Building a Capacity Framework for Officials and Civil Servants to Meet the Requirements of Developing Digital Government in Vietnam

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Abstract: *Digital transformation in the public sector is an inevitable trend, in which Digital Government is considered a high-level development stage, aiming to improve governance efficiency, transparency, and quality of service to the people. The contingent of cadres and civil servants plays a key role in the process of realizing Digital Government, requiring comprehensive changes in professional capacity, technology, and public service thinking. However, Vietnam currently does not have a specialized capacity framework for cadres and civil servants suitable for the characteristics of Digital Government. Based on the analysis of international documents, domestic policy documents and expert consultation, this study proposes a capacity framework consisting of 5 main groups: (1) digital technology capacity and data use; (2) public management capacity in the digital environment; (3) capacity for systems thinking and innovation; (4) capacity for digital ethics and information security; and (5) capacity for serving people in the digital space. The competency framework is designed in an integrated manner, suitable for each job position and administrative level. The study also proposes directions for applying the competency framework in recruitment, training, and evaluation of cadres and civil servants and recommends some policy implications to improve the effectiveness of human resource development in the public sector in the process of national digital transformation.*

Keywords: *Digital Government; Civil servant competency; Digital transformation; Public administration; Competency framework.*

1. INTRODUCTION

In the context of the fourth industrial revolution around the world, digital technology is affecting all aspects of economic and social life, including state administration and public service provision. The digital transformation process in the public sector is a trend and an urgent requirement to improve the efficiency of state apparatus operations, enhance interaction between the government and the people, and at the same time create a modern, transparent, and serving administration (Chu et al., 2023). Digital government is a high-level development stage of applying digital technology in state management, which has become a strategic goal of many countries, including Vietnam. In recent years, the Communist Party of Vietnam and the State have had many policies and guidelines to promote national digital transformation, focusing on building a digital government and developing a digital economy and a digital society. This raises an urgent need to improve the capacity of cadres and civil servants - those who directly deploy, coordinate, and operate the digital government system.

According to Resolution No. 52-NQ/TW in 2019 of the Politburo on several policies and strategies to proactively participate in the fourth industrial revolution, Vietnam has set the goal of developing a digital government, aiming for a smart government by 2030. The National Digital Transformation Plan and the Digital Government Development Strategy for the 2021-2025 period, with a vision to 2030, also specifically emphasize the central role of people in the digital transformation process. Cadres, civil servants, and public employees are considered the "nucleus" that determines the success of implementing digital government at all levels. In practice, the qualifications and capacity of cadres and civil servants have not kept up with the requirements of innovation (Hoan, 2024). Many people are still confused about applying information technology, lack the skills to work in a digital environment, and

are not ready to adapt to modern management methods based on data and digital technology. This directly affects the operational efficiency of state agencies in the process of building a digital government.

The reasons leading to this situation is that the government does not have a clear, systematic, and appropriate competency framework to guide the training, recruitment, use, and evaluation of officials and civil servants in the context of digital transformation. Meanwhile, in many developed countries and some countries in the region, digital competency framework models for the public sector have been built and widely applied, playing an important role as a tool for planning and developing high-quality administrative human resources (Cuong & Le, 2024). These competency frameworks often clearly identify core competency groups, functional competencies, and professional competencies appropriate for each job position in digital government. In Vietnam, although there are documents regulating standards, titles, and some capacity requirements for officials and civil servants, they are still general and do not fully reflect new requirements in the context of the digitalization of the administrative system. The lack of a specialized capacity framework for officials and civil servants serving the digital government causes difficulties in training and fostering, as well as not creating motivation to innovate and improve the quality of the team.

Digital Government not only requires civil servants to have solid professional capacity, digital technology skills, systems thinking, data-based decision-making ability, change management capacity, and quick adaptation to a constantly changing working environment. This leads to a change like the civil service's capacity model. Civil servants are the ones who execute orders and handle administrative procedures; in a Digital Government, they must become the ones who create, support, and coordinate digital activities while ensuring integrity, transparency, and accountability in the digital space. Therefore, building a modern capacity framework that is suitable for the characteristics of digital administration is an urgent strategic requirement for Vietnam in the current period and the near future (Hien et al., 2024).

This study was conducted to build a capacity framework for civil servants that is suitable for the requirements of Digital Government in Vietnam. The study focuses on identifying the necessary core competency groups, which may include: (1) digital technology and data usage competencies, (2) public management competencies in the digital environment, (3) systems thinking and innovation competencies, (4) digital ethics and information security competencies, (5) citizen service competencies in the digital space. At the same time, the study also proposes criteria to assess the level of response of officials and civil servants to each competency group, thereby serving as a basis for recruitment, training, fostering, and human resource management in the public sector. The objective of the study is to build a highly applicable competency framework that can be adjusted to each group of job positions or management levels and, at the same time, be suitable for the practical conditions of Vietnam.

2. LITERATURE OVERVIEW

In recent years, the term "Digital Government" has become increasingly popular in documents, national development strategies, and academic research related to public administration and digital transformation. Digital Government is understood as the next development of e-government, not only the digitalization of public services but also the restructuring of the entire process of governance, management, and decision-making of the state based on big data, artificial intelligence, and advanced digital technologies (Hai et al., 2021). Digital Government is a government model that comprehensively applies digital technology to improve management efficiency, increase transparency and interaction, and proactively serve the people. Along with that, factors such as open data, people's participation through digital platforms, and the ability to integrate between public information systems become important pillars of Digital Government.

The concept of Digital Government in Vietnam is also being increasingly defined through legal documents and strategic orientations. According to Decision No. 942/QD-TTg of 2021 of the Prime Minister approving the Strategy for e-Government Development towards Digital Government for the 2021-2025 period, with a vision to 2030, Digital Government in Vietnam is understood as a Government operating based on data and digital technology to provide high-quality public services, serving people and businesses more effectively. Characteristics of Digital Government include operating based on

digital data; providing services on demand; having the ability to forecast and make quick decisions; and creating a two-way, transparent, and trustworthy interactive environment with citizens.

The shift from e-Government to Digital Government entails fundamental changes in operating models, management methods, and especially new requirements for civil servants. Studies around the world have shown that the success or failure of Digital Government depends largely on the capacity of human resources in the public sector. To effectively implement Digital Government, civil servants need to be equipped with multi-dimensional capacities, not only in terms of technological skills but also in terms of data management, strategic thinking, inter-sectoral coordination capacity, and public ethics in the digital environment. The digital capacity of civil servants is one of the key factors that helps countries move faster in the digital transformation process while ensuring the sustainability of digital initiatives in the public sector (Ly, 2024).

Some countries have taken the lead in building a competency framework specifically for civil servants in the Digital Government environment. For example, Singapore has developed a "Digital Workplace Skills Framework" that includes digital platform skills, data analysis skills, information security skills, and innovation skills. South Korea has also developed a digital civil servant competency framework with three main groups: technology usage skills, data-based policy analysis skills, and digital citizen engagement skills. The "digital-ready" civil servant competency framework model focuses on the ability to adapt, innovate, and work in an environment supported by artificial intelligence and automation systems. These models all emphasize the essential role of technological competencies but do not consider them the only factor, but rather part of a comprehensive competency system that civil servants need to develop (Medel-Ramírez et al., 2023).

In Vietnam, civil servant capacity has been mentioned in many documents such as the Law on Cadres and Civil Servants (2008, revised 2019), Decree 90/2020/ND-CP on the assessment of cadres, civil servants, and public employees, or the standards for titles according to each rank, but the civil servant capacity framework still mainly focuses on traditional administrative capacities such as legal knowledge, document skills, communication skills, and public ethics. The inclusion of digital capacities or the capacity to work in a digital environment into the capacity framework has not been systematically implemented (Nga et al., 2024). Some training programs on digital transformation for cadres and civil servants have been organized but have not been linked to a clear system of capacity standards. This leads to a lack of orientation in training and fostering and also causes difficulties in evaluating and using cadres.

Some studies in Vietnam have mentioned civil servant capacity in the new context. Digital competence should be considered an important criterion in evaluating civil servants in the 4.0 period. It is proposed to build a competency framework including groups of digital management competencies, data competencies, security competencies, and digital citizen service competencies. However, these studies stop at the level of theoretical proposals, do not have specific assessment tools, and do not clearly define the competency stratification according to each group of job positions or management levels. In addition, the gap in inheriting and comparing with international competency frameworks is also a limitation that needs to be overcome (Nguyen et al., 2024).

It is noteworthy that the trend of approaching according to the "integrated competency framework" model is being applied by many countries. This model not only classifies competencies horizontally (ie, different competency groups) but also organizes them vertically, i.e., proficiency levels corresponding to positions and roles in the administrative system (Nguyen, 2022). This allows for the flexibility to apply the competency framework to many different contexts, from recruitment and appointment to training and performance evaluation. Vietnam's approach to this model can bring dual benefits, both standardizing competency requirements and being suitable for the characteristics of administrative decentralization and diverse job positions in the state apparatus.

The literature review also shows the need to distinguish between groups of competencies in the civil servant competency framework for digital government. Typically, modern competency frameworks are divided into 3 groups (1) Core competencies such as public service ethics, systems thinking, and collaboration; (2) Functional competencies such as digital project management, data processing, and basic digital skills; and (3) Technical competencies associated with specific jobs such as information systems management, cybersecurity, and big data analysis. Building a competency framework based on this grouping helps increase logic and facilitates the assessment of competencies by position.

From the above overview, it can be seen that the current research gap in Vietnam is the lack of a competency framework specifically designed for the context of digital government where civil servants are not only users of technology but also agents promoting digital transformation in the organization (Pham, 2020). Researching and developing a suitable competency framework with high practical applicability is essential to meet the new requirements set out in the national digital government development strategy.

3. RESEARCH METHODOLOGY

This study uses a qualitative approach to ensure comprehensiveness and depth in developing a competency framework for officials and civil servants to meet the requirements of developing a digital government in Vietnam. Document analysis is used to synthesize and systematize international competency frameworks and policy and legal documents related to officials, civil servants and digital transformation in the public sector. The research team conducted semi-structured interviews with many experts including managers, policy makers and lecturers of administrative schools to collect in-depth opinions on the necessary competency groups in the current context.

4. RESULTS AND DISCUSSION

Based on the synthesis of international documents, national policies, and expert opinions in the field of public management, state administration, and digital transformation, the study has developed a competency framework consisting of five main competency groups for cadres and civil servants in the context of developing Digital Government in Vietnam. The competency groups are determined according to the principle of inheriting the traditional competency framework of public administration while deeply integrating new factors related to the requirements of technology, data, and digital thinking. This competency framework is not only an assessment tool but also an orientation for the development, training, and planning of cadres and civil servants in the future.

4.1. Digital Technology and Data Usage Competency Group

The competency group specifically reflects the requirements of Digital Government compared to traditional government or e-government. In Digital Government, civil servants must "know how to use" technology, but they also need to understand how technology changes the nature of administrative work and how to use data to make management decisions (Shepherdson et al., 2009).

Different from the common understanding of "knowing how to use computers", this group of competencies includes basic understanding of digital infrastructure (national databases, integration platforms, data sharing), the ability to exploit open data and big data, the ability to read and understand data in analytical reports, and the ability to coordinate with technology experts in internal digital transformation projects. Some more advanced competencies recommended for department-level managers to manage public information technology projects include an understanding of information system administration and the basic principles of information security and safety.

4.2. Public Management Capacity Group in the Digital Environment

The capacity group refers to the ability to organize, manage, and coordinate administrative work in a digital operating environment, with data connectivity and the application of digital platforms within the agency and between agencies. Experts emphasize that management in the digital environment is not simply "people management" but "system management", where managers need to know how to design administrative processes associated with digital platforms, optimize information flow through data, and make decisions based on real-time indicators (Thang, 2024).

Digital coordination capacity is also demonstrated in the ability to implement digitalization programs in the organization, from planning, internal communication, and team training to monitoring digitalization progress. Unlike the traditional line-based management model, civil servants in the digital environment must know how to coordinate across sectors and cooperate with technology units, private partners, and the digital community. An indispensable accompanying competency is digital leadership – the ability to inspire and facilitate an organization to overcome obstacles when transforming from an old management model to a digital model.

In the context of Vietnam's public administration, where information is fragmented between levels and sectors, this competency group plays a key role in promoting integration, connectivity, and cooperation

between agencies. Through a survey of expert opinions, it can be seen that many department and sector managers still face difficulties in coordinating technology projects because they cannot operate in a digital environment that requires flexibility, agility, and the ability to make decisions on a digital platform.

Many experts in Vietnam also agree that in the context of digitalization, officials and civil servants need to be encouraged to have an innovative spirit, not be afraid to try new methods, be willing to fail in a controlled manner, and continuously learn from practice. However, the major challenge today is that the public management system in Vietnam is still biased towards stability, focusing more on control than innovation. Therefore, building and disseminating this group of competencies requires changes in both leadership thinking and institutional design.

4.3. Group of Competencies For Systems Thinking And Innovation

In the context of Digital Government, officials and civil servants not only take on the role of implementing administrative processes according to templates but also have to actively participate in the process of redesigning the system, adapting to rapid changes in technology, data, and people's behavior. Therefore, systems thinking and innovation capacity are considered a group of fundamental competencies, playing a dominant role in the approach to work of civil servants in the modern administrative environment (Tuoi & Thanh, 2023).

Systems thinking is the ability to look at the whole picture and analyze the relationships between components in the administrative system, from the grassroots to the central level, between agencies, units, and between the state and the people. In the digital environment, processes are no longer separate but closely linked through data, technology platforms, and public service ecosystems. Officials and civil servants need to identify information flows, detect system bottlenecks, and propose improvements based on a comprehensive perspective instead of handling problems locally and separately.

In addition, innovation is not only the privilege of leaders or technicians but has become a core competency of all civil servants in the Digital Government. This competency includes the ability to ask questions, propose new solutions, test initiatives in daily work, and be willing to accept risks within the allowed framework to improve governance efficiency. Innovation capacity needs to be linked to local realities, areas of expertise, and people's needs instead of mechanically applying available models.

Vietnamese practice shows that many cadres and civil servants are still limited by task-based thinking, lacking initiative in detecting and solving systemic problems. Therefore, the group of systemic thinking and innovation capacity not only needs to be trained as technical skills but also needs to be promoted through mechanisms to encourage initiatives, accept experimentation, and a culture of continuous learning in the public sector.

4.4. Ethical Competence and Public Service Responsibility in the Digital Environment

A prominent feature of the Digital Government is the strong increase in the level of publicity, transparency, and the ability of citizens to monitor through digital platforms (Trung, 2024). This poses new requirements for public service ethics in the digital environment, including ethics in using data, protecting citizen information, making administrative processes transparent, and the ability to be accountable to the public for decisions supported by technology.

Traditional public service ethics are concerned with personal behavioral standards (respect for the law, integrity, honesty), digital ethics require officials and public servants to have a deeper understanding of risks in the digital environment such as personal data disclosure, information manipulation on the network environment, or using information systems for improper public purposes. In addition, digital accountability is also an important criterion for public servants to maintain social trust in an open administrative environment.

4.5. Competency Group Serving People in the Digital Environment

Last but not least is the competency group serving people and businesses through the digital environment, where civil servants are not only manual file processors but also become "digital experience supporters" for citizens. This competency includes the ability to advise and guide the use of online public services; the ability to explain legal issues via digital platforms (public service portals, official social networks); digital communication skills; and a positive and proactive service attitude (Thoa & Cuong, 2024).

The development of online public services, the national public service portal, has completely changed the relationship between the government and its citizens. People expect quick, transparent, and accurate responses, which requires civil servants to not only be good at their profession but also know how to proficiently use digital tools to interact and support. In addition, civil servants also need to be able to evaluate citizen feedback through digital data, thereby improving service processes and minimizing hassles (Van Quang et al., 2021).

The diagram above illustrates a competency framework of 5 groups for civil servants in the context of developing Digital Government in Vietnam. The center is the overall goal, connected to 5 core competency groups.
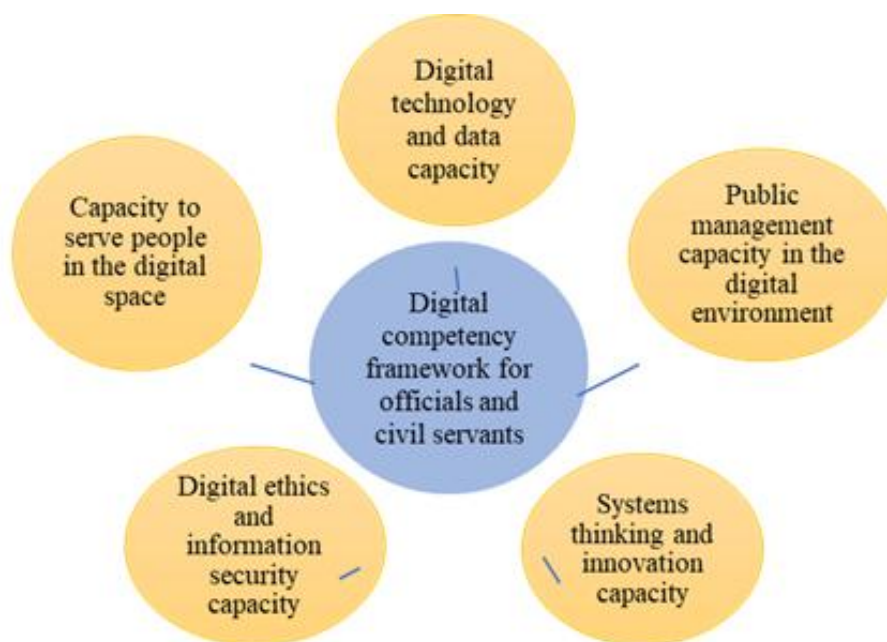

Figure 1. *Competency framework of 5 groups for civil servants in the context of developing Digital Government in Vietnam*

Based on the research and analysis results, some policy implications are proposed to support the implementation of the competency framework into public personnel management practices in the context of developing Digital Government in Vietnam.

First, the State needs to issue a national standard competency framework for cadres and civil servants in the context of digital transformation, and integrate this framework into regulations on standards for ranks, titles and job positions (Briesen et al., 2019). This is an important step to institutionalize the competency framework, ensuring legality and wide applicability.

Second, it is necessary to establish a competency assessment system according to the standard framework, combining periodic assessment, ad hoc assessment and assessment during the work process. This system can use electronic assessment tools, combining self-assessment, peer assessment and assessment by leaders. Administrative agencies at the ministerial and provincial levels should be the first places to pilot the implementation (Van Thanh et al., 2018).

Third, the training and development system for officials and civil servants needs to be redesigned in a competency-based manner, that is, "training according to capacity shortage needs" rather than mass training. It is necessary to develop a digital civil servant training framework program, combining online learning, centralized training, and simulation practice, while developing a team of lecturers with knowledge of both public administration and digital technology.

Fourth, it is necessary to strengthen motivational mechanisms associated with digital capacity, such as prioritizing the appointment of officials with high digital capacity, innovative leadership ability, and deep understanding of data. This not only creates motivation for learning but also contributes to changing administrative thinking toward modernity, flexibility, and adaptability to the digital environment (Vu & Vu, 2021).

Fifth, it is necessary to establish an inter-sectoral coordination mechanism between the Ministry of Home Affairs, the Ministry of Information and Communications, the Ministry of Education and Training, and localities for unified implementation, avoiding overlap or fragmentation in the development and application of the competency framework. In addition, it is possible to mobilize technical support from international organizations such as UNDP, ADB, or international cooperation agencies of developed countries during the pilot implementation and effectiveness evaluation process.

5. CONCLUSION

The development of Digital Government requires profound transformation in the organization and operation of the state administrative apparatus. In which, the team of cadres and civil servants plays a central role, deciding the effectiveness of the implementation of digitalization programs, administrative reform and the provision of modern public services. This study has identified and proposed a competency framework consisting of 5 main groups to guide the capacity development of cadres and civil servants in the context of Digital Government in Vietnam.

The competency framework not only has theoretical value in clarifying the characteristics and requirements of the digital administrative environment but also has practical significance in developing recruitment criteria, designing training programs, assessing capacity, and classifying cadres and civil servants. The implementation of the competency framework requires institutional adjustment, designing a suitable implementation roadmap, and developing an ecosystem to support learning and assessing digital competencies in the public sector. In the coming time, it is necessary to continue testing the application of the competency framework in central and local administrative agencies, thereby perfecting specific indicators for each job position.

At the same time, further research on digital leadership competencies and the development of qualitative assessment tools will be necessary directions to develop a modern, professional civil service team that can adapt to national digital transformation.

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