

Research on Digital Government, Digital Civil Servants, Digital Citizens in Vietnam

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ABSTRACT

The fourth industrial revolution (revolution 4.0) with the highlight of the rapid development of digital technology has had a strong impact, changing the way of state administration, shifting from the real environment to the digital environment, thereby forming a digital government in each country. That raises the requirement of digital capacity for civil servants and citizens to become digital civil servants and digital citizens. In other words, when civil servants and citizens have digital knowledge and skills that meet the basic requirements in digital transactions, they become digital civil servants and digital citizens, then the performance of civil servants' public duties, the interaction between civil servants and citizens will be carried out smoothly in the digital environment. This will help save time and costs for people when there is a request for administrative records and interactions with the government; help save time and improve the work efficiency of civil servants. This study builds a theoretical framework on digital government and analyzes the level of influence of digital civil servants and digital citizens on digital government. The author conducted a survey with a sample size of N = 240 local civil servants at the commune level and N = 240 local people of 24 selected communes in 3 provinces representing 3 regions of Vietnam, including Lang Son province (North), Nghe An province (Central), Tay Ninh province (South). The research results show that the digital capacity of the people is assessed at a low level, so it is necessary to focus on developing digital citizens; digital civil servants have basic digital knowledge and skills to work in the digital environment but still need to be improved. From the research conclusion, the author discusses solutions for developing digital human resources in Vietnam today to operate the digital government effectively.

Keywords: Digital Government; Digital Civil Servants; Digital Citizens; Vietnam.

INTRODUCTION

The term “revolution 4.0” appeared in 2016, requiring innovation in thinking and action for effective state governance. Vietnam has also acted promptly to join that development trend with the national digital transformation program issued by the Prime Minister (PM, 2020), aiming to build and operate a digital government to better serve the people.

The 2020-2025 period has marked a turning point in thinking, management methods, and application of digital technology to build a modern, professional, effective, and efficient administration. From the achievements of applying digital technology and developing digital government, in 2025, Vietnam will carry out a revolution to streamline the state apparatus, especially at the local level: Establish a two-level local model, including provincial and commune levels; abolish the district-level locality of the previous 3-level locality model.

After the reform of the state apparatus, many tasks of the district-level government were transferred to the commune-level government, which put pressure on the commune level in local governance. This increased the pressure on innovating management methods, building and operating digital government to better serve the people. Therefore, research on digital government and issues related to digital government is necessary, attracting the author's attention in this study.

LITERATURE REVIEW

Although the term “digital government” is a new term, it is becoming popular in state administration in each country. Experts and researchers emphasize that it is a government designed and operated based on data and digital technology; with all operations safely in the digital environment to provide better quality services, make more timely decisions, and issue better policies. With that characteristic, digital government will use resources more optimally, create development, and effectively solve major problems in economic and social development management (Ngoc, X., 2023). This viewpoint is also similar to the approach of MST (2022), that digital government uses digital data and digital technology to bring all operations into the digital environment; design and optimize organizational operations, provide better quality services, make more timely decisions, plan better policies, and use resources more optimally. Further emphasizing the role of digital government, Vuong, L.D. et al. (2024) affirmed that digital government allows for greater citizen participation, aiming at the goal that public services of state agencies will be provided automatically 24/7 to serve people in handling administrative procedures.

It can be seen that the most common interpretation of the content of digital government today is the operating mechanism of organizations and government agencies in the digital environment; operations based on data and digital technology to make more timely and effective decisions and provide better services, thereby creating development for the country, locality and organization. The above studies have determined the content of digital government, inherited and developed into the scale "Digital government" (DG) for this study, focusing on a number of aspects: Designed digital operating model - all operations are safe in the digital environment (DG1); Operation based on data and digital technology - digital technology is applied in administration; data is fully digitized (DG2); People can conveniently exploit digital data and transact and interact with the government in the digital environment (DG3).

Building a digital government requires digital capacity and according to many recent studies, digital capacity is interpreted in a broad sense as reflected in the ability of organizations and states in terms of digital infrastructure and digital knowledge and skills of human resources to build and operate the activities of organizations and government agencies in the digital environment. In which, the subject factor (digital knowledge and skills of human resources) is identified as the most important. For this study, the author identifies the subject factor as including civil servants (subjects performing public duties) and citizens (subjects receiving public services, subjects receiving public policies); they need to have basic digital knowledge and skills necessary to become digital civil servants and digital citizens.

Digital civil servant is a modern term, defined as the subject performing public duties in the digital environment, realizing the goal of building a digital government. Many recent studies emphasize the requirement for digital civil servants that they be trained/self-trained with basic digital knowledge and skills necessary to meet job requirements and complete assigned tasks in the digital environment. According to Hoan, D.M. (2024), criteria for digital civil servants include basic digital knowledge and skills and effective application in performing tasks in the digital environment, which are identified as criteria for evaluating digital civil servants. Similarly, Khanh, T.T.B. (2025) affirmed that the standards for digital civil servants are the capacity to advise, the capacity to organize and perform tasks in the digital environment; the capacity to direct, operate, inspect, supervise, and report on the results of performing tasks in the digital environment; the capacity to interact and guide work to resolve administrative records of people in the digital environment.

Hoan, D.M. (2024) and Khanh, T.T.B. (2025) have clearly identified the criteria for digital civil servants, and this study inherits and develops them to build the scale "Digital civil servant" (DS) that shows the following contents: Civil servants have basic digital knowledge and skills necessary to work in the digital environment (DS1); Civil servants interact and transact with people in the digital environment proficiently to resolve people's administrative document requests (DS2); Civil servants deploy work in the digital environment, ensuring progress and quality of assigned work, creating satisfaction for people (DS3).

Digital citizen is also a new term, appearing alongside the term digital civil servant, which is the subject that interacts with the government in the digital environment to give opinions, criticize policies or request the resolution of administrative records... For individuals to become digital citizens, they must have basic digital knowledge and skills necessary to transact in the digital environment when participating in the policy process, requesting the resolution of administrative records at the local level; or participating in other social activities in the digital environment. MIC (2021) analyzes the conditions for the formation of digital citizens, which are: Ability to access digital information sources, ability to communicate in the digital environment; Basic digital skills to buy and sell goods online and exercise rights and responsibilities when transacting in the digital environment... Huong, D.T.T. (2025) shares the same view, and affirms that building a digital government not only requires a team of information technology engineers, but also requires a common workforce (people) with basic digital skills to use digital tools in production, services and daily life.

In practical terms, the goal of building a digital government is to serve the people, so only when each citizen becomes a digital citizen will this goal be successful. Therefore, the government needs to implement a policy of training and fostering universal digital knowledge and skills for the people; at the same time, people need to proactively learn and foster digital knowledge and skills, only then will the goal of developing digital citizens and building a digital government be truly affirmed. MIC (2021) and Huong, D.T.T. (2025) also mentioned quite detailed issues of digital citizenship, reflected in digital knowledge and skills and the initiative to learn and update digital knowledge and skills to suit the trend of digital society development. The author inherits and develops the above content and builds the scale "Digital citizens" (DC) with general content: People are equipped and updated with basic digital knowledge and skills necessary to adapt to the trend of digital government development (DC1); People transact and interact effectively in the digital environment when participating in the policy process - giving opinions and criticizing local policies (DC2); People have effective education and interaction in the digital environment when requesting to resolve administrative records at the local level (DC3).

Through the overview study, the author has built a theoretical framework on digital government, digital civil servants, and digital citizens. The research model includes 3 scales: "Digital civil servant" (DS), "Digital citizens" (DC), "Digital government" (DG), designed by the author to evaluate/test the correlation and examine the level of influence of 2 independent scales/variables "Digital civil servant" (DS), "Digital citizens" (DC) on the dependent scale/variable "Digital government" (DG).

The scales include 9 observation variables, designed into 9 questions in the survey and measured by a 5-level Likert scale: 1 - Strongly disagree; 2 - Disagree; 3 - No opinion; 4 - Agree; 5 - Strongly agree (Table 1, Figure 1). The author of the survey aims to collect data for analysis, evaluation and conclusion of empirical research in Vietnam with the hypothesis: *Digital civil servants (H1), Digital citizens (H2) are basic requirements, having a direct impact on Digital government.*

Table 1. Theoretical framework

Research content	Related research	Developing new research scales
1. Digital civil servant (DS)		
<ul style="list-style-type: none"> - Equipped with basic and necessary digital knowledge and skills to meet job requirements and complete assigned tasks in the digital environment. - Interactivity and work instructions to handle people's administrative records in the digital environment. 	Hoan, D.M. (2024); Khanh, T.T.B. (2025);	<p>DS1. Civil servants have basic digital knowledge and skills necessary to work in the digital environment.</p> <p>DS2. Civil servants interact and transact with people proficiently in the digital environment to resolve people's administrative document requests.</p> <p>DS3. Civil servants carry out work in a digital environment, ensuring progress and quality of assigned work, creating satisfaction for the people.</p>
2. Digital citizens (DC)		
<ul style="list-style-type: none"> - Equipped with basic digital knowledge and skills necessary to transact in the digital environment. - Ability to interact and transact in the digital environment when 	MIC (2021); Huong, D.T.T. (2025).	<p>DC1. People are equipped and updated with basic digital knowledge and skills necessary to adapt to the development trend of digital government.</p> <p>DC2. People transact and interact effectively in the digital environment when participating in the policy process - giving opinions and criticizing local policies.</p>

Research content	Related research	Developing new research scales
participating in policy processes, requests to resolve administrative records at the local level; or participate in other social activities in the digital environment.		DC3. People can effectively transact and interact in the digital environment when requesting to resolve administrative records at the local level.
3. Digital government (DG)		
<ul style="list-style-type: none"> - Designed and powered by data and digital technology. - Operate safely in the digital environment; provide timely and accurate services. 	MST (2022); Ngoc, X. (2023); Vuong, L.D. et al. (2024).	<p>DG1. The digital government model is designed - all operations are safe in the digital environment.</p> <p>DG2. Data-driven and digital governance - digital technology applied in governance; fully digitized data.</p> <p>DG3. People can conveniently exploit digital data and transact and interact with the government in the digital environment.</p>

Source: Compiled by the author through the review

Research Model

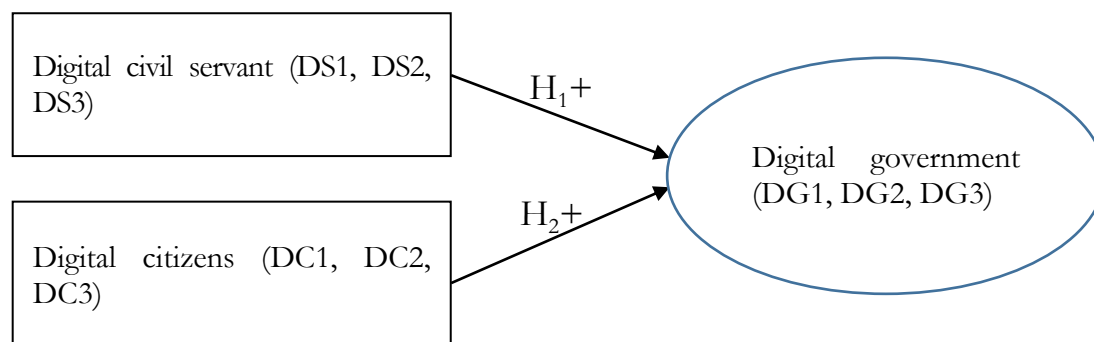


Figure 1. Research model

RESEARCH METHODS

The author uses a combination of qualitative research (collecting and analyzing secondary documents to build a theoretical model) and quantitative research (surveying, collecting and analyzing primary data to test the theoretical model). In quantitative research, according to Hair, J.F. et al. (2009), the minimum sample size required is $N = m \times 5$ (in which, m is the number of observed variables). Applied in this study, the model includes 03 scales, 9 observed variables, so the minimum sample size required to conduct the survey is $N = 9 \times 5 = 45$.

In fact, the author conducted an official survey with a sample size of $N = 240$ ($N > 45$) local civil servants at the commune level and $N = 240$ ($N > 45$) local people of 24 selected communes in 3 provinces representing 3 regions of Vietnam, including Lang Son province (North), Nghe An province (Central), Tay Ninh province (South). The survey was conducted selectively to collect information from respondents with higher education level and age group with better ability to acquire digital knowledge and skills: Civil servants under 45 years old; People under 45 years old, conducting online transactions with local authorities at least 3 times in the last 3 years.

RESEARCH RESULTS AND DISCUSSION

From the data collected through a survey with a sample size of $N = 240$ local civil servants at the commune level and $N = 240$ local people, the author tested the reliability of the scales and observed variables to serve as a basis for conducting exploratory factor analysis and regression analysis. According to Hair, J.F. et al. (2009), the scales are reliable when meeting the standard condition of Cronbach's $\alpha > 0.6$; the observed variables are reliable when meeting the standard condition of Corrected Item-Total Correlation > 0.3 . The test results show that all 3 scales and 9 observed variables in the theoretical model are reliable, including: Model 1 - civil servant survey; and Model 2 - citizen survey (Table 2).

Table 2. Statistical results and testing results of the scale

Scales	Observed variables	N	Min	Max	Mean	Std. Deviation	Cronbach ' Alpha	Corrected Item-Total Correlation
Model 1: Civil servant survey								
1. Digital civil servant (DS)	DS1	240	1	5	4.11	.599	.722	DS1 = .581
	DS2	240	1	5	4.06	.609		DS2 = .489
	DS3	240	1	5	4.08	.621		DS3 = .549
2. Digital citizens (DC)	DC1	240	1	5	4.03	.618	.665	DC1 = .451
	DC2	240	1	5	3.87	.596		DC2 = .399
	DC3	240	1	5	3.91	.605		DC3 = .406
3. Digital government (DG)	DG1	240	1	5	4.09	.600	.690	DG1 = .572
	DG2	240	1	5	4.13	.596		DG2 = .646
	DG3	240	1	5	4.04	.621		DG3 = .597
Model 2: Citizen survey								
1. Digital civil servant (DS)	DS1	240	1	5	4.20	.511	.693	DS1 = .617
	DS2	240	1	5	4.02	.592		DS2 = .607
	DS3	240	1	5	4.08	.601		DS3 = .588
2. Digital citizens (DC)	DC1	240	1	5	3.96	.594	.658	DC1 = .504
	DC2	240	1	5	3.81	.485		DC2 = .517
	DC3	240	1	5	3.76	.444		DC3 = .485
3. Digital government (DG)	DG1	240	1	5	4.19	.623	.643	DG1 = .604
	DG2	240	1	5	3.93	.584		DG2 = .580
	DG3	240	1	5	3.92	.602		DG3 = .459

Source: Author's survey results

The statistical data in Table 2 shows that the observations of the "Digital civil servant" (DS), "Digital citizens" (DC), "Digital government" (DG) scales are rated at an average of Mean ≥ 3.87 (Model 1) and Mean ≥ 3.76 (Model 2), all of which are statistically significant according to the Likert scale (1-5). This shows that the digital government model in Vietnam is designed and operates safely, helping people to easily exploit digital data and transact and interact with the government in the digital environment; civil servants and people are assessed to have basic digital knowledge and skills necessary to conduct transactions, work, and request services in the digital environment, which is a condition for building and operating a digital government.

In particular, there is a difference in the observed values of the scales, that the observed values of the "Digital citizens" (DC) scale are assessed at a lower level than the observed values of the "Digital civil servant" (DS) scale in both models: Mean (DC1) = 4.03, Mean (DC2) = 3.87, Mean (DC3) = 3.91 (Model 1) and Mean (DC1) = 3.96, Mean (DC2) = 3.81, Mean (DC3) = 3.76 (Model 2). This shows that many people are still not proficient/effective in transactions, interactions with the government to request file resolution or participate in the policy process in the digital environment, directly affecting the construction of digital government. For civil servants, although the observed values of the "Digital civil servant" (DS) scale are rated at a higher level, showing that digital civil servants have basic digital knowledge and skills to work in the digital environment, they still need to be improved. Because digital transformation and building a digital government is a new issue, there will be many changes and developments, while the vast majority of civil servants are recruited before implementing digital transformation and are mainly trained in digital knowledge and skills as a situational solution to implement the national digital transformation program.

The above empirical research results contribute to reflecting the reality of digital capacity of Vietnamese civil servants and people in the context of the 4.0 revolution and digital transformation, building a digital government today; showing similarities with the comments and assessments of a number of recent studies. Research by Huong, D.T.T. (2025) concluded that: Digital transformation and building a digital government not only requires a team of information technology engineers, but also requires a general workforce with basic digital skills to use digital tools in production, services and daily life; however, the rate of workers with basic digital skills in Vietnam is still low compared to the regional average; the difference in access to technology between population groups leads to the risk of increasing the digital divide, which not only affects the effectiveness of the social digitalization process but can also deepen social inequality if there are no timely and reasonable intervention policies. Or like Anh, B.T.

(2025), when discussing this issue, suggested solutions to support people in accessing digital resources, open resources and data, creating favorable conditions for people to access and exploit information.

With the test results meeting the standards, all 3 scales and 9 observed variables of the theoretical model can be used to perform the following analysis techniques. The author conducts exploratory factor analysis with Varimax rotation to preliminarily assess the unidimensionality, convergent value, and discriminant value of the scales to have more basis for drawing research conclusions about the suitability of the theoretical model.

Exploratory factor analysis results for Model 1 - civil servant survey

Table 3. Total Variance Explained

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.767
Bartlett's Test of Sphericity	Approx. Chi-Square	1715.381
	df	36
	Sig.	.000

Total Variance Explained									
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.738	41.537	41.537	3.738	41.537	41.537	2.636	29.292	29.292
2	2.705	30.052	71.589	2.705	30.052	71.589	2.606	28.953	58.245
3	1.213	13.474	85.063	1.213	13.474	85.063	2.414	26.819	85.063
4	.393	4.363	89.426						
5	.357	3.966	93.392						
6	.221	2.460	95.852						
7	.175	1.943	97.795						
8	.133	1.476	99.271						
9	.066	.729	100.000						
Extraction Method: Principal Component Analysis.									

Source: Author's survey results

Table 4. Rotated Component Matrix

Rotated Component Matrix ^a				
Scales	Observed variables	Component		
		1	2	3
1. Digital civil servant (DS)	DS1	.731		
	DS2	.729		
	DS3	.827		
2. Digital citizens (DC)	DC1		.857	
	DC2		.864	
	DC3		.818	
3. Digital government (DG)	DG1			.797
	DG2			.825
	DG3			.740
Extraction Method: Principal Component Analysis.				
Rotation Method: Varimax with Kaiser Normalization.				
a. Rotation converged in 4 iterations.				

Source: Author's survey results

In terms of theory, exploratory factor analysis was performed in accordance with the data set shown through the values: $0.5 \leq \text{KMO} \leq 1$; Bartlett test with observation significance level $\text{Sig.} < 0.05$; Eigenvalue ≥ 1 ; Total Variance Explained $\geq 50\%$; Factor Loading ≥ 0.5 (Hair, J.F. et al., 2009). Data in Table 3 and Table 4 show that:

- $\text{KMO} = 0.767 > 0.5$, confirming that exploratory factor analysis is appropriate for the data set; Bartlett's test has an observed significance level of $\text{Sig.} = 0.000 < 0.05$, showing that the observed variables have a linear

correlation with the representative factor. Total variance extracted with Cumulative % = 85.063% > 50% (Table 3), showing that 85.063% of the variation of the representative factors is explained by the observed variables; all observed variables have Factor Loading > 0.5 (Table 4), showing that the observed variables have good statistical significance. The theoretical research model initially proposed is consistent with the survey research practice.

- The observed variables were extracted into 03 factors corresponding to 03 initial factors with Eigenvalues > 1 (Table 3), continuing to confirm the suitability of the initial research model. And the initial research model was kept intact, including: 02 independent variables "Digital civil servant" (DS), "Digital citizens" (DC) and 01 dependent variable "Digital government" (DG) with a total of 9 observed variables with good statistical significance, which can perform multivariate linear regression analysis to examine the relationship of variables in the model.

Exploratory factor analysis results for Model 2 - citizen survey

Similarly, performing exploratory factor analysis with Varimax rotation with Model 2, the results show that: Model 2 (citizen survey) has KMO = 0.779 (KMO > 0.5); Cumulative % = 82.164% (Cumulative % > 50%); loading factor of observed variables with Factor Loading > 0.5; observed variables are extracted into 03 factors corresponding to 03 initial factors with Eigenvalues > 1, continuing to confirm the suitability of the original research model. And thus, the original research model is kept intact, including: 02 independent variables "Digital civil servant" (DS), "Digital citizens" (DC) and 01 dependent variable "Digital government" (DG) with a total of 9 observed variables with good statistical significance, it is possible to perform multivariate linear regression analysis to examine the relationship of variables in the model (Table 5).

Table 5. Multivariate regression results

Model		Coefficients ^a						
		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1. Civil servant R ² = .687 Durbin-Watson = 2.007	(Constant)	1.013	.545		1.384	.001		
	DS	.593	.048	.554	11.889	.000	.521	1.821
	DC	.323	.050	.218	9.544	.002	.439	1.802
2. Citizens R ² = .709 Durbin-Watson = 2.104	(Constant)	.984	.342		1.589	.000		
	DS	.661	.055	.649	10.748	.000	.671	1.758
	DC	.243	.067	.192	8.515	.001	.385	1.793

a. Dependent Variable: Digital government (DG)

Source: Author's survey results

Data in Table 5 shows that both models have standard test values to be able to draw research conclusions about the correlation between 02 independent variables "Digital civil servant" (DS), "Digital citizens" (DC) and 01 dependent variable "Digital government" (DG). Specifically:

Model 1 - Civil Servant Survey

- R² = 0.687, confirming that the scales "Digital civil servant" (DS), "Digital citizens" (DC) explain 68.7% of the variation in the scale "Digital government" (DG); VIF = 1.821 and VIF = 1.802 (1 < VIF < 2), showing that the regression model does not have multicollinearity; Durbin-Watson = 2.007 (1 < d < 3), showing that the regression model does not have autocorrelation, confirming that the scales "Digital civil servant" (DS), "Digital citizens" (DC) are independent and have the same impact on the scale "Digital government" (DG), confirming the suitability of the theoretical research model with the survey data set.
- The regression coefficients of the two independent variables "Digital civil servant" (DS), "Digital citizens" (DC) are both statistically significant (Sig. < 0.05) and have positive values: B(DS) = 0.593 and B(DC) = 0.323, confirming the positive relationship between the two independent variables "Digital civil servant" (DS), "Digital citizens" (DC) and 01 dependent variable "Digital government" (DG); hypotheses H1, H2 are accepted; the initial research model continues to be confirmed to be appropriate.

- The regression model is determined as: $DG = 1.013 + 0.593 \cdot DS + 0.323 \cdot DC$. The correlation level of the independent variables and the dependent variable in decreasing order is: "Digital civil servant" (DS), "Digital citizens" (DC).

Model 2 - Citizen Survey

The regression analysis results in Model 2 also show similar significant values as the conclusion in Model 1: $R^2 = .709$; $VIF = 1.758$ and $VIF = 1.793$ ($1 < VIF < 2$); Durbin-Watson = 2.104 ($1 < d < 3$). The regression model is determined as: $DG = 0.984 + 0.661 \cdot DS + 0.243 \cdot DC$. The correlation level of the independent variables and the dependent variable in decreasing order is: "Digital civil servant" (DS), "Digital citizens" (DC).

The statistical results (Table 2) and regression analysis results (Table 5) show similarities with the assessment level of digital competence of civil servants and digital competence of citizens, contributing to further confirmation of empirical research results in Vietnam, that:

- Firstly, the digital government model in Vietnam is designed and operates safely, helping people to easily exploit digital data and transact and interact with the government in the digital environment; civil servants and people are assessed to have basic digital knowledge and skills necessary to conduct transactions, work, and request services in the digital environment, which is a condition for building and operating a digital government.
- Second, digital civil servants have basic digital knowledge and skills to work in the digital environment but still need to be improved. Because digital transformation and building a digital government is a new issue, there will be many changes and developments, while the vast majority of civil servants are recruited before implementing digital transformation and are mainly trained in digital knowledge and skills as a temporary solution to implement the national digital transformation program.
- Third, despite the dissemination of digital knowledge and skills, many people are still not proficient/effective in transactions, interacting with the government to request resolution of documents or participating in the policy process in the digital environment. This directly affects the development of digital government, because people are the subjects directly interacting with the government in the digital environment to build and operate digital government at the local level.

From the research conclusion, the author implies some policy contents aiming at the goal of developing digital capacity of civil servants (digital civil servants) and digital capacity of citizens (digital citizens) to maintain and develop digital human resources for the digital transformation strategy and building a digital government in Vietnam.

- Firstly, for civil servants, although agencies and localities have prepared for the goal of digital transformation and building a digital government in the 2021-2025 period; civil servants are trained in basic digital knowledge and skills necessary to perform public duties in the digital environment. However, this can be considered a temporary solution to respond to the trend of digital technology development and digital transformation. In the long term, agencies and localities need to pay attention to synchronously implementing two solutions: (1) training, fostering and encouraging training and fostering to develop the digital capacity of civil servants; (2) building standards on digital knowledge and skills to recruit and assess the quality of civil servants.
- Second, for the people, localities actively communicate and disseminate basic digital knowledge and skills to people through mass media, digital cultural platforms and social networks; support people to learn, update and supplement basic digital knowledge and skills to adapt to the trend of digital society development. This is meaningful as a short-term policy measure to promptly foster, update and supplement the gaps in digital knowledge and skills for people to form and develop digital human resources in the context of the current digital society; contribute to raising public awareness, encouraging people to actively participate in digital transformation and building and operating digital government. In the long term, the state needs to research and implement digital knowledge and skills education programs for students at each level and grade to prepare digital social human resources for national strategic goals.

The above solutions are meaningful in state administration of agencies and localities. However, the goal of digital transformation, building and operating digital government is to serve the people, so when each citizen becomes a digital citizen, digital transformation will be successful. On the other hand, digital transformation to build and operate digital government is not just the work of state agencies, but also the work of each citizen, requiring the synchronous participation of the entire social system. Therefore, in addition to policy solutions from agencies and localities, each civil servant and citizen needs to regularly proactively learn, update and supplement digital knowledge and skills to suit the development trend of digital society, which is a factor ensuring the success of digital transformation and changing national rankings.

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