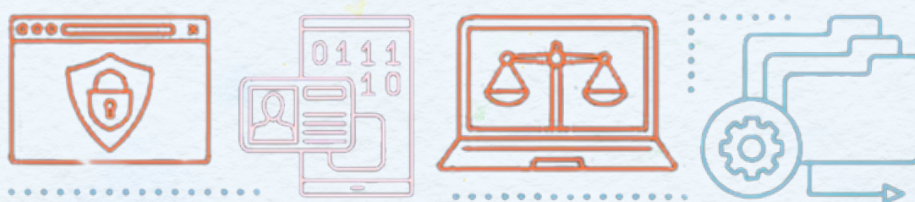


Joint Agency Briefing Paper



DIGITAL TECHNOLOGY & VULNERABLE GROUPS



From Policy to Practice in Vietnam

Vietnam, June 2025

This paper represents a collaborative effort led by the Institute for Policy Studies and Media Development (IPS), built upon in-depth consultations with partner organizations and relevant stakeholders. In pursuit of a more inclusive and impactful digital transformation in Vietnam, IPS has undertaken a thorough assessment of the national digital agenda, working closely with key partners to identify the opportunities and challenges faced by social organizations and vulnerable groups.

The resulting policy recommendations provide a strategic roadmap that encompasses policy, technical, and cooperation perspectives. Drawing from this collective expertise, the report highlights four pivotal lessons that can guide future action and inspire more equitable digital progress.

- ① Digital Transformation as a Multi-Component Ecosystem, Requiring Synchronization Between Policy, Technology, and People
- ② Inclusive Policy Design, Substantive Participation Mechanisms, and Grassroots Support Institutions: Foundations for Effective Digital Transformation with the Key Intermediary Role of SOs
- ③ Ensuring Digital Rights as a Prerequisite for Greater Public Participation in the Digital Transformation Process, Especially for Vulnerable Groups
- ④ Establishing Multilevel, Multilayered, and Multilateral Cooperation Mechanisms to Strengthen the Capacity, Voice, and Policy Influence of SOs and Disadvantaged Communities

Institute for Policy Studies and Media Development (IPS)

18th Floor, VTC Online Building, 18 Tam Trinh,

Minh Khai, Hai Ba Trung, Hanoi, Vietnam

P: (84) 373 643 601

E: contact@ips.org.vn

W: ips.org.vn

| Background

In recent years, digital transformation has become one of Vietnam's top strategic priorities to promote socio-economic development in the digital era. The National Digital Transformation Program until 2025, with a vision towards 2030, was approved by the Prime Minister in Decision No. 749/QĐ-TTg dated June 3, 2020, with the aim of making Vietnam a stable, prosperous digital country, a pioneer in testing new technologies and business models.

In line with this orientation, digital transformation is not merely a technological solution, but also a key driving force for innovation in state management, improving business productivity and competitiveness, as well as enhancing the quality of life for citizens. Notably, the Program emphasizes the principle of “leave no one behind”, aiming to ensure that all people, including marginalized communities such as persons with disabilities (PWDs), ethnic minorities (EMs), migrant workers, etc., have equal access to information, knowledge, digital services, and development opportunities.

Although digital transformation is identified as an inclusive, “people-centered” process, most digital transformation policies in Vietnam are still built in a “top-down” approach, led by state agencies, with consultation processes that are often formalistic. Despite playing an important role in bridging policies and communities, especially for marginalized communities, social organizations (SOs) do not yet have a clear mechanism for participation in the stages of policy formulation, critique, and monitoring. Many SOs, in practice, are either not invited to participate early in the policy-making process or do not have sufficient access to information. When participation does occur, it is typically limited to conferences or seminars held after the policy drafting is nearly finalized, which significantly limits the potential for substantive contributions.

In addition, the digital divide remains a major barrier, making many individuals in marginalized communities to face difficulties or be excluded from the opportunities brought by digital transformation. Not only infrastructure or equipment issues, the digital divide also includes disparities in digital skills, the ability to use digital services, and the level of trust in technology platforms. According to the Press Release on the results of the 2023 PWDs Survey¹, only 33.6% of PWDs in Vietnam have Internet access, compared to 83.7% of those without disabilities. Migrant workers, who have already faced difficulties in integrating into new workplaces and residences, also encounter barriers in accessing public services as well as other social services. The 2024 PAPI survey² further indicates that temporary residents, especially in localities with a large number of temporary residents, face many limitations in accessing public services.

¹ Statistics Department (Ministry of Finance). (2024). *Press Release on the results of the 2023 PWDs Survey*. Access at: <https://www.nso.gov.vn/tin-tuc-thong-ke/2024/11/thong-cao-bao-chi-ve-ket-qua-dieu-tra-nguoi-khuyet-tat-nam-2023/>.

² CECODES, RTA & UNDP. (2025). *The 2024 Viet Nam Provincial Governance and Public Administration Performance Index (PAPI 2024): Measuring Citizens' Experiences*. A Joint Policy Research Paper by the Centre for Community Support and Development Studies (CECODES), Real-Time Analytics (RTA), and United Nations Development Programme (UNDP). Hanoi, Vietnam. Access at: <https://papi.org.vn/eng/bao-cao/>.

This context clearly shows the urgent need to strengthen the multi-stakeholder coordination mechanisms, ensuring the meaningful participation of SOs and representatives of marginalized communities in the digital transformation process, from policy formulation to implementation and monitoring. Only then can digital transformation truly become a tool to promote inclusive development and social equity. To foster more effective participation of SOs and vulnerable groups, and to help bridge the digital divide, the Institute for Policy Studies and Media Development (IPS) has conducted an assessment of the digital transformation process in Vietnam. IPS also collaborated with several SOs in Vietnam including the Center for Highland Natural Resource Governance Research (CEGORN), the Center of Research and Inclusive Development Action (IDEA), the Hanoi Association of Persons with Disabilities (DP Hanoi) and the Center for Development and Integration (CDI), to carry out studies assessing the impact of digital transformation on vulnerable groups.

All participating organizations have extensive experience working directly with vulnerable communities. Specifically, IDEA and DP Hanoi are specialized in PWDs and women with disabilities; CEGORN has strengths in researching and supporting Ems in mountainous areas; CDI focuses on labor rights and supporting migrant workers. Thanks to the involvement of these organizations, the research process could deeply reach the target community groups, reflecting their voices, needs, and practical experiences in digital transformation. In addition to collecting qualitative and quantitative data from the public, the studies also created opportunities for marginalized communities to participate directly or indirectly in policies feedback and proposing process through methods such as community surveys, in-depth interviews, focus group discussions, or policy dialogues with regulatory agencies. Representativeness and close connection with the community not only enhance the credibility of research findings, but also provide an important foundation for building inclusive, feasible and meaningful digital transformation solutions in practice.

| Research Objectives

The above-mentioned studies were carried out with the following objectives:

- Assess the participation of SOs and marginalized communities (including PWDs, women with disabilities, EMs, and migrant workers) in the process of developing and recommending digital transformation policies in Vietnam.
- Explore the experiences of marginalized communities in using digital technology devices and services, including advantages and disadvantages/barriers.
- Identify digital devices and applications that meet accessibility requirements and are widely used by marginalized communities.
- Assess the impact of programs and policies related to digital transformation on marginalized communities.
- Propose policy solutions and recommendations to enhance the effectiveness of digital technology for marginalized communities.

Impact of Digital Transformation Policies and the Current Situation of Access and Participation of SOs and Vulnerable Groups in the Digital Transformation Process

1. The Current Situation of Access and Participation of SOs and Vulnerable Groups in the Digital Transformation Process

The current state of digital technology access among vulnerable groups (PWDs, EMs, and migrant workers) reveals significant limitations and barriers. While these barriers are often specific to each group, they generally stem from common difficulties including: lack of digital devices and stable internet connectivity, limited digital skills and technological literacy, language and literacy barriers, complex and unfriendly interface and procedures on service delivery platforms (particularly online public services) for disadvantaged users, lack of adequate support and guidance from officials or relatives, lack of awareness and information about digital services and support policies, and high cost of technology access relative to the income of these groups. Beyond challenges in accessing digital technology, vulnerable groups currently have limited opportunities to express their needs, share experiences, or contribute feedback to digital transformation programs and policies. Although many digital initiatives have been widely implemented, most have not been designed with the substantive participation of vulnerable groups, resulting in policy solutions that may not suit their living conditions, access capabilities, and specific contexts. The lack of effective consultation mechanisms and appropriate support further limits the ability of these groups to contribute.

Technology Literacy and Skills:

PWDs who participated in DP Hanoi's study³ said that due to differences in cognition, understanding and knowledge compared to non-disabled people, they are more likely to trust others. People with intellectual disabilities living in the inner city of Hanoi face serious difficulties due to lack of basic education, such as reading and writing, leading to limited access to information and participation in social activities. Meanwhile, people with visual impairments rely heavily on accessibility aids such as screen readers (JAWS, NVDA on computers; Voice Assistant, TalkBack on Android; Be My Eyes, Vision on iOS) or text-to-speech (TTS) translation apps. However, the rapid development of technology and the delay in updating support tools make it difficult for them to keep up and cause many inconveniences.

Meanwhile, for EMs surveyed by CEGORN, low literacy rates and language differences are the greatest barriers to accessing and using applications on smart digital devices⁴. Re-illiteracy and limited skills in filtering information significantly reduce the

³ DP Hanoi & IPS. (2024). *Assessment Report on the Impact of Digital Transformation on Persons with Disabilities in Hanoi*. Access at: <https://dphanoi.org.vn/bao-cau-nghien-cuu-tac-dong-cua-chuyen-doi-so-doi-voi-nguoi-khuyet-tat-tai-ha-noi.html>.

⁴ CEGORN & IPS. (2024). *Assessment Report on the Impact of Digital Transformation on Ethnic Minority Areas*. Access at: <https://ips.org.vn/thu-vien/bao-cau-danh-gia-ve-tac-dong-chuyen-doi-so-doi-voi-cac-vung-dong-bao-dan-toc-thieu-so-ct292.html>.

effectiveness of technological solutions. The role of the Community Digital Technology (CDT) Teams has not been fully realized, resulting in support for ethnic minority groups remaining ineffective.

The CDI report⁵ points out that although migrant workers tend to have a more basic understanding of digital technology, they are affected by concerns about privacy and personal data protection, making them quite hesitant to use applications that require the provision of personal data.

Access to Information and Online Public Services:

Online public administration services are currently considered difficult to access by marginalized communities due to unfriendly interface design and failure to meet basic international accessibility standards such as Web Content Accessibility Guidelines 2.0 (WCAG 2.0). PWDs face numerous difficulties, often having to perform operations many times without success when carrying out online public administrative procedures, and are unable to find appropriate support when necessary. In addition, 5G network rates account for a significant portion of the average income of rural workers (packages range from 135,000 VND/month for 4GB/day to 480,000 VND/month for 20GB/day, while the average income of rural workers is about 7,200,000 VND/month⁶), creating a major barrier to accessing online services. When using applications such as VNeID⁷ or banking applications, PWDs frequently encounter many obstacles during log in, information authentication, and security operations, due to user experience (UX) design has not been optimized for different types of disabilities. Filling out online forms is also a big challenge due to complex structure, lack of support instructions, and the absence of integrated accessibility tools, resulting in errors or failure to complete the process.

The rate of access to online public services, expressing opinions, participating in public activities/events or discussing social issues on social networks, as well as access to other information of EMs is still limited. One of the main reasons is language barrier, limited skills in using technology, and a lack of understanding regarding the functions and operation of digital platforms. Many individuals are unaware of the existence of government portals, websites, and online public services platforms; even though who are aware often do not know how to use them due to their complicated, unfriendly and unoptimized interfaces for disadvantaged users. Meanwhile, although many information channels have been set up to help people access official information from state agencies such as portals or commune-level websites, in fact, these platforms have not been operated effectively, causing further obstacles and making information access even more difficult. This leads to the fact that citizens are almost entirely dependent on local

⁵ CDI & IPS. (2024). *Assessment Report on the Impact of the National Digital Transformation Program on Migrant Workers in Selected Industrial Parks in Vietnam*. Access at: <https://cdi.vietnam.org/wp-content/uploads/2024/12/CDI-Bao-cao-danh-gia-tac-dong-CDS-toi-NLD-di-cu-tai-2024.pdf>.

⁶ Statistics Department (Ministry of Finance). (2025). *Press Release on the socio-economic situation in the first quarter of 2025*. Access at: <https://www.gso.gov.vn/du-lieu-va-so-lieu-thong-ke/2025/04/thong-cao-bao-chi-tinh-hinh-kinh-te-xa-hoi-quy-i-nam-2025/>.

⁷ VNeID is Vietnam's national identification application that can substitute for traditional documents, enables digital identification of citizens, and provides features that support the development of digital citizens, digital government, and a digital society.

officials when they have related needs, such as carrying out administrative procedures in the electronic platform.

The CDI report⁸ indicates that about 30% of migrant workers are unaware of online public services, reflecting the significant gap between policy expectations and practice. Although services related to residence registration and residence management are widely used, they continue to encounter issues regarding procedures, settlement time and additional costs compared to current regulations when carried out online. While the implementation of online administrative procedures for migrant workers is an urgent need, often tied to key social protection and support policies, the national online learning platform (onetouch.mic.gov.vn) has not in fact provided specific courses to guide the public in performing online public services. The number of courses available for citizens is far lower than those for government officials, leading to a lack of essential information and skills for this population group.

Issues with Devices and Connectivity Infrastructure:

According to BroadbandChoices (2022)⁹, the average Internet speed in Vietnam was 6.1 Mbit/s, significantly lower than in other countries in the region such as the Philippines, Malaysia, and Thailand, creating a major barrier to digital access. This issue is particularly concerning for PWDs, who have a high demand for assistive devices and software to access information but face difficulties in accessing the Internet and in owning or using appropriate equipment. According to the Press Release on the results of the 2023 PWDs Survey¹⁰, only 33.6% of PWDs in Vietnam have Internet access, compared to 83.7% of those without disabilities. The level of Internet access among PWDs also varies by region and gender: in urban areas, 40.1% have Internet access, while in rural areas the figure is 31.0%; women with disabilities have a higher rate of Internet use (39.3%) than men with disabilities (29.6%).

IDEA's report¹¹ noted that 80% of PWDs in Ha Nam province use smartphones, but most of them are old, second-hand devices either purchased used or given by family members. In fact, these older devices frequently experience hardware and software malfunctions and do not meet the minimum technical requirements needed to run accessibility applications. Such devices are often incompatible with new technology, lack memory space, are no longer supported by manufacturers with operating systems update, and pose many potential security risks. For the visually impaired, screen readers such as TalkBack (Android) or VoiceOver (iOS) require devices with enough powerful configurations, regularly updated operating system, and well-functioning touchscreens.

⁸ CDI & IPS. (2024). *Assessment Report on the Impact of the National Digital Transformation Program on Migrant Workers in Selected Industrial Parks in Vietnam*. Access at: https://cdvietnam.org/wp-content/uploads/2024/12/CDI_Bao-cao-danh-gia-tac-dong-CDS-toi-NLD-di-cu-tai-2024.pdf.

⁹ BroadbandChoices. (2022). *Internet Accessibility Index*. Access at: <https://www.broadbandchoices.co.uk/features/internet-accessibility-index>.

¹⁰ Statistics Department (Ministry of Finance). (2024). *Press Release on the results of the 2023 PWDs Survey*. Access at: <https://www.nso.gov.vn/tin-tuc-thong-ke/2024/11/thong-cao-bao-chi-ve-ket-qua-dieu-tra-nguoi-khuyet-tat-nam-2023/>.

¹¹ IDEA & IPS. (2024). *Research Report on the Participation of Women with Disabilities and Ethnic Minority Communities in the Policy-Making Process Related to Digital Transformation*. Access at: https://idea.org.vn/wp-content/uploads/2025/02/BAO-CAO-IDEA-_-Final.pdf.

The incompatibility between outdated devices and digital platforms not only interrupts the UX but also inadvertently excludes PWDs from the ongoing digital transformation.

Connectivity infrastructure in remote and mountainous areas still face many shortcomings. According to a report by the Ministry of Information and Communications (now the Ministry of Science and Technology), as of mid-2024, only 256/1077 “signal black spots” villages (23.8%) have mobile coverage¹². In many locations, the power grid system is not fully covered, making it difficult or even impossible to deploy and maintain an Internet connection. Many areas have not been invested by network operators to expand their infrastructure due to high costs and low profits, forcing residents to rely on unstable public Wi-Fi hotspots or poor-quality mobile networks. Even in some rural lowland areas, connection quality remains unstable, affecting the experience while using online platforms, especially for administrative transactions or online learning. In addition, the shortage of free public access points leaves citizens, especially low-income groups, with few options if they cannot afford personal devices/private connections. This shows a clear inequality in technology infrastructure between regions and population groups, posing a great challenge to comprehensive and inclusive digital transformation goal.

Participation in the Policy Process:

At various levels, SOs continue to play important roles in implementing and participating in the policy development process. These organizations tend to focus more on providing feedback and policy critique during the formulation and enactment stages than on monitoring and evaluating policy implementation later on. Beyond policy role, many SOs are currently implementing social programs and projects in areas such as education, health, culture, science, environmental protection, poverty alleviation, food hygiene and safety, vocational training, and employment support, etc. Through these activities, they are directly involved in the delivery of social policy goals, especially by supporting vulnerable groups such as PWDs, EMs, women, and children.

However, most SOs still have a limited level of participation throughout the entire policy cycle, especially in the stages of providing policy feedback and critique. Some organizations are hesitant to engage in policy issues, viewing them as sensitive areas, or feel a lack of confidence in capacity, lack of information, and uncertainty about actual impact of their involvement. Others that were previously active in policy process have gradually shifted their focus to community development and philanthropic activities due to changing context and operational environment challenges, rather than continuing policy advocacy and critique.

SOs also reported that, regarding policies on digital transformation and digital technology, they have neither participated in providing feedback nor been officially invited to do so. They noted that while the Internet is increasingly used across society, submitting comments online, via the websites of drafting agencies, is neither preferred

¹² Ministry of Information and Communications. (2024). *National Digital Transformation Report for the first 6 months of 2024*. The 9th session of the 15th National Assembly, the National Committee for Digital Transformation.

nor common. Many organizations view online feedback as informal, lacking interaction, and often unclear whether their input will be received or responded to. Although digital technology and social media undeniably help SOs increase their participation in policy development and consultation, experience from DP Hanoi¹³ shows that, despite efforts to use digital tools such as online surveys to gather input from members on draft policies, the effectiveness remains limited. Survey implementation is hampered by two main factors: short response windows and the low digital skills of PWDs, particularly in using electronic forms, navigating online platforms, or understanding legal documents. In addition, draft documents posted online are sometimes not updated in line with the drafting agency's progress, making it even more difficult to follow and participate in the consultation process¹⁴.

Many PWDs still lack adequate access to information about PWDs support policies in general and policies related to digital transformation in particular. Information is mainly accessed through associations, clubs or representative organizations; however, in reality, a large number of PWDs do not participate in such organizations. This may be due to various factors such as: mobility difficulties, lack of mobility assistance, limited health conditions, or severe disabilities that make it impossible to engage in community activities. As a result, most of PWDs are not informed about new policy developments, especially in the digital technology sector, where policies often change rapidly and require constant update. At the same time, very few PWDs have participated in or been invited to participate in the process of formulating, consulting on, or critiquing policies related to digital transformation. Even when they have the desire to contribute, they often do not know whom to approach, which channels to use, or what forms of participation are appropriate.

Meanwhile, EMs generally have better access to policy information, thanks to communication networks at the commune, village, and hamlet levels, as well as active support from border guards and local community officers¹⁵. However, similar to PWDs, most ethnic minority people have never directly participated in commenting on, providing feedback for, or developing policies related to digital transformation. The absence of incentives, support tools, or feedback platforms that are accessible and sensitive to local languages and cultures has kept their role in the policymaking process very limited.

¹³ DP Hanoi & IPS. (2024). *Assessment Report on the Impact of Digital Transformation on Persons with Disabilities in Hanoi*. Access at: <https://dphanoi.org.vn/bao-cau-nghien-cuu-tac-dong-cua-chuyen-doi-so-doi-voi-nguoi-khuyet-tat-tai-ha-noi.html>.

¹⁴ On November 12, 2024, the Vietnam Asia-Pacific Economic Center (VAPEC) in collaboration with the Center for Development and Integration (CDI) organized [a seminar](#) to provide comments on the Draft State Budget Estimate for 2025 and the Finance - State Budget Plan for the period 2025–2027, announced by the Ministry of Finance on October 25, 2024 to encourage organizations, individuals participating in contributing opinions. After the seminar, CDI quickly synthesized the opinions, and is expected to send them back to the participating organizations for another round of feedback before officially transferring them to the Ministry of Finance on November 14, 2024. However, on the morning of November 13, 2024, the National Assembly has already convened and [approved the State Budget Estimate](#), making further input no longer in line with the policy schedule. However, CDI still submitted the compiled recommendations to the Ministry of Finance as a reference for the agency to consider in preparing the budget for the following year.

¹⁵ CEGORN & IPS. (2024). *Assessment Report on the Impact of Digital Transformation on Ethnic Minority Areas*. Access at: <https://ips.org.vn/thu-vien/bao-cau-danh-gia-ve-tac-dong-chuyen-doi-so-doi-voi-cac-vung-dong-bao-dan-toc-thieu-so-ct292.html>.

2. Impact of Digital Transformation Policies on Vulnerable Groups

The impact of digital transformation policies on vulnerable groups is compiled from IPS research¹⁶ and four independent studies conducted by SOs, including: DP Hanoi¹⁷, IDEA¹⁸, CEGORN¹⁹ and CDI²⁰. The recorded impacts cover various aspects such as life, employment, education, access to services and the level of engagement of these groups with the digital transformation policy system being implemented in Vietnam.

2.1. Positive Impacts

Access to Public Services: Digital transformation, especially the roll out of online public services, has made a significant role in making it easier for citizens, including vulnerable groups, to carry out administrative procedures without having to visit state agencies in person. Submitting documents, tracking application status, and receiving results online saves time, travel costs, printing costs, and reduces reliance on assistance from others. This is a particularly important factor for PWDs, people living in remote areas, or migrant workers with irregular work schedules. In addition, essential support services such as education, health and public transport are also being gradually digitized. Notably, digital platforms like train and bus ticketing apps are being improved to ensure accessibility for PWDs and other marginalized communities, helping to promote inclusivity and equity in access to social services. Furthermore, digital transformation enhances transparency and efficiency in government management, supports the development of e-government and the transition toward digital government, and creates a more user-friendly and accessible administrative system for all.

Communication and Social Connection: Digital technology helps bridge spatial distance and physical barriers in communication, thereby strengthening social connections for marginalized communities. For PWDs, using social networks and messaging or calling apps enables them to actively interact and connect with friends and family without the need to travel, reducing feelings of social isolation. Some even reported finding life partners or romantic opportunities through online platforms. For migrant workers, who are often separated from their families for extended periods, digital technology allows for regular and closer contact with loved ones, providing emotional stability and motivation at work.

Access to Information and Knowledge: Digital transformation makes it easier for marginalized communities to access information about policies, legal regulations, public

¹⁶ The research report has not yet been published.

¹⁷ DP Hanoi & IPS. (2024). *Assessment Report on the Impact of Digital Transformation on Persons with Disabilities in Hanoi*. Access at: <https://dphanoi.org.vn/bao-cau-nghien-cuu-tac-dong-cua-chuyen-doi-so-doi-voi-nguoi-khuyet-tat-tai-ha-noi.html>.

¹⁸ IDEA & IPS. (2024). *Research Report on the Participation of Women with Disabilities and Ethnic Minority Communities in the Policy-Making Process Related to Digital Transformation*. Access at: <https://idea.org.vn/wp-content/uploads/2025/02/BAO-CAO-IDEA--Final.pdf>.

¹⁹ CEGORN & IPS. (2024). *Assessment Report on the Impact of Digital Transformation on Ethnic Minority Areas*. Access at: <https://ips.org.vn/thu-vien/bao-cau-danh-gia-ve-tac-dong-chuyen-doi-so-doi-voi-cac-vung-dong-bao-dan-toc-thieu-so-ct292.html>.

²⁰ CDI & IPS. (2024). *Assessment Report on the Impact of the National Digital Transformation Program on Migrant Workers in Selected Industrial Parks in Vietnam*. Access at: <https://cdivietnam.org/wp-content/uploads/2024/12/CDI-Bao-cau-danh-gia-tac-dong-CDS-toi-NLD-di-cu-tai-2024.pdf>.

administrative services, and social knowledge. In addition, online platforms enable these groups to reach scientific content, develop soft skills, stay updated on current affairs, and promote local products. For EMs in remote areas, digital technology opens the door to the outside world, fostering greater social inclusion and awareness.

Learning and Employment Opportunities: Digital transformation opens up new opportunities for learning and employment among marginalized communities, especially PWDs and those living in areas with limited access to traditional services. A key advantage is access to online training programs, a form of learning and vocational training well suited to people who have difficulty moving, seeing, hearing, or living in places where inclusive education is not yet available at all levels. For example, visually impaired individuals can work in computer-based office jobs, provide translation services, or engage in online business activities via social media. Remote learning and working reduces mobility barriers, offers flexible schedules, and enables increased income and greater economic independence. For migrant workers, digital technology makes it easier to find job information, participate in online vocational training, and upskill without leaving their current workplace.

2.2. Negative Impacts

Risk of Fraud and Cybersecurity Threats: According to the Vietnam Cyber Information Security report²¹, in January 2025, there were as many as 125,593 fake website addresses impersonating government agencies and organizations, and 72 websites impersonating corporate brands. These fake sites are used by scammers to defraud and cause harm to individuals online. Due to limited digital literacy and technology skills, vulnerable groups are easily targeted by fraudsters. PWDs and EMs face risks of online scams, personal data theft, harassment, and cyber violence. In particular, women with disabilities and ethnic minority women are even more vulnerable due to lower awareness and greater susceptibility to manipulation. Disclosure of personal data is also a major concern for migrant workers. According to CDI's research²², 18% of surveyed migrant workers reported having been victims of online fraud. Additionally, lacking skills to distinguish official from false information, vulnerable groups are more easily exposed to misinformation.

Difficulties in Accessing Public Services: Online public administrative services are often complicated, difficult to use, require repeated unsuccessful attempts, and offer limited user support. Findings from the “Review of 63 Provincial E-Service Portals from a User Perspective in 2024”²³ by IPS & UNDP show that currently, not a single portal fully meets the criteria of convenience, user-friendliness, and accessibility for citizens.

²¹ Department of Information Security. (2025). *Vietnam Cyber Security Report, January 2025*. Access at: <https://khonggianmang.vn/alert/bao-cao-attt-mang-viet-nam-thang-01-2025.269/>.

²² CDI & IPS. (2024). *Assessment Report on the Impact of the National Digital Transformation Program on Migrant Workers in Selected Industrial Parks in Vietnam*. Access at: https://cdi.vietnam.org/wp-content/uploads/2024/12/CDI_Bao-cao-danh-gia-tac-dong-CDS-toi-NLD-di-cu-tai-2024.pdf.

²³ IPS & UNDP. (2024). *Review of 63 Provincial E-Service Portals from a User Perspective in 2024*. In the series of Policy Discussion Papers on Governance and Participation. Commissioned by the Institute for Policy Studies and Media Development (IPS) and the United Nations Development Programme (UNDP) in Viet Nam. Ha Noi, Viet Nam. Access at: <https://ips.org.vn/en/library/review-of-63-provincial-e-service-portals-from-a-user-perspective-in-2024-ct287.html>.

All 63 portals demonstrate significant shortcomings, particularly for users in remote, mountainous, and island areas, where digital infrastructure and digital skills remain limited. Interfaces and procedures often fail to consider the needs of persons with disabilities, creating barriers for various disability groups. Additionally, officials frequently lack experience in assisting PWDs and EMs.

Limitations in Skills and Equipment: Many individuals lack essential equipment, such as computers, to complete online procedures. Technology skills are limited, and unstable internet connections are also a barrier for vulnerable groups.

Dependence and Impact on Skills: Heavy reliance on digital technology can lead to reduced concentration and hinder the development of real-world skills. Such dependence may also affect personal independence, skill development, and mental health, and can contribute to low self-esteem, particularly among vulnerable groups.

Risk of Job Loss: According to the World Economic Forum's report²⁴ on the future of employment in 2025, technology skills are expected to become more important than any other skill over the next five years. AI and big data top the list, followed by networking, cybersecurity, and digital literacy. This shift means that many current jobs, especially those involving simple technical tasks, are at risk of being replaced by automation or smart technology systems. Similarly, CDI's research²⁵ shows that migrant workers are aware of the negative impacts of digital transformation, as technology can cause job losses for workers engaged in simple or seasonal work, either in companies or as freelancers.

Policy Recommendations

Below is a summary of policy recommendations developed based on component studies conducted by SOs in collaboration with IPS, along with consultations involving SOs and various target groups, including PWDs, women with disabilities, EMs, and migrant workers. These recommendations aim to promote a comprehensive, inclusive, and equitable digital transformation process, ensuring that vulnerable groups can access and fully benefit from digital transformation initiatives.

Training and Awareness-Raising:

Provide specific information and guidance: Promote communication about the effectiveness of digital transformation and cyber safety and security through multiple channels. Use appropriate, easy-to-understand, and accessible language for PWDs and EMs. Alongside communication about building digital government, digital economy, and digital society, provide clear guidance on using common digital transformation applications and platforms (e.g. public service portals, cashless payment systems, etc.).

²⁴ World Economic Forum. (2025). *Future of Jobs Report 2025: The jobs of the future - and the skills you need to get them*. Access at: <https://www.weforum.org/stories/2025/01/future-of-jobs-report-2025-jobs-of-the-future-and-the-skills-you-need-to-get-them/>.

²⁵ CDI & IPS. (2024). *Assessment Report on the Impact of the National Digital Transformation Program on Migrant Workers in Selected Industrial Parks in Vietnam*. Access at: https://cdivietnam.org/wp-content/uploads/2024/12/CDI_Bao-cau-danh-gia-tac-dong-CDS-toi-NLD-di-cu-tai-2024.pdf.

Training on online safety: Offer training sessions on safe participation in cyberspace for PWDs, EMs, and other groups. Include essential skills in information safety and cybersecurity when using smart devices and social media.

Strengthen capacity of local officials: Enhance the digital skills of local officials in IT application, information management, and digital data handling to better serve and support groups in need of special assistance.

Develop online training courses: Create online training programs and instructional videos on using e-government services (such as temporary residence registration, VNeID). Add courses to free online learning platforms to meet the needs of workers.

Investment in Equipment and Digital Technology for Vulnerable Groups:

User-friendly product design: Ensure new technology products, including online public service applications, are accessible for PWDs. Prior to release, gather feedback from vulnerable groups about their needs and expectations, and allow them to test and provide input.

Improve public service portals: Review and upgrade public service portals to comply with the latest version of the WCAG accessibility standards, ensuring the rights of PWDs. These standards should be mandatory, not just recommended.

Ensure accessibility across media channels: Television and radio programs should provide more airtime with sign language interpretation. Applications should offer subtitles and text-to-speech features for the deaf and hard of hearing. Websites must meet accessibility standards for the visually and hearing impaired, and should be tested for accessibility by different groups before being launched.

Support equipment and infrastructure: Provide standardized digital devices and install Internet infrastructure for units, agencies, and associations, especially in remote areas. Allocate resources and invest in infrastructure such as network-connected computers at community locations in remote villages so people can access information and use public services locally.

State Policies and Policy Implementation on Digital Technology Access for Disadvantaged Groups:

Mandatory regulations: Review and propose amendments to existing regulations supporting persons with disabilities, ensuring these are not merely encouraged but are binding obligations for implementing agencies. Fully and effectively enforce Circular No. 26/2020/TT-BTTTT, which mandates the application of standards and assistive technologies to help PWDs access information and communication services.

Consultation with disadvantaged users: Regulations related to the provision of online public services should involve consultation and user testing by marginalized communities to enable reasonable adjustments and adequate support. For ethnic minority areas, solutions are needed to help people fully understand relevant issues, enabling them to provide effective feedback during policy consultations.

Strengthen Community Digital Technology (CDT) Teams: Consolidate and enhance CDT Teams, increasing participation from youth and union members with IT skills. Allowances should be provided to support their effective operation.

Promote participation of marginalized communities in community and political activities: Encourage PWDs and EMs to take a more active role in community and local activities, and political participation. This helps raise awareness, responsibility, and initiative, and enables them to be more engaged in policy development and monitoring the implementation of digital transformation policies.

Address policy implementation challenges: Local authorities should be guided to deliver online public services (such as temporary residence registration) in accordance with regulations, ensuring that citizens can easily access and use these services, thus reducing time and costs compared to in-person procedures. Service quality should be improved, and better guidance provided when accessing online public services.

Building and Expanding Domestic and International Cooperation Networks to Enhance SOs' Policy Engagement:

Strengthen multilateral cooperation networks: Building and maintaining multilateral cooperation networks is essential for enhancing collective strength, expanding influence, and improving the quality of SOs' participation in policy processes, particularly in digital transformation. These networks should not only link SOs with each other, but also extend to research institutes, universities, leading experts, media agencies, technology companies, digital media entities, and relevant government bodies. In a rapidly evolving digital landscape, collaborating with technology businesses and digital policy experts is crucial for strengthening analytical capacity, keeping up with trends, and participating in policy discussions more substantively.

Engage in international policy forums and networks: Connect with and participate in international networks and policy forums on digital technology and vulnerable groups. Involvement at regional and global levels enables Vietnamese SOs to learn from international experience, adopt global standards, and amplify the voices of vulnerable groups from Vietnam in broader policy discussions. This approach also elevates the standing of domestic organizations and allows them to influence national policy by referencing international recommendations and trends.

Document and replicate multi-stakeholder cooperation models: In recent years, several collaborative models have emerged among SOs to support policy development, improvement, and execution, such as the Policy Advocacy Alliance Support Program, which encourages public participation in policy development and oversight²⁶. Many organizations involved in this research have maintained effective collaborative networks. These experiences should continue to be studied, documented, and widely shared to replicate good practices and address limitations in building cooperation mechanisms, ultimately improving the effectiveness of SOs' policy engagement.

²⁶ Pham Quang Tu, Team Leader, Oxfam Policy Advocacy Alliance Support Program. (2015). *Assessment Report on the Consultation Process in Legislative and Regulatory Process in Vietnam (National Legislative Development Project)*. Presentation at the Workshop on September 25–26, 2014, Da Nang.

| LESSONS LEARNED

1. Digital Transformation as a Multi-Component Ecosystem, Requiring Synchronization Between Policy, Technology, and People

Digital transformation is not a fixed destination or merely a technology project, it is a long-term process closely tied to innovations in organization, operations, and service delivery across the socio-economic development and national governance system. The effectiveness of digital transformation should be evaluated from an ecosystem perspective, in which the three key elements, policy, technology, and people, must be synchronized and highly interactive. Effectiveness evaluation should go beyond the completion of infrastructure or software deployment and focus on the actual level of adoption, frequency of use, and, most importantly, the degree of satisfaction and tangible benefits experienced by citizens, businesses, and public officials.

To ensure that digital transformation process is substantive and inclusive, the 5A framework can be applied, which encompasses 05 fundamental factors shaping citizens' accessibility, particularly for marginalized communities:

Availability: Digital infrastructure, technology platforms, and online public services should be deployed equitably, especially in remote, border, and island areas.

Affordability: Policies to support terminal equipment, telecommunications and data packages, and digital services at reasonable costs are essential to ensure access for low-income populations.

Awareness: Strengthen public communications to improve understanding and overcome apprehension, misconceptions, or lack of information about individual rights and responsibilities in the digital environment.

Accessibility: Services must be user-centric, ensuring usability and inclusivity for PWDs, the elderly, and EMs regarding language, interface, and processes.

Ability: Invest in digital skills through on-the-job training, online courses on open platforms, or hands-on instruction at the community level.

The flexible and targeted application of the 5A analytical framework for each specific group is essential to optimize resources, increase policy effectiveness, and ensure equity in digital transformation. Rather than adopting a uniform, linear policy approach, regulators should clearly identify core barriers within each factor group that are specific to specific communities, thus designing appropriate policy interventions. For instance, EMs frequently face major challenges regarding 02 factors: Awareness (lack of information and limited understanding of digital rights and opportunities) and Ability (weak digital skills, language, and educational barriers). Meanwhile, migrant workers, especially those in the informal sector, primarily encounter obstacles in Affordability due to low incomes, unstable living conditions, and limited access to digital infrastructure and personal devices.

2. Inclusive Policy Design, Substantive Participation Mechanisms, and Grassroots Support Institutions: Foundations for Effective Digital Transformation with the Key Intermediary Role of SOs

Inclusive Policy Design: Digital policies must be grounded in deep understanding of the diverse needs and accessibility levels of marginalized communities. The consultation process with representatives from marginalized communities should be institutionalized, taking place early, regularly, and with clear feedback. Public consultation must go beyond mere “reference”; it should become a mandatory, well-documented stage in policy formulation, with real adjustments made based on the input received.

Substantive Participation through Civil Society Brokering: SOs play a crucial intermediary role in bridging policy and practice, particularly for hard-to-reach groups such as PWDs, EMs, and migrant workers. This role should be formally recognized and supported, both technically and financially, as an integral component of policy design related to digital transformation.

Grassroots Implementation Mechanisms: Bringing policies into effective practice is indispensable with the involvement of grassroots institutions such as CDT Teams, local technical support groups, and commune/ward officials. These institutions need systematic investment in training, working tools, and coordination mechanisms with SOs, experts, and government authorities. When operated effectively, they become a critical frontline for helping citizens, especially vulnerable groups, access, utilize, and provide feedback on policies in a meaningful and sustainable way.

3. Ensuring Digital Rights as a Prerequisite for Greater Public Participation in Digital Transformation Process, Especially for Vulnerable Groups

Enhancing Digital Literacy and Awareness: Improving digital skills and awareness is fundamental to safeguarding rights in the digital era. For citizens, there should be widespread communication campaigns and digital skills training, both in-person and online, covering public service use, information security, and essential digital skills for education, work, and business. For state agencies, it is crucial to expand and strengthen human resources with ICT and digital transformation skills, in both quantity and quality, across all local government levels.

Ensuring Digital Rights for Vulnerable Groups through Accessible Technology and Consultation: For marginalized communities, full implementation of legal provisions on access to information and information technology (ICT) is essential, ensuring equal recognition, non-discrimination, and the right to freedom of expression and opinion for PWDs. Solutions include developing and deploying software and applications that are linguistically and functionally accessible, especially for EMs and PWDs. All relevant accessibility standards and assistive technologies must be fully enforced for information and communication products and services. The process of developing regulations and

technical guidelines should include substantive consultation with community representatives, rather than relying solely on universal standards.

Ensuring Equitable Digital Access: Equitable access to digital infrastructure and data must be guaranteed as a foundational condition for realizing other rights in the digital age. In today's context, internet access is vital for learning, employment, social interaction, and public service usage. However, the digital divide between urban and rural areas, and between lowland and mountainous regions, remains stark. Government should implement targeted policies to invest in digital equipment, extend internet coverage to villages and remote areas, and prioritize local budgets for digital transformation, especially in areas with significant ethnic minority populations.

4. Establishing Multilevel, Multilayered, and Multilateral Cooperation Mechanisms to Strengthen the Capacity, Voice, and Policy Influence of SOs and Disadvantaged Communities

Building and Developing Multi-Stakeholder Networks²⁷: The strengthening of collaborative networks should be promoted at three levels: (i) among SOs, to share experiences, coordinate actions, and create a unified voice on policy issues; (ii) between SOs and the public sector, to establish formal mechanisms for policy consultation and ensure that community needs are timely reflected in the policymaking process²⁸; and (iii) between SOs and businesses, research institutions, and universities, to update professional knowledge, technology, and practical applications, as well as to expand resources for implementing initiatives that support inclusive digital transformation.

Sharing Experiences and Resources to Enhance Advocacy Capacity: Effective participation in the policy process requires not only internal experience, but also mechanisms for sharing resources, methods, and good practices among SOs. Models such as interdisciplinary research-action groups, working groups, or open policy forums have demonstrated the potential to bring community voices into policy development in a substantive way. For these networks to function effectively, they need dedicated coordination teams, flexible yet consistent working methods, and the ability to respond quickly to policy changes. On this foundation of sharing, organizations can collaborate further, conducting joint research, designing technical materials, organizing thematic events, and directly participating in policy design processes.

Strengthening International Cooperation: Facilitating the participation of SOs in policy forums at both national and international levels is essential for expanding the representation of marginalized communities in the formulation of digital transformation

²⁷ In 2023, IPS has established the "Tech for Good Network" with the participation of social organizations, social enterprises and technology enterprises, in order to promote the application of technology for inclusive and sustainable development.

²⁸ After completing the research on the participation of women with disabilities and ethnic minority communities in the policy-making process related to digital transformation (in collaboration with IPS), IDEA organized a workshop in Ha Nam province to share the research findings. The workshop was attended by representatives from the Department of Labor, Invalids and Social Affairs; the Provincial Police; the Vietnam Fatherland Front Committee of the province; the Provincial Women's Union; as well as local authorities from several districts and communes.

strategies and policies. Through connections with regional initiatives, international training programs, and multilateral advocacy networks, Vietnamese SOs not only have the opportunity to disseminate effective local intervention models but also to access international standards and emerging policy trends. At the same time, these connections further enhance their capacity for networking, communication, and policy advocacy within the framework of global cooperation.

REFERENCES

1. BroadbandChoices. (2022). *Internet Accessibility Index*. Access at: <https://www.broadbandchoices.co.uk/features/internet-accessibility-index>
2. CDI & IPS. (2024). *Assessment Report on the Impact of the National Digital Transformation Program on Migrant Workers in Selected Industrial Parks in Vietnam*. Access at: https://cdvietnam.org/wp-content/uploads/2024/12/CDI_Bao-cao-danh-gia-tac-dong-CDS-toi-NLD-di-cu-tai-2024.pdf
3. CECODES, RTA & UNDP. (2025). *The 2024 Viet Nam Provincial Governance and Public Administration Performance Index (PAPI 2024): Measuring Citizens' Experiences*. A Joint Policy Research Paper by the Centre for Community Support and Development Studies (CECODES), Real-Time Analytics (RTA), and United Nations Development Programme (UNDP). Hanoi, Vietnam. Access at: <https://papi.org.vn/eng/bao-cao/>
4. CEGORN & IPS. (2024). *Assessment Report on the Impact of Digital Transformation on Ethnic Minority Areas*. Access at: <https://ips.org.vn/thu-vien/bao-cao-danh-gia-ve-tac-dong-chuyen-doi-so-doi-voi-cac-vung-dong-bao-dan-toc-thieu-so-ct292.html>
5. Department of Information Security. (2025). *Vietnam Cyber Security Report, January 2025*. Access at: <https://khonggianmang.vn/alert/bao-cao-attn-mang-viet-nam-thang-01-2025.269/>
6. DP Hanoi & IPS. (2024). *Assessment Report on the Impact of Digital Transformation on Persons with Disabilities in Hanoi*. Access at: <https://dphanoi.org.vn/bao-cao-nghien-cuu-tac-dong-cua-chuyen-doi-so-doi-voi-nguoi-khuyet-tat-tai-ha-noi.html>
7. IDEA & IPS. (2024). *Research Report on the Participation of Women with Disabilities and Ethnic Minority Communities in the Policy-Making Process Related to Digital Transformation*. Access at: https://idea.org.vn/wp-content/uploads/2025/02/BAO-CAO-IDEA-_-Final.pdf
8. IPS & UNDP. (2024). *Review of 63 Provincial E-Service Portals from a User Perspective in 2024*. In the series of Policy Discussion Papers on Governance and Participation. Commissioned by the Institute for Policy Studies and Media Development (IPS) and the United Nations Development Programme (UNDP) in Viet Nam. Ha Noi, Viet Nam. Access at: <https://ips.org.vn/en/library/review-of-63-provincial-e-service-portals-from-a-user-perspective-in-2024-ct287.html>
9. Ministry of Information and Communications. (2024). *National Digital Transformation Report for the first 6 months of 2024*. The 9th session of the 15th National Assembly, the National Committee for Digital Transformation
10. Pham Quang Tu, Team Leader, Oxfam Policy Advocacy Alliance Support Program. (2015). *Assessment Report on the Consultation Process in Legislative and Regulatory Process in Vietnam (National Legislative Development Project)*. Presentation at the Workshop on September 25–26, 2014, Da Nang
11. Statistics Department (Ministry of Finance). (2024). *Press Release on the results of the 2023 PWDs Survey*. Access at: <https://www.nso.gov.vn/tin-tuc-thong-ke/2024/11/thong-cao-bao-chi-ve-ket-quu-dieu-tra-nguoi-khuyet-tat-nam-2023/>
12. Statistics Department (Ministry of Finance). (2025). *Press Release on the socio-economic situation in the first quarter of 2025*. Access at: <https://www.gso.gov.vn/du-lieu-va-so-lieu-thong-ke/2025/04/thong-cao-bao-chi-tinh-hinh-kinh-te-xa-hoi-quy-i-nam-2025/>
13. World Economic Forum. (2025). *Future of Jobs Report 2025: The jobs of the future - and the skills you need to get them*. Access at: <https://www.weforum.org/stories/2025/01/future-of-jobs-report-2025-jobs-of-the-future-and-the-skills-you-need-to-get-them/>



18th Floor, VTC Online Building, 18 Tam Trinh,
Minh Khai, Hai Ba Trung, Hanoi, Vietnam

P: (84) 373 643 601

E: contact@ips.org.vn

W: ips.org.vn