

Research Article

Network Management and Criteria for Consultants on Digital Transformation in Enterprises in Vietnam

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Abstract

The Ministry of Information and Communications has issued criteria and regulations for the recognition of individuals and organizations as consultants within the network supporting enterprises in their digital transformation, as outlined in Decision No. 376/QĐ-BTTTT dated March 13, 2023. This set of criteria includes specific evaluation standards for individuals and organizations participating in the Ministry's consultant network for digital transformation support. Consultants have utilized these evaluation criteria to enhance and supplement their capabilities, thereby improving the quality of their organizational activities in order to qualify for participation in the Ministry's assessment network for the level of digital transformation among enterprises. This study aims to analyze the content of the evaluation criteria and the outcomes related to the quality assessment of individuals and organizations within the consultant network for digital transformation support in Vietnam, as established by the Ministry of Information and Communications. The research findings highlight the current state of quality among consultants in the digital transformation sector, particularly concerning enterprise digital transformation. Additionally, the study proposes solutions to enhance the overall quality of consulting services, specifically in the area of digital transformation, to meet the growing demand for consultancy in the context of the Fourth Industrial Revolution.

Keywords

Digital transformation, Consultants, Ministry of Information and Communications, Evaluation criteria, Quality assessment, Fourth Industrial Revolution

1. The Necessity of Establishing Criteria

The digital economy increasingly asserts itself as a core driver of global growth. No longer confined to a select group

of "high-tech" nations, the digital economy is now being propelled across both developed and developing countries,

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generating substantial profits for numerous businesses and nations alike. Governments and policymakers are actively researching and seeking optimal strategies to leverage the opportunities presented by the digital transformation revolution to accelerate the development of their respective digital economies, thereby maximizing benefits for their citizens.

Digital transformation involves a comprehensive change wherein businesses, universities, the public, and workers adapt to new business models and operational methods. It encompasses the utilization of web functionalities in design, production, marketing, sales, advertising, and data-driven management models. Consequently, the capabilities of companies are enhanced, leading to improved processes. Digital technology encompasses advancements related to smartphones, cloud computing, big data, artificial intelligence, robotics, the Internet of Things (IoT), 3D printing, virtualization, cybersecurity, advanced robotic systems, automation, and more—all extensively applied across various sectors of socioeconomic life. Small and medium-sized enterprises (SMEs) constitute 99.83% of the total number of businesses, account for 72.7% of total employment, contribute 50.6% of total value added, and provide 55.1% of export turnover, underscoring their vital role in the economy. These enterprises are restructuring their organizational structures and business cultures, transitioning from technology-driven production to management-oriented awareness to achieve effective digital transformation processes. It is crucial for SMEs to conduct cost-benefit analyses of digital technologies and to recognize these technologies' potential benefits.

Vietnam possesses significant opportunities for developing its digital economy. With a large, youthful population and a burgeoning workforce, the country is positioned favorably for new business models. The increasing number of Internet and smartphone users contributes to an attractive market for the digital economy. Vietnam is anticipated to become a global center for digital technology and economy development. The resolutions from the XIII National Congress of the Party, the Politburo's Resolution 52-NQ-TW dated September 27, 2019, and the National Digital Transformation Program as established by Decision 749/QĐ-TTg on June 3, 2020, all emphasize that digital transformation and the development of the digital economy and society are strategic priorities for the nation moving forward, setting ambitious goals, including achieving a digital economy that accounts for 20% of GDP by 2025. These development targets present significant challenges, as conventional growth scenarios suggest that Vietnam's digital economy might only reach 10.5% of GDP by 2025. To achieve the goal of a 20% digital economy, a sustained annual growth rate of approximately 20% is required, three times the expected GDP growth rate of 6.5-7% per year. This ambitious scenario demands decisive action from the entire political system and substantial investment from various ministries, sectors, and localities for digital transformation

and the development of the digital economy.

The application of domestic digital platforms, termed "Make in Vietnam," will be crucial in providing the momentum necessary for the recovery and growth of Vietnam's economy. Digital technology firms are already assisting various sectors in their recovery and growth efforts.

In business operations, companies continually seek technological solutions to enhance productivity and operational efficiency across all stages. In a competitive and globalized environment, businesses that fail to adopt new technologies for innovation and continue to rely on traditional business methods risk vanishing from the market. Particularly in light of the rapid changes brought about by the Fourth Industrial Revolution, companies that do not adapt quickly and leverage modern technological advantages to optimize production may face the threat of lagging behind and struggling to survive.

According to the National Strategy for the Development of the Digital Economy and Digital Society by 2025, with a vision toward 2030, the Prime Minister has tasked the Ministry of Information and Communications with the responsibility of developing and implementing a professional program for building a network of experts and consulting organizations focused on digital economy and enterprise digital transformation.

Currently, the digital transformation capabilities of Vietnamese enterprises remain weak. Although there is a substantial number of digital platform enterprises, they lack strength, and the "Make in Vietnam" platforms face intense competition from external sources. Despite their efforts, Vietnamese digital platform enterprises are under significant competitive pressure from foreign platforms, particularly those operating cross-border, and are experiencing unfair competition even domestically. The legal framework is still incomplete; we currently lack effective tools to combat monopolies, ensure fair competition, and protect Vietnamese enterprises in cyberspace. Additionally, there is a deficiency of legal instruments to limit harmful mergers and acquisitions that could adversely impact the market. Furthermore, the market for the digital economy has yet to develop in the right direction, and the establishment of a domestic digital market—especially a government digital market to provide Vietnamese enterprises with opportunities for growth before venturing into the global arena—has not been effectively implemented.

A critical task that must be undertaken to meet the digital transformation needs of enterprises is the establishment of a Digital Economy and Enterprise Digital Transformation Consulting Network. This network will guide and assist businesses in assessing their level of digital transformation and provide consultancy for implementing digital transformation and developing the digital economy. The professional organization of the consulting network will include the development of expert criteria and operational regulations, conducting surveys to select experts and consulting entities for participation,

creating training materials, organizing training courses for experts, hosting seminars and expert discussions, and coordinating activities to maintain and develop the network.

2. Research findings

2.1 Conducting a preliminary assessment of the various digital transformation frameworks currently employed by consulting firms for enterprises.

Currently, there are four digital transformation frameworks employed by consulting firms for evaluating enterprises, which are compared as follows:

Table 1. four digital transformation frameworks

Design Parameters	PWC	Deloitte/TM Forum	MIT/Capgemini	Forrester
Tập trung vào các khía cạnh cụ thể	<p>Seven aspects represent digital transformation as follows:</p> <ol style="list-style-type: none"> Digital business models and customer engagement Digitization of products and services offered Digitization and integration of vertical and horizontal value chains 	<p>There are five core business aspects that support enterprises throughout their transformation journey:</p> <ol style="list-style-type: none"> Customer Technology Strategy Operations Organization & Culture 	<p>The concept of "digital intensity" includes:</p> <ol style="list-style-type: none"> Strategic assets Internal operations Digital capabilities 	<p>Four aspects provide a holistic view of a company:</p> <ol style="list-style-type: none"> Culture Technology Organization Insights

	<ol style="list-style-type: none"> Data and analytics as core competencies Flexible IT architecture Compliance, security, legal, and taxation Organization, personnel, and digital culture 			
Theoretical Framework	<p>The PWC digital transformation framework emphasizes the development of comprehensive solutions for clients, focusing on creating a future digital ecosystem that provides a 360-degree view of the company among partners, vendors, and customers</p>	<p>Deloitte/TM Forum's digital maturity model indicates that strategy plays a crucial role in determining digital maturity, followed by a focus on customer engagement.</p>	<p>The digital transformation framework proposed by MIT highlights that large companies primarily concentrate on implementing technologies such as analytics, mobility, social media, and embedded devices to enhance customer experiences and improve both internal and external operations</p>	<p>Forrester's Digital Transformation 4.0 framework suggests that companies should primarily focus on three areas: developing adaptive digital strategies, integrating digital activities across the organization, and embedding operational excellence into their digital execution processes.</p>

As- singing Digital Maturity	This model adopts a quantitative approach, assigning scores to specific aspects and subsequently determining the level of digital maturity	The quantitative assessment considers summarized scores for each sub-aspect	The quantitative assessment considers average composite score derived from an online questionnaire for each dimension	The quantitative method is applied by calculating digital maturity scores, which inform the decision-making process regarding maturity levels.
Levels of Digital Maturity	The model identifies four specific levels of maturity: 1. Novice 2. Vertical Integrator 3. Horizontal Collaborator 4. Digital Champion	Additionally, five specific maturity levels are defined as follows: 1. Initiating 2. Emerging 3. Implementing 4. Advancing 5. Leading	Another classification includes four specific maturity levels: 1. Beginner 2. Fashionista 3. Conservative 4. Digirati	Furthermore, four specific industry categories are recognized: 1. Skeptics 2. Adopters 3. Collaborators 4. Differentiators
Visualization of Results	Scores indicate the distribution of maturity levels	Maturity distribution can be illustrated graphically through a 2x2 matrix	Maturity distribution can be illustrated graphically through a 2x2 matrix	Scores indicate the distribution of maturity levels
Policy	This model suggests that	This model advises companies to act and concentrate on:	companies should prioritize: 1.	Companies are encouraged to

	companies should: 1. Transition to a platform-based approach 2. Focus on human capital 3. Enhance processes 4. Implement new technologies 5. Build digital trust	1. Strategy 2. Targeting digital capabilities 3. Enhancing customer experiences	Customer-centric focus 2. Empowering employees 3. Organizational change	concentrate on: 1. Developing strategic plans 2. Creating customer-centric metrics 3. Implementing marketing impact analysis.
Examples	Fast-moving consumer goods in Scandinavia	Telecommunications service providers	L'Oréal Nike 's Asian paint retail	Nestle

2.2 Investigating international experiences in establishing consulting roles based on the assessment of digital transformation frameworks utilized by enterprises.

Digital transformation consultants provide not only in-depth technological insights but also play a critical role in guiding enterprises through their digital transformation journeys. They assist organizations in selecting and implementing effective technological solutions while also significantly influencing business strategy and organizational culture.

These consultants help businesses gain a clearer understanding of the opportunities and challenges presented by the digital environment. They offer tailored strategies that align with the specific needs of each enterprise, ensuring that the transformation process encompasses not just technology but also processes, human resources, and the overall business landscape.

Furthermore, digital transformation consultants are pivotal in educating and reshaping organizational mindsets, fostering a corporate culture that is adaptable and responsive to market fluctuations. Their expertise extends beyond technical knowledge; they possess a profound understanding of industry dynamics and market trends.

As the demand for digital transformation consultants grows, they emerge as essential professional partners and strategic allies, enabling businesses not only to survive but also to thrive in an increasingly competitive digital marketplace. Consequently, these consultants can assume various roles related to strategy, architecture, and operations. For instance, they play a vital role in helping enterprises harness the full potential of the digital landscape.

Their engagement begins with strategic consulting, where they provide detailed guidance on digital transformation strategies. This includes defining objectives, establishing a vision, and developing specific roadmaps and implementation plans to ensure that each step aligns with the organization's overarching goals.

Another domain in which digital transformation consultants operate is in the design and implementation of information technology architectures. They are responsible for creating flexible and appropriate architectures that meet the specific needs of businesses, thereby facilitating the development of efficient and integrated systems that optimize workflows and enhance overall performance.

Additionally, these consultants contribute to development by proposing and building new applications, systems, and services. In doing so, they ensure that enterprises not only adopt new technologies but also maximize their innovative and competitive potential within the digital market.

The operation and management of digital systems is another crucial aspect emphasized by digital transformation consultants. They engage in the deployment and maintenance of digital services, ensuring that all operational elements are managed effectively and securely.

Finally, digital transformation consultants are responsible for cybersecurity and information safety within organizations. They develop and implement security measures to mitigate cyber risks, ensuring that business information is rigorously protected.

Together, these activities constitute a comprehensive digital transformation strategy, empowering businesses to transition confidently and effectively from traditional to digital realms.

2.3 Developing an operational and management framework for the consulting network focused on digital transformation of enterprises in Vietnam

An overarching diagram illustrating the Formation,

Operation, and Utilization of the Consultant Network.

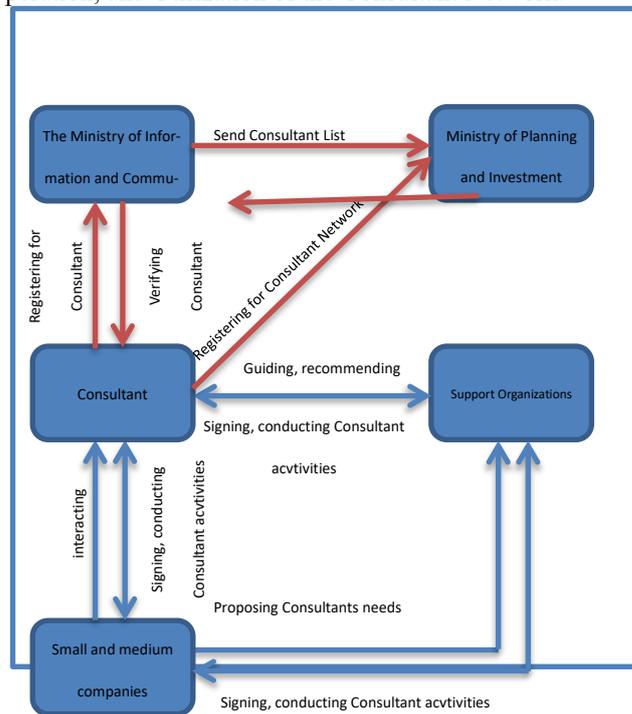


Figure 1. An overarching diagram illustrating the Formation, Operation, and Utilization of the Consultant Network.



Figure 2. The Process of Establishing, Managing, and Operating the Consultant Network.

2.3.1 Responsibilities of the Ministry of Information and Communications

Manage, monitor, and evaluate the activities of the consultant network, removing any consultants who do not meet the established requirements.

Assess demand and provide training to enhance the skills of consultants.

Submit an annual report on the status of implementation concerning small and medium-sized enterprises to the Ministry of Planning and Investment by December 15 each year.

2.3.2 Responsibilities of Agencies and Organizations Supporting Small and Medium-Sized Enterprises: The Consultation Support Process for Small and Medium-Sized Enterprises

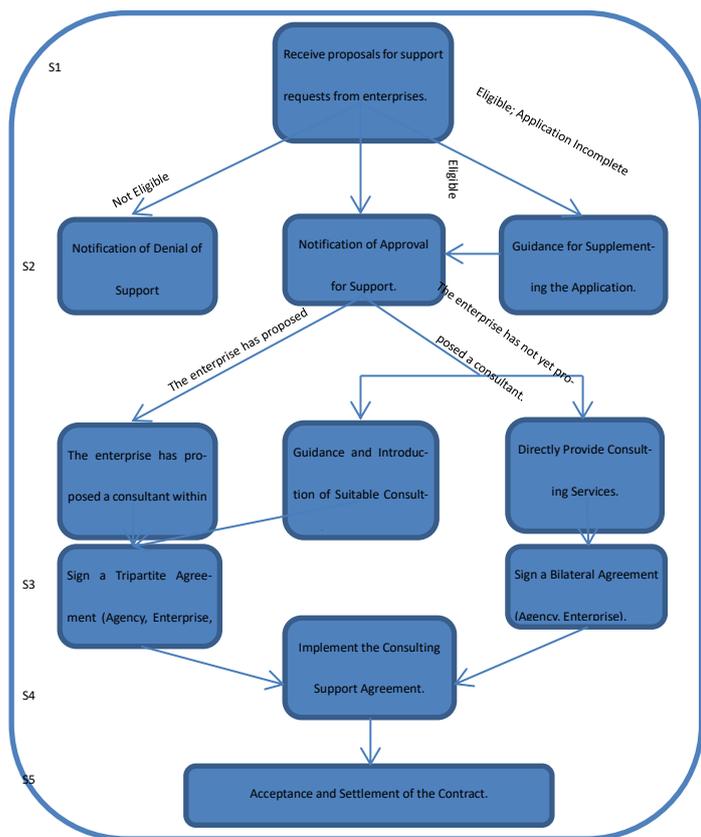


Figure 3. The Process of Consultant Support.

2.3.3 The Registration Process for Verification in the Consultant Network

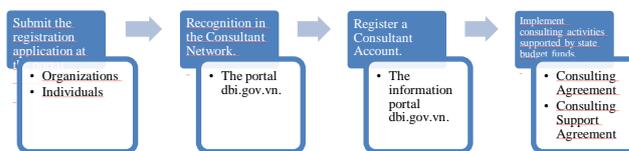


Figure 4. The Registration Process for Verification in the Consultant Network

4. Recommendation

Proposing Competency Requirements for Consultants in the Field of Digital Transformation

Table 2. Criteria for Digital Transformation Consultants

	Chief Consultant / Strategic Consultant	Digital Experience Consultant for Clients	Infrastructure and Digital Technology Consultant	Operations, Management, and Business Process System Development Consultant	Cultural Transformation Consultant	Data and Information Asset Consultant
0	Standard					
I	Consulting for Large Enterprises / Corporations / Groups					
1	Educational Qualifications					
1 . 1	Degree	Master's degree or higher	Bachelor's degree or higher in a relevant consulting	Bachelor's degree or higher	Bachelor's degree or higher	Bachelor's degree or higher

			field				
1 · 2	Relevant Certifications (if applicable)	Certifications from internationally recognized organizations acknowledged by Vietnam in fields related to digital transformation					
1 · 3	Research Projects (if applicable)						
2	Work Experience						
2 · 1	Duration of Work Experience	≥ 10 years	≥ 7 years	≥ 7 years	≥ 7 years	≥ 5 years	≥ 5 years
3	Consulting Experience						

3 · 1	Consulting Experience	Projects /Programs: Digital Transformation (CD S) Strategy Other Relevant Fields	Specialized Projects /Programs	IT Projects /Programs	Business Management/ Human Resources/Process Systems/ Finance Projects/ Programs	Digital Development /Management /Business Culture Projects/ Programs	Projects /Programs for Digitization and Data Management /Construction
3 · 2	Consulting Experience	≥ 7 years	≥ 5 years	≥ 5 years	≥ 3 years	≥ 3 years	≥ 3 years
3 · 3	g Firm Size	Enterprises with a revenue exceeding 500 billion VND and/ or employing more than 300 personnel	Enterprises with a revenue exceeding 300 billion VND and/ or employing more than 200 personnel	Enterprises with a revenue exceeding 200 billion VND and/ or employing more than 200 personnel	Enterprises with a revenue exceeding 300 billion VND and/ or employing more than 200 personnel	Enterprises with a revenue exceeding 200 billion VND and/ or employing more than 200 personnel	Enterprises with a revenue exceeding 300 billion VND and/ or employing more than 200 personnel

3 · 4	Number of Participating Consulting Firms	≥ 3 enterprises	≥ 2 enterprises	≥ 2 enterprises	≥ 2 enterprises	≥ 1 enterprise	≥ 2 enterprises
3 · 5	Consulting Contracts	≥ 3 consulting contracts, with at least 1 contract valued at ≥ 1 billion VND	≥ 2 consulting contracts, with at least 1 contract valued at ≥ 300 million VND	≥ 2 consulting contracts, with at least 1 contract valued at ≥ 300 million VND	≥ 2 consulting contracts, with at least 1 contract valued at ≥ 300 million VND	≥ 2 consulting contracts, with at least 1 contract valued at ≥ 50 million VND	≥ 2 consulting contracts, with at least 1 contract valued at ≥ 100 million VND
4	Management Experience						
4 · 1	Management Experience	≥ 5 years in a management position at an enterprise with revenue exceeding 500 billion	≥ 3 years in a management position at an enterprise or in a specialized management role at	≥ 3 years in a management position with in the IT sector at an enterprise with revenue	≥ 3 years in a management position at an enterprise with revenue exceeding 200 billion VND and/or employing more than	≥ 2 years in a management position within the human resources sector at an enterprise with revenue exceeding	≥ 3 years in a management position at an enterprise with revenue exceeding 200 billion VND and/or

		VND and/or employing more than 300 personnel	an enterprise with revenue exceeding 200 billion VND and/or employing more than 100 personnel	exceeding 200 billion VND and/or employing more than 100 personnel	100 personnel	200 billion VND and/or employing more than 100 personnel	employing more than 100 personnel
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1 1	Consulting for Small and Medium-sized Enterprises						
1 1	Educational Qualifications						
1 · 1	Consulting for Small and Medium-sized Enterprises (SMEs)	Bachelor's degree or higher in the field of consulting/training	Bachelor's degree or higher				
2	Work Experience						
2 · 1	Work Experience	≥ 7 years	≥ 5 years	≥ 5 years	≥ 5 years	≥ 5 years	≥ 5 years

3	Consulting Experience						
3 . 1	Primary Consulting Areas	Expe-ri-ence in: Digital Transformation (CD S), Business Management, and other relevant consulting fields	Expe-ri-ence in the consulting domain	Expe-ri-ence in In-formation Technology (IT)	Expe-ri-ence in business management and operations	Expe-ri-ence in consulting and training for business culture	Expe-ri-ence in data management
3 . 2	Consulting Experience	≥ 3 years	≥ 1 year	≥ 1 year	≥ 1 year	≥ 1 year	≥ 1 year
3 . 3	Size of Consulting Firms	Small and medium-sized enterprises (SM Es)	Small and medium-sized enterprises (SM Es)	Small and medium-sized enterprises (SM Es)	Small and medium-sized enterprises (SME s)	Small and medium-sized enterprises (SM Es)	Small and medium-sized enterprises (SM Es)
3 . 4	Number of Participating Consulting Firms	≥ 3 enterprises	≥ 2 enterprises	≥ 2 enterprises	≥ 2 enterprises	≥ 2 enterprises	≥ 2 enterprises

3 . 5	Consulting Contracts	≥ 2 consulting contracts, with at least 1 contract valued at ≥ 100 million VND	≥ 1 consulting contract valued at ≥ 50 million VND	≥ 1 consulting contract valued at ≥ 50 million VND	≥ 1 consulting contract valued at ≥ 50 million VND	≥ 1 consulting contract valued at ≥ 50 million VND	≥ 1 consulting contract valued at ≥ 50 million VND
4	Management experience						
4 . 1	Years of Management Experience	≥ 3 years in a management position with in a management position within SME s or as personnel working at organizations that support SME s, in projects aimed at business	≥ 2 years in a management position with in the IT sector at SM Es or as IT personnel in organizations or	≥ 2 years in a management position with in SME s or as personnel working at organizations that support SME s, in projects aimed at business	≥ 2 years in a management role focused on building corporate culture	≥ 2 years of experience in consulting and providing services related to data management and data systems	

	specialist working at organizations that support SMEs or in projects aimed at business development support		projects that support enterprises	development support, or as consultants for enterprises		
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5. Conclusion

The Ministry of Information and Communications plays a critical and undeniable role in the management and operation of the consultant network, as well as in providing guidance on digital transformation for enterprises. Its role extends beyond the management of information and communications to encompass various aspects that support the comprehensive development of businesses in the digital age.

The operational and management processes of the network, along with the criteria for consultants, are increasingly significant in the context of enterprise digital transformation, where flexibility, innovation, and a deep understanding of technology are essential for success. This process is not merely a series of implementation steps; it represents a holistic strategy that synchronizes key elements such as technology, human resources, business processes, and customer relationships.

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