

Research impact of digital culture on digital transformation in Vietnam businesses

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ABSTRACT

Objective: Digital transformation is a process that has an impact on all sectors of society, especially on the economy, economy and businesses. Digital transformation opens up new and limitless possibilities for business operations. However, an organization that wants to accelerate digital transformation needs to first focus on its people-or its culture. Digital transformation is not only about technology, but the key issue is transforming the values, beliefs and goals of the business first. Businesses are one of the organizations that are experiencing the rapid and powerful impact of digital transformation in many fields. Method: this study focuses on understanding the influence of digital cultural factors on the digital transformation process in Vietnamese enterprises, using the framework of 7 digital cultural factors (feasibility, openness, knowledge, reliability, agility, interdependence and accountability) by Cigref research. The study has collected 305 survey questionnaires by means of an online Google form survey and sent to business members operating in Vietnam at random. Conclusion: The survey data is processed by SPSS 16 software to find out the influence of each factor through the standardized regression model of the research variables.

Keywords: Digital culture, digital transformation, business

1. INTRODUCTION

1. OVERVIEW OF RELATED THEORIES

1.1. The role of corporate culture in the development of an organization or business

Corporate culture is a topic that has been recognized by executives and managers as important in the process of building and developing the organization. Culture creates the atmosphere in the enterprise [1 - 3]. Culture creates an ethical organization [4 - 6]. Culture forms a positive organization [1, 4]. In particular, Daniel Denison [7], using statistical tools based on a large set of data collected from many companies with effective production and business activities in many countries, has proven the influence of Direct impact of Corporate Culture on "return on investment (ROI), profit (ROS), increase in sales, return on

existing assets (ROA), directly affects, profit, employee satisfaction, and overall efficiency".

A company's culture is an expression of that company's identity, and therefore, each corporate culture will have its own characteristics. In addition, each company will have subcultures, reflecting the characteristics of each department, the diversity of each group and suitable for each business line [8].

Corporate culture affects the way people behave, is understood as the personality of the organization, creates the general perception and feelings of employees towards the business. It is the corporate culture that is the thread linking the members to get high labor efficiency, the cordial relationship between

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members with each other and with the enterprise. If a business has a negative and unclear corporate culture, it is often a place where laziness, inefficiencies, low productivity, lack of responsibility, lack of transparency, even nepotism develop, financial misappropriation. These things make the organization an entity with no personality, no environment to nurture, maintain and develop a workforce to meet the development needs of the business, thereby affecting the situation. their emotions, their patience, and at some point they will leave the organization [9].

1.2. The role of digital culture in the digital transformation of organizations and businesses

Digital transformation, which is "an organization's ability to adapt, respond, and position itself for success in the face of rapid technological developments" [10].

Digital transformation is an objective process, like it or not, digital transformation is still happening and will take place. Each individual or organization can participate or stay out of that process. However, if you stay out, there will certainly be a growing gap between organizations and businesses that have implemented digital transformation and that gap will gradually widen exponentially.

Digital transformation is the process of total and comprehensive change of individuals and organizations in the way of living, working and production based on digital technology [11]. With an organization, because it is a change, it will first be the work of the leader, the head. At the same time, because it is total and comprehensive, it is also the work of all members of the organization. Digital transformation is a common story for all businesses, regardless of industry. It is the playground of all businesses where anyone who is agile enough can seize the opportunity [12].

Digital transformation is happening rapidly in businesses around the world. 40% of enterprises participating in the survey said that their organizations have had many successes from implementing digital transformation projects. Sectors with a high percentage of businesses participating in digital transformation and achieving high efficiency: finance, transportation, manufacturing, healthcare and wholesale/retail [8].

Currently, according to the assessment of small and medium enterprises (SMEs) of 14 countries in the Asia Pacific region, most believe that digital transformation is really important for business operations, with 62% of businesses expect digital transformation to help them create new products/services, 56% of businesses think the competition is changing, and digital transformation will help businesses keep up with the changes of the market. that competitive environment [13 - 14].

For businesses, digital transformation has a positive impact on all internal and external factors of the business, including: internal factors such as operational processes, organizational governance, safety in organization and production infrastructure of enterprises; External factors of an enterprise include: market, business activities, customers, partners...

The positive effects of digital transformation bring to businesses such as: (1) Helping businesses develop business models, create new products and services to meet the needs of the market; (2) Helping businesses improve the efficiency of operations and management in the organization, in the use of resources as well as improve efficiency in the decision-making process for businesses [8].

Digital transformation is being implemented in many industries, from processing technology to agriculture, commerce, payment, transport,

finance and education [15]. Vietnam is one of the fastest growing digital economies in Southeast Asia at a rate of 38% a year. Accordingly, the digital sector is expected to contribute about 30% of GDP by 2030. Vietnam's digital economy in 2019 is worth 12 billion USD, contributing 5% of the country's GDP, 4 times higher than last year. 2015 [4].

As companies make progress in their digital journey, so does the nature of the challenge. A digitally stable organization is not only fueling digital transformation, but it is also starting to see signs of cross-functional and cross-functional collaboration.

Digital culture can be seen as an increasing part of "traditional" culture, digital culture can have two sources: digitization of existing cultural objects, and digitization of cultural elements. cultural factors [5]. Building a digital organization is not just about applying technology, but also about human ability to manage technology, and more importantly, human thinking and culture. that the organization accumulates. Digital technology can make organizations faster, smarter, and better at what they do. Business leaders widely recognize the goal of digital, but the vast majority of digital transformations fail not only because of challenges with adopting new technology or finding the right know-how. How people work together to transform the organization is critical. Indeed, companies with digital aspirations are often plagued by attributes such as resistance to change, lack of knowledge sharing, and aversion to risk. These behaviors can impede change in any situation, but they are particularly ill-suited for digital transformation, given the speed at which technology evolves. Therefore, realizing an organization's full potential requires a shift in mindset to embrace the speed and agility of digital technology.

A lot of research confirm that digital transformation is not limited to the process of deploying digital technology to enhance business operations. It is the process of aligning organizational goals, values and culture with employees using digital technology [16]. Another key finding of digitally mature companies is that they all have a clear digital strategy combined with a culture and leadership ready to drive transformation; and digital companies whose true transformation of technology is of prime importance [17-18].

The most aspirational companies in the world today, with a great work culture. And strong digital culture characteristics have the following common characteristics: (1) Customer-centric, (2) Data-driven, (3) Risk-taking and innovative (Creators and doers), (4) Collaboration, (5) Agility, (6) Transparency, (7) Lifelong learning [2].

The rapid advancement of digital technology in most industries has fundamentally changed the environment of companies, companies need to transform and digitize their entire business models and conditions. existing organization, such as structure, processes, and culture [8, 19]. Many articles that have covered digital transformation have mentioned cultural attributes to promote the success of digital transformation, such as innovation [20 - 21], relationship risks [7], [9], collaborative working environment [22].

For Vietnamese businesses, one of the barriers and difficulties that businesses consider as the top is the difficulty in changing business habits and practices [20], which is changing the way they do business. working in the process of applying software and digitizing processes. This barrier has prevented many businesses from achieving their digital transformation goals.

With the desire to jointly evaluate the effects of cultural factors supporting successful

digital transformation (called digital culture) in a study, the author has selected 7 attributes of digital culture to assess its influence on the digital transformation process of enterprises based on the research framework of The Cigref [21].

2. MEASUREMENT ASPECTS OF DIGITAL CULTURE IN DIGITAL TRANSFORMATION ACTIVITIES IN VIETNAM BUSINESSES

According to cigret, Several characteristics have been identified as the foundation for the success of digital transformation including a frame of reference for digital corporate culture that has a set of seven interconnected dimensions that convey a culture that faci-

litates transformation and makes the company more efficient in the digital world.

In this study, the author uses 7 elements of Cigref's digital culture framework. Each aspect is rooted in the day-to-day realities of the organization through its values, behaviors, leadership styles, and practices that reflect the challenges, needs, and distinctive characteristics of each.

Objective: research on the impact of digital cultural factors in digital transformation in Vietnamese banks. From there to evaluate which cultural factors will affect and affect the digital transformation process of enterprises. The research model is detailed as follows:

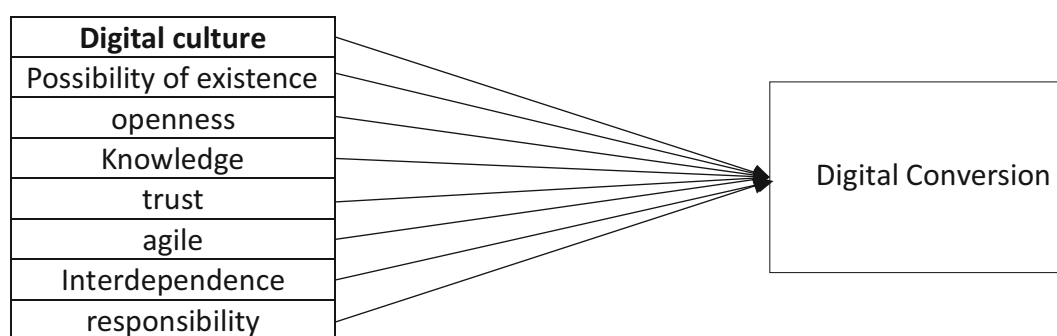


Figure 1. Research model

Digital culture is measured by variables including: Viability is measured by 5 variables (VI1-VI5), Openness is measured by 5 variables (OP1-OP5); Knowledge attribute is measured through 6 variables (KN1-KN6); Reliability is measured by 6 variables (TR1-TR6); Agility attribute is measured through 6 variables (AG1-AG6); Interdependence is measured by 5 variables (ID1-ID5); Responsibility attribute is measured by 5 variables (RE1-RE5). The digital transformation of a business is measured by 3 variables (1-3).

3. DISCUSSION OF RESEARCH RESULTS

3.1. Research results

First, the author conducts a review of the works closely related to the research problem

to determine the research model and design the questionnaire to ensure high reliability as well as proven from previous studies. there. To obtain the most objective data, the author uses an online survey using Google form to collect data. Vietnamese enterprises were selected at random. Data collection was conducted over a period of 1 month through the Survey Questionnaire system. The data processing was done by the author using SPSS tool version 16. The author considered and used the research results of Tabachnick and Fidell, "the sample size must be guaranteed according to the formula: $n \geq 8m 50$ (n is the sample size, m is the number of independent variables in the model)"; And according to Harris RJ. Aprimer [23], [16]: " $n \geq 104 m$ (where

m is the number of independent and dependent variables), or $n \geq 50m$, if $m < 5$ ". With the research of the topic, with the number of measurement variables of 38, and applying the rule of 5 samples/measured variables, the sample size is estimated at 190 survey questionnaires. This study selects representative sampling units who are officials and employees working in Vietnamese enterprises.

3.1.1. Descriptive statistics analysis with research variables

Statistical results from the collected data of 305 surveys, show that all elements of the digital cultural framework are accepted and there is a high consensus in recognizing its influence on the digital culture process. digital transformation in business. Specifically, the results obtained include: (1). The feasibility factor (VI1) has the mean: 4,292, standard deviation: 0.855; (2) The openness factor (OP) has the mean: 4.19, standard deviation 0.937; (3) Knowledge factor (KN) has the average level: 4,237, standard deviation 0.882; (4) Reliability factor (TR) has mean: 4.3, standard deviation 0.821; (5) The Agility Factor (AG) has a mean: 4.2735, standard deviation 0.83; (6) Factor Interdependence (ID) has mean: 4,248, standard deviation 0.824; (7) The Responsibility

Factor (RE) has a mean: 4.26, standard deviation 0.836. In particular, in this result, the Trust factor has the lowest standard deviation (0.821), which confirms the high consensus when assessing the factor that has a high influence on the digital transformation process in today's businesses.

3.1.2. Cronbach Alpha test of research variables

For the independent variables in the research model, the results from the survey table are as follows: The observed variables used to measure this independent variable have Cronbach's Alpha coefficients respectively: (1) Feasibility: 0.914; (2) Openness: 0.882; (3) Knowledge: 0.929; (4) Reliability: 0.932; (5) Agility: 0.931; (6) Interdependence: 0.93; (7) Responsibility: 0.915. Besides, the survey results also show that the total correlation coefficient of each observed variable is >0.5 . Thus, all of these observed variables are significant and have high reliability in the research model, the removal of any observed variables will also reduce the reliability coefficient of the whole scale of this factor. The study did not exclude any observed variables from the scale.

3.1.3. Linear regression results

Table 1. Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.878 ^a	.770	.765	.39791

a. Predictors: (Constant), Responsibility Element, Feasibility Element, Openness, Trust Element, Knowledge Element, The element of Interdependence, Agility Element

The table of regression coefficient results shows the significance level of the independent variables including Openness (OP): Sig= 0.031, Knowledge (KN): Sig=0.001, Responsibility (RE): Sig=0.001, both <0.05 . Thus, it can be concluded that these factors all affect the

digital transformation process in Vietnamese enterprises. Regression coefficients of independent variables Viability (VI): Sig=0.81, Reliability (TR)=0.397, Agility Factor (AG)=0.19, Interdependence (ID): Sig=0.175 >0.05 . This means that these four factors need to be

removed from the research model.

The regression model after normalization is:

$$DT = 0.16*OP + 0.265*KN + 0.252*RE$$

In there:

DT: Digital transformation of businesses

OP: The element of openness

KN: Knowledge factor

RE: Responsibility Element

The model shows that the knowledge factor has the greatest influence on the digital transformation process in Vietnamese enterprises with a coefficient of Beta = 0.265, which is a good suggestion for business leaders when they want to drive digital transformation in your organization. Responsibility has the second biggest influence on the digital transformation process at enterprises with Beta = 0.252, proving that survey respondents attach great importance to business ethics and corporate social responsibility. with customers, partners and stakeholders in the process of providing services in the digital transformation environment. The third influencing factor for the digital transformation process of Vietnamese enterprises is the openness with the coefficient Beta = 0.16.

With the remaining four factors in the research model, including Feasibility, Reliability, Agility and Interdependence, the data collected in this study shows no effect on the conversion process. number in the current period of Vietnamese enterprises. This is also a finding that requires more time and resources to conduct further research to answer the existing results.

The results of the regression model are one of the bases for Vietnamese business leaders to consider to focus on promoting digital transformation activities at their units with specific solutions related to (1) facilitating conditions and environment for employees to update their knowledge related to digital transformation of their business; (2) Developing standards related to business ethics

and corporate social responsibility in the process of organization's operation and development; (3) Building an open working, learning and developing environment in the enterprise.

3.2. Discussing the results of the research

From the results of the research, it is shown that the factors of responsibility, openness, and knowledge are 3 of the 7 factors of the research model that have an impact on the digital transformation process of Vietnamese enterprises. Male. Specifically:

- Issues related to accountability are one of the most influential factors in the digital transformation process in enterprises. This is a very meaningful finding for managers at enterprises. This confirms once again that the corporate culture factor plays a key role in the development of the enterprise, especially the issue of business ethics and the social responsibility of the organization, which is recognized by the employees. highly appreciated. This makes perfect sense as the digital environment evolves. This result is also consistent with the survey's conclusion about barriers in digital transformation activities for Vietnamese enterprises, the survey results show that the fear and fear of data leakage will be the same. individual/enterprise is one of the major barriers (accounting for 33.9%).

- Other element that leaders also need to pay attention to to accelerate the digital transformation process is to build a culture of openness in the organization. The sharing of information and knowledge, as well as increasing the level of interaction with customers, in order to strengthen the leadership presence and commitment to the consistent implementation of values to create trust. Information for employees, customers and partners are possible measures that bank leaders need to study and implement.

- Element to focus on that business leaders should not miss are issues related to increasing

understanding, updating new knowledge, personal and business investment in capitalize knowledge as well as share the knowledge that they already have with members of the organization as well as with customers and business partners. This result is consistent with the Digital Transformation Annual Report of Vietnamese enterprises 2021, when the results of the Report also clearly show "When businesses start to achieve digital transformation goals, they encounter difficulties in the lack of staff with experience, knowledge and skills to implement digital transformation projects for their businesses" [22].

4. LIMITATIONS AND DIRECTIONS FOR FURTHER RESEARCH

Therefore, if there is a follow-up research, In the limited time and resources, the authors have only implemented the data collection method by sending the online survey link, and because of time constraints, within a month of time, the authors only 305 interview questionnaires were collected. The number of survey questionnaires should be increased as well as in-depth interviews with representatives of some subjects in the study such as department managers and employees to have better findings.

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Nghiên cứu tác động của văn hóa số đến quá trình chuyển đổi số tại doanh nghiệp Việt nam

Nguyễn Lan Anh và Trần Thị Thu Hà

TÓM TẮT

Chuyển đổi kỹ thuật số có tác động đến mọi thành phần, lĩnh vực hoạt động, nhất là đối với hoạt động sản xuất, kinh doanh. Quá trình chuyển đổi này mở ra nhiều khả năng mới và vô hạn cho nền kinh tế. Nhưng, doanh nghiệp muốn tiến hành chuyển đổi số, đầu tiên cần phải tập trung vào con người-hay chính là văn hóa của tổ chức. Một trong những yếu tố then chốt để chuyển đổi số thành công chính là chuyển đổi giá trị, niềm tin cũng như các chiến lược của doanh nghiệp trước tiên. Các doanh nghiệp chịu sự ảnh hưởng lớn của chuyển đổi kỹ thuật số. Vì vậy, bài báo này tìm hiểu tác động của các yếu tố văn hóa kỹ thuật số đến chuyển đổi số tại các doanh nghiệp Việt Nam, sử dụng khung 7 nhân tố văn hóa kỹ thuật số (khả thi, cởi mở, kiến thức, độ tin cậy, sự nhanh nhẹn, sự phụ thuộc lẫn nhau và tính trách nhiệm) của Cigref nghiên cứu. Bài báo đã thu về 305 phiếu trả lời bằng phương pháp điều tra trực tuyến Google form gửi đến các thành viên doanh nghiệp Việt Nam một cách ngẫu nhiên. Dữ liệu điều tra được xử lý bằng phần mềm SPSS 20 để tìm ra mức độ ảnh hưởng của từng nhân tố thông qua mô hình hồi quy đã được chuẩn hóa của các biến nghiên cứu.

Từ khóa: Văn hóa kỹ thuật số, Chuyển đổi số, Doanh nghiệp

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