State Management in Vietnam in the Context of Digital Transformation

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Abstract

The 4th industrial revolution (revolution 4.0) has created a breakthrough in technology, followed by a trend of digital transformation in the management activities of organizations. Along with that trend, Vietnam has a policy of participating in the 4.0 revolution, building a national digital transformation program, officially implemented from 2020. In fact, digital transformation is a new issue; there is no consensus on content in research and management in countries. Therefore, the author chose the topic of this article as necessary and appropriate in the current trend of digital transformation. Using mainly qualitative research methods through collecting and analyzing secondary documents, the author has contributed to explaining some contents, meanings and conditions to ensure the implementation of digital transformation in state management activities in Vietnam; Provide additional scientific information to serve future research on issues related to digital transformation, as well as applied research in state management activities in Vietnam.

1. Introduction:

Vietnam has been on the path of development, with fairly stable growth over the past decade, contributing to raising the country's position in the international arena. This development is based on the results of reforms and innovations in state management by the Government and ministries, branches and localities, emphasizing digital transformation and the construction of e-government and digital government.

From 2016 to present, with the rapid development and spread of the 4.0 revolution, digital technology is dominating the management and operation of the Government, ministries, branches and localities; the effectiveness of state management has been improved, contributing to serving the people better and better. In that context, our Party has promptly issued policies and guidelines for the development of science and technology... and proactively participated in the 4.0 revolution (CPV, 2019); the Prime Minister has promptly issued and directed the implementation of the National Digital Transformation Program (PM, 2020).

In fact, the process of digital transformation has achieved important initial results, which is the basis for Vietnam to build and develop e-Government and digital government. However, digital transformation is a new issue,

unprecedented in state management, so it has posed specific requirements and needs to be researched and innovated in state management of the Government and ministries, branches and localities. With that meaning and explanation, the author focuses on and chooses to study the topic of digital transformation in state management when conducting this research.

2. Theory of digital transformation:

In the context of the 4.0 revolution, digital transformation helps increase productivity, reduce costs and open up new development spaces, creating new values beyond the traditional values inherent in the organization. In general, according to MIC (2021), digital transformation is the transformation of operating models based on digital technology and digital data; it is a major, overall change of individuals and organizations in the way of life, working and production methods based on digital technologies. Trung, N.S. (2022) explains that digital transformation is essentially the next step in the development of information technology application: Normally, the application of information technology does not change the existing process or model; when the application of information technology at a high level leads to a change in the process or operating model, it is called digital transformation. Obviously, there is a difference between information technology application and digital transformation. Accordingly, applying information technology means digitizing existing processes, according to existing operating models, to provide existing services; while digital transformation means digitizing, changing to new processes, new organizational models, service delivery methods or providing new services. For example, with the form of work settlement in state agencies: (1) Civil servants handle work on paper and exchange directly (traditional method); (2) Civil servants handle work by drafting documents, printing, submitting for signing and issuing documents and exchanging directly (application of information technology); (3) Civil servants handle work by drafting, editing, submitting for signing online in the Voffice system; exchanging online in a digital technology environment (digital transformation). In this case, digital transformation has created a new way of handling work - online, replacing the traditional form of work settlement of state agencies.

In the practice of organizational management and administration, digital transformation can be approached in many areas associated with the characteristics of the specialized field and management field of each type of organization. In terms of business management, digital transformation is the integration of digital technologies into all areas of an enterprise, taking advantage of technologies to fundamentally change the way of operation, business model and provide new values to the customers of that enterprise as well as accelerate business activities. In Vietnam, digital transformation is often understood as the process of changing from a traditional business model to a digital business by applying new technologies such as big data, internet of things (IoT), cloud computing... to change the method of operation, leadership, working process, corporate culture (Da Nang EIP, 2022). According to this approach, digital transformation is also a change in both the way a business operates and its culture, requiring businesses to constantly change, experiment with new things, and be willing to accept failures in order to grow.

In terms of state management, the government apparatus of many countries, after realizing the importance of digital transformation in increasing operational efficiency and ensuring national security, immediately entered a new race in applying digital transformation. Accordingly, digital transformation is approached by using digital data and digital technology to change user experience with services provided by the state, change business processes, change the model and method of operation of state management agencies (Khanh Hoa DTP, 2022). With this approach, the concept of "digital transformation" is emphasized by researchers and managers by distinguishing it from the concept of "digitalization", accordingly: Digitalization is the process of modernization,

converting conventional systems to digital systems (such as converting from paper documents to soft files on computers, digitizing television from analog broadcasting to digital broadcasting...); Meanwhile, digital transformation is exploiting the data obtained from the digitalization process, then applying technologies to analyze, transform that data and create newer values. Therefore, digitalization can be seen as part of the digital transformation process.

There are many approaches to digital transformation, but the common problem to identify digital transformation is: The integration of digital technology into the fields of an organization; that is, the application of digital technology in management, operation and digitization of data, exploitation and transformation of that data to create new values for the organization. In terms of research, based on the characteristics of state management activities, the author inherits the above approaches and contents when building the concept of digital transformation, which is the use of digital technology and digital data to create new values and apply it to serve the management and operation activities of state agencies.

On the other hand, discussing the significance of digital transformation for state management activities, many published studies have shown that digital transformation really brings many benefits, really meaningful to all aspects of the activities of state agencies and enterprises in terms of organization, management, operation, research, business, service provision... That is saving time and costs for both state agencies and people; forming a model of digital government, digital society in state management.

- Digital transformation helps save costs and time for the state and people.

Digital transformation helps state agencies reduce operating costs and save time in performing routine tasks. When the work processes of agencies in the system are operated stably in a digital environment, leaders make decisions more

quickly and accurately thanks to a timely and transparent reporting system, optimizing the productivity of civil servants. These things not only help increase the efficiency of the agency and civil servants, but also enhance the professionalism of the agency and civil servants.

Digital transformation helps people save time and costs when accessing public services. When state agencies take advantage of technology platforms, it will help reduce a lot of time and costs (traditional costs, additional costs) for people when they need services, request service provision from state agencies. That helps the service provision activities of state agencies not only promptly meet the needs of the people, but also increase the prestige and professionalism in the provision of public services; increase the responsibility and improve the work efficiency of civil servants; expand the ability to attract and retain customers.

In that sense, digital transformation also helps change the user experience with services provided by the state, change business processes, change the model and operation method of state management agencies. That also requires a change in the awareness and actions of leaders and managers to always have the right direction and the ability to successfully transform the state administrative apparatus.

- Digital transformation helps form, operate and develop digital government, digital economy, digital society.

Digital transformation with the digitization of data and digital data transformation has created new values, which can be new processes, new models... in the management activities of the state and other organizations. In fact, society is always moving, the 4.0 revolution requires innovation in technology applications, exploiting big data in digital form so that state agencies can perform state management tasks in the best way. Therefore, digital transformation is an objective trend and every state agency, every organization, and every citizen who does not adapt will inevitably fall behind. Therefore, national digital

transformation as an objective requirement is identified as consisting of three main components, including: Digital transformation in the activities of state agencies to develop digital government; digital transformation in the activities of enterprises to develop digital economy; digital transformation in the activities of people to develop digital society (MIC, 2021). With that meaning, digital transformation will form in each country digital government, digital economy and digital society, specifically:

Developing digital government: It is explained as the implementation of management and operation activities by state agencies and organizations in the digital environment. This helps agencies and organizations improve management efficiency, while also helping agencies and organizations innovate their operating models, change the way they provide services based on digital technology and data, and allow businesses to participate in the service provision process (Khanh Hoa DTP, 2022). In other words, digital government has all operations safely in the digital environment, with an operating model designed and operated based on data and digital technology to be able to provide better quality services, make more timely decisions, and issue better policies. For example, when implementing digital transformation, state agencies and organizations use online public services connected to the national database on population, land, and taxes so that people can register land use rights online.

Digital economic development: It is the development of digital technology enterprises, shifting from assembly and processing of information technology to making digital technology products, industry 4.0, developing digital content, creative industry, platform economy, sharing economy, e-commerce and smart manufacturing. Digital economy includes "digital technology industry, telecommunications industry, industry selling goods based on digital technology platforms (e-commerce), industry selling services based on digital platforms (digital business), such as transportation booking services, restaurant and hotel booking services" (Trung, N.S., 2022).

Digital society development: Digital society includes digital citizens (citizens participating in social activities, participating in the state's policy process in the digital environment) and digital culture (codes of conduct, ethical standards and enjoyment of cultural values by people in the digital environment). The main driving force of digital society is digital technology, based on the rapid growth of information and data, changing all aspects and taking people as the center. In the current context, smartphones are the main means for people in the digital world to access many services such as: ordering goods, paying for electricity, transferring money, medical examination... Therefore, developing digital society requires the universalization of smart devices (smartphones...) for people to help people have equal opportunities to access services, training, knowledge, narrow the development gap, reduce inequality.

When digital government, digital economy and digital society are formed and operated synchronously, social development management in each country will be convenient with digitized big data, saving resources while still ensuring effectiveness. Interaction between state agencies and people will be carried out more and more easily through online forms. Digital transformation then affirms its role, has truly great significance and is an inevitable development trend.

3. Some conditions to ensure digital transformation in state management activities in Vietnam:

In general, according to MIC (2021), digital transformation is the transformation of operating models based on digital technology and digital data. In terms of state management, digital transformation is approached by using digital data and digital technology to change user experience with services provided by the state, change business processes, change the model and method of operation of state management agencies. In short, it is the use of digital technology and digital

data to create new values both in terms of organization and operation of state agencies.

From the above approaches, it can be seen that digital data and digital technologies are necessary factors to implement digital transformation. However, to operate and transform these factors to create new values that the goal of digital transformation is aiming for, there must be a subject to implement, which is people with the necessary qualities and capacities. That is not only the human factor implementing policies and public services (cadres, civil servants, collectively referred to as civil servants), but also includes people who are beneficiaries of policies and public services (citizens). They also need to meet the requirements of digital transformation according to the trend of applying digital technologies to interact with each other in the management activities of state agencies, also known as digital civil servants, digital citizens. For internal governance in state agencies, digital transformation requires that the implementing subject is a digital civil servant; for social development governance, in addition to the requirement of digital civil servants, digital citizens are needed. Therefore, it is possible to identify some basic conditions to ensure the implementation of digital transformation in general in state management, which are: Digital technology, digital data, digital civil servants, digital citizens.

- Firstly, digital technology is the next step in the development of information technology, allowing faster calculations, more data processing, larger capacity transmission, at lower costs. According to MIC (2021), digital technology is one of the main technology groups of the 4.0 revolution; four typical digital technologies promoting digital transformation include Artificial Intelligence, Internet of Things, Big Data, Cloud Computing, specifically:

Artificial Intelligence: Human efforts to make machines have human intelligence are called artificial intelligence. In this sense, artificial intelligence still has a long way to go to get closer to the set goal. But in a narrower sense, artificial intelligence with the goal of enhancing human intelligence has made great strides in the past two decades. For example: Google's artificial intelligence machine AlphaGo defeated the reigning Chinese Go champion in 2016; technology to convert information content from text to voice, convert from voice to text, take notes of meetings, transcribe audio recordings, correct spelling mistakes... help agencies and organizations with administrative work (taking minutes, building summary reports...) accurately, saving time.

Internet of Things: Is a fundamental technology of the 4.0 revolution, playing a role in connecting the real environment and the digital environment to successfully implement digital transformation. If the internet is a network connecting devices together (computers, smartphones, etc.) to exchange and share data, then the internet of things is a network connecting all things together to do the same thing.

Big Data: Generated from many smart devices, sensors connecting all things and human activities in the network environment. It is estimated that each day, this data generated can be equivalent to the data stored in one billion DVDs in the past. If previous technology needed a very long time to process such data, current digital technology allows processing and analysis in a much shorter period of time to extract information, knowledge or make appropriate decisions.

Cloud computing: Technology that allows computing power to reside in virtual servers, called clouds, on the internet of providers instead of in home computers and offices on the ground, for people to connect and use as a service when they need it. In short, to make it easier to compare, cloud computing is like the electricity grid; individuals, households, and businesses, instead of investing in generators, use the electricity grid service of the power company, pay as they use it without having to worry about operation and management.

- Second, digital data is data formed through the digitization of documents using information

technology applications - the process of modernizing and converting conventional systems to digital systems, such as converting paper documents to soft files on computers. State agencies apply information technology to digitize documents such as policy documents, directives, instructions, etc. that have been issued and are still in effect related to each management field, thereby forming digital data of the agency.

When transforming digitally, with the use of digital platforms such as document access systems, agencies, organizations, and citizens can exploit data (free or pay access service fees) to conduct transactions and make legal requests with state agencies. Example of a commune-level digital transformation platform: Instead of developing 10599 software for 10599 communes, wards, and towns nationwide (GSO, 2024), using a common platform for 10599 communes, wards, and towns will shorten the implementation time and optimize costs; agencies, organizations, and citizens will access this digital platform to conduct transactions and request administrative records with commune-level government agencies.

- Third, digital civil servants are the subjects implementing digital transformation in state agencies to develop digital government; they must be trained and equipped with basic and necessary digital knowledge and skills. At the same time, civil servants must proactively and regularly update their digital knowledge and skills to successfully complete assigned tasks in the digital environment: Advising and organizing the implementation of assigned tasks in the digital environment; directing, operating, inspecting, supervising, and reporting on the results of performing assigned tasks in the digital environment…

In fact, digital transformation is unprecedented but is a great opportunity for development for all countries, because technological breakthroughs have been conceived for many years, even decades, but have only developed explosively in recent years. Developing countries can even take advantage of the opportunity to transform digitally faster, because in a certain aspect, developed countries are often less enthusiastic about the new because they are stable in the old; countries in difficulty, developing countries are often enthusiastic about the new to find opportunities for breakthroughs. Vietnam is also one of those countries, with the opportunity to promote digital transformation to develop digital government and digital society. Digital transformation has put state agencies in a position to build a team of digital civil servants, changing the working habits of civil servants from the real environment to the digital environment.

- Fourth, digital citizens are those who have basic digital knowledge and skills necessary to transact in the digital environment when participating in social activities and participating in the state's policy process. For example, citizens with mobile devices form habits of communicating in the online environment, online shopping, online learning, online medical examination, etc. The nine elements that make up digital citizens include: Ability to access digital information sources; ability to communicate in the digital environment; basic digital skills; buying and selling goods online; ethical standards in the digital environment; physical and psychological protection from the effects of the digital environment; rights and responsibilities in the digital environment; identification and authentication of personal data; privacy in the digital environment (MIC, 2021).

Digital transformation with the meaning of developing digital government and digital society has required each citizen to equip themselves with basic and necessary digital knowledge and skills and constantly update and supplement them to avoid being left behind. Digital transformation is not just the work of state agencies, but also the work of each citizen, requiring the synchronous participation of the entire social system. After all, digital transformation is to serve the people, so each citizen must become a digital citizen for digital transformation to be successful: The participation of the entire population is the factor that ensures the success of digital transformation, changing the national ranking (Trung, N.S., 2022).

Therefore, digital transformation also has the meaning of a national revolution; when the entire population participates in digital transformation, they will become the factor that discovers suitable technology, finds or improves suitable solutions in the direction of positive interaction between state agencies and the people.

Based on the analysis and synthesis of research documents, the article not only clarifies the concept and meaning of digital transformation in state management activities, but also identifies the basic conditions to ensure the implementation of digital transformation in state management activities in Vietnam, namely: Digital technology, digital data, digital civil servants, digital citizens. With the results of this research, the author hopes to provide more scientific information to serve future studies on issues related to digital transformation, as well as research on applications in state management activities in Vietnam.

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