreneurship small enterprises is clear through providing the financial information that is appropriate to the small enterprises owners and managers so that they can manage their business in competitive environment, make rational decisions and expand the business and avoid its failure.

The researchers stated that the importance of digital governance of small enterprises rises from entrepreneurship decision making related to:

- 1. Directing financial resources towards successful investment opportunities through various accounting information that contribute to the preparation of economic feasibilty study.
- 2. Contributing to selecting the priority of investment opportunities according to the local community needs by providing information for the identification of standards.
- 3. Directing attracting investments towards the existing successful projects through providing information that show those projects profits and financial positions.
- 4. Providing information that play an important role on the success and continuity of projects such as identifying product cost according to the modern methods of cost and pricing products according to the modern methods of pricing such as the target cost; this reflected positively on the plans of economic development.
- 5. Providing information that helps to evaluating project performance especially the financial aspect which gives a clear reflect of project performance; this is the work which leeds to evaluating project performance.

# 3. Study methodology

## 3.1 Study method and tools

The mean, Chi-square and T-test were adopted to measure the study sample individuals' responses to a questionnaire distributed to small enterprises in Saudi Arabia.

The analytical descriptive approach was used to measure the impact of digital transformation of the companies on improving sustainable entrepreneurship in small enterprises in Saudi Arabia through collecting primary and secondary data from previous literature. The questionnaire was designed on an electronic link as study tool for data collection and directed to a pilot sample of managers and employees in the small enterprises and of a number of specialized experts to benefit from their opinions and suggestions. The validity and reliability of the tool was confirmed using the Cronbach Scale.

# 3.2 Study population

The population of the study comprises a number of the commercial, service and industrial small enterprises existing in Khamis Mushait.

## 3.3 Study sample

The study sample was randomly selected of (73) individuals from the small enterprises in Khamis Mushait. A questionnaire was distributed to the study sample individuals and (68) of them by (93%) were answered.

## 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.

# Hypothesis one:

There is a statistically significant relationship between digital governance and enhancing sustainable entrepreneurial companies.

Table (1): The mean, chi-square and t-test for the statements of the hypothesis one

|   | Statement   | Mean | DF | Chi-Square | T-test |
|---|---|------|----|------------|--------|
| 1 | Digital governance enhances ethics and values of engagement.              | 4    | 4  | 76.643ª    | 42.908 |
| 2 | Digital governance enhances entrepreneurship and innovative solutions.    | 4    | 4  | 63.214ª    | 41.812 |
| 3 | Digital governance enables to exploitation and development of resources.  | 4    | 4  | 58.000ª    | 42.565 |
| 4 | Digital governance contributes to the search for new resources.           | 4    | 4  | 51.714     | 38.836 |
| 5 | Digital governance contributes to attracting investments.                 | 4    | 4  | 39.071ª    | 35.812 |
| 6 | Digital governance contributes to the success and continuity of projects. | 4    | 4  | 45.357ª    | 37.831 |
| 7 | Digital governance contributes to evaluating projects' performance.       | 4    | 4  | 59.214ª    | 42.830 |

Source: Prepared by the researcher based on the field study data 2023.

The table (1) above shows the values of the degree of freedom, the mean, the chi-square and t-test of the study sample answers for the statements as follow:

- 1. The degree of freedom was (4), the mean (4), the chi-square (76.643<sup>a</sup>) while the t-test was (42.908) for the statement (Digital governance enhances ethics and values of engagement). This result indicates that the degree of need was (great).
- 2. The degree of freedom was (4), the mean (4), the chi-square (63.214<sup>a</sup> a) while the t-test was (41.812) for the statement (Digital governance enhances entrepreneurship and innovative solutions). This result indicates that the degree of need was (great).
- 3. The degree of freedom was (4), the mean (4), the chi-square (58.000<sup>a</sup> a) while the t-test was (42.565) for the statement (Digital governance enables to exploitation and development of resources). This result indicates that the degree of need was (great).

- 4. The degree of freedom was (4), the mean (4), the chi-square (51.714 a) while the t-test was (38.836) for the statement (Digital governance contributes to the search for new resources). This result indicates that the degree of need was (great).
- 5. The degree of freedom was (4), the mean (4), the chi-square (39.071<sup>a</sup>) while the t-test was (35.812) for the statement (Digital governance contributes to attracting investments). This result indicates that the degree of need was (great).
- 6. The degree of freedom was (4), the mean (4), the chi-square (45.357<sup>a</sup> a) while the t-test was (37.831) for the statement (Digital governance contributes to the success and continuity of projects). This result indicates that the degree of need was (great).
- 7. The degree of freedom was (4), the mean (4), the chi-square (59.214<sup>a</sup> a) while the t-test was (42.830) for the statement (Digital governance contributes to evaluating projects' performance). This result indicates that the degree of need was (great).

## Hypothesis two:

There is a statistically significant relationship between digital governance and achieving competitive advantage.

Table (2): The mean, chi-square and t-test for the statements of the hypothesis two

|   | Statement   | Mean | DF | Chi-Square          | T-test |
|---|---|------|----|---------------------|--------|
| 1 | Digital governance enables tracking, monitoring and analyzing metrics and data, and improving and developing the quality of work. | 4    | 4  | 57.429ª             | 43.336 |
| 2 | Digital governance reduces and saves effort, energy and cost.   | 4    | 4  | 67.214ª             | 44.680 |
| 3 | Digital governance improves operating efficiency.   | 4    | 4  | 58.571ª             | 41.553 |
| 4 | Digital governance achieves faster performance and digital procedures outperform traditional methods.                             | 4    | 4  | 63.786 <sup>a</sup> | 43.698 |
| 5 | Digital governance opens the way for creativity in providing service to workers.  | 4    | 4  | 37.286 <sup>a</sup> | 37.617 |
| 6 | Digital governance makes it easier for administrators to monitor workflow.  | 4    | 4  | 46.786ª             | 40.462 |
| 7 | Digital transformation contributes to the rapid spread and expansion of companies and corporations.                               | 4    | 4  | 52.571ª             | 40.711 |

Source: Prepared by the researcher based on the field study data 2023.

The table (1) above shows the values of the degree of freedom, the mean, the chi-square and t-test of the study sample answers for the statements as follow:

1. The degree of freedom was (4), the mean (4), the chi-square (57.429<sup>a</sup>) while the t-test was (43.336) for the statement (Digital governance enables tracking, monitoring and analyzing metrics and data, and improving and developing the quality of work). This result indicates that the degree of need was (great).

- 2. The degree of freedom was (4), the mean (4), the chi-square (67.214<sup>a</sup>) while the t-test was (44.680) for the statement (Digital governance reduces and saves effort, energy and cost). This result indicates that the degree of need was (great).
- 3. The degree of freedom was (4), the mean (4), the chi-square (58.571<sup>a</sup>) while the t-test was (41.553) for the statement (Digital governance improves operating efficiency). This result indicates that the degree of need was (great).
- 4. The degree of freedom was (4), the mean (4), the chi-square (63.786<sup>a</sup> a) while the t-test was (43.698) for the statement (Digital governance achieves faster performance and digital procedures outperform traditional methods). This result indicates that the degree of need was (great).
- 5. The degree of freedom was (4), the mean (4), the chi-square (37.286<sup>a</sup>) while the t-test was (37.617) for the statement (Digital governance opens the way for creativity in providing service to workers). This result indicates that the degree of need was (great).
- 6. The degree of freedom was (4), the mean (4), the chi-square (46.786<sup>a</sup>) while the t-test was (40.462) for the statement (Digital governance makes it easier for administrators to monitor workflow). This result indicates that the degree of need was (great).
- 7. The degree of freedom was (4), the mean (4), the chi-square (52.571<sup>a</sup> a) while the t-test was (40.711) for the statement (Digital transformation contributes to the rapid spread and expansion of companies and corporations). This result indicates that the degree of need was (great).

## Hypothesis three:

There is a statistically significant relationship between digital governance and enhancing entrepreneurship decision making.

Table (3): The mean, chi-square and t-test for the statements of the hypothesis three

|   | Statement   | Mean | DF | Chi-Square | T-test |
|---|---|------|----|------------|--------|
| 1 | Digital governance directs financial resources towards successful investment opportunities.                             | 4    | 4  | 52.214ª    | 40.679 |
| 2 | Digital governance directs and attracts investments towards successful existing projects.                               | 4    | 4  | 53.357ª    | 40.655 |
| 3 | Digital governance provides information which plays significant role in the success and continuity of projects.         | 4    | 4  | 48.357ª    | 39.390 |
| 4 | Digital governance provides information which helps in evaluating projects' performance especially financial aspect.    | 4    | 4  | 55.214ª    | 42.679 |
| 5 | Digital governance contributes to selecting priority investment opportunities in accordance with local community needs. | 4    | 4  | 56.357ª    | 44.655 |

Source: Prepared by the researcher based on the field study data 2023.

The table (1) above shows the values of the degree of freedom, the mean, the chi-square and ttest of the study sample answers for the statements as follow:

- 1. The degree of freedom was (4), the mean (4), the chi-square (52.214<sup>a</sup>) while the t-test was (40.679) for the statement (Digital governance directs financial resources towards successful investment opportunities). This result indicates that the degree of need was (great).
- 2. The degree of freedom was (4), the mean (4), the chi-square (53.357<sup>a</sup>) while the t-test was (40.655) for the statement (Digital governance directs and attracts investments towards successful existing projects). This result indicates that the degree of need was (great).
- 3. The degree of freedom was (4), the mean (4), the chi-square (48.357<sup>a</sup>) while the t-test was (39.390) for the statement (Digital governance provides information which plays significant role in the success and continuity of projects). This result indicates that the degree of need was (great).
- 4. The degree of freedom was (4), the mean (4), the chi-square (55.214<sup>a</sup> a) while the t-test was (42.679) for the statement (Digital governance provides information which helps in evaluating projects' performance especially financial aspect). This result indicates that the degree of need was (great).
- 5. The degree of freedom was (4), the mean (4), the chi-square (56.357<sup>a a</sup>) while the t-test was (44.655) for the statement (Digital governance contributes to selecting priority investment opportunities in accordance with local community needs). This result indicates that the degree of need was (great).

## 4. Findings:

The researcher came up with following:

- 1. There is a statistically significant relationship between digital governance and enhancing sustainable entrepreneurship companies business as digital governance enhances entrepreneurship, business and innovative solutions.
- 2. Digital governance enables tracking, monitoring and analyzing metrics and data, and improving and developing the quality of work.
- 3. There is a statistically significant relationship between digital governance and achieving competitive advantage.
- 4. There is a statistically significant relationship between digital governance and enhancing entrepreneurship decision making.
- 5. Digital governance provides information which helps in evaluating projects' performance especially the financial aspect.

#### 5. Recommendations:

Based on the findings, the researcher recommends the following:

- 1. Digital governance should be implemented in small enterprises in Saudi Arabia.
- 2. Tracking, monitoring, analyzing metrics and data and improving and developing the quality of work should be available.

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