SOLUTIONS TO PROMOTE APPLICATION OF INFORMATION TECHNOLOGY IN ETHNIC MINORITY REGION

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It is necessary to promote the application of information technology in ethnic minorities in order to support ethnic minority people to access, learn and exchange new technologies in different fields. This will improve people’s life, narrow the gap among regions, develop society and economy, ensure order and security of ethnic minority areas, and increase state management quality on ethnic affairs in the new situation.

Keywords: Information technology; ethnic minority region; solution to promote application of information technology.

1. Introduction

There are 54 ethnic groups in Vietnam, including 53 ethnic minority (EM) groups. Although most of the EM people reside in massive strategic areas and play an important role in politics, economics, national defense, security and ecological environment, the majority of EM people have low educational level, scattered residence, slow socio-economic development.

Today, EM people still have a very limited access to computers and Internet. To be more specific, the percentage of Hoa households with computer at home is 46.7%, households with Internet connection at home is 47.2%; correspondingly for the Ngai group is 27.4% and 17.1% while the remaining 51 ethnic groups stand at less than 17% of households own computers and less than 10% have access to the Internet. The Si La, Chut, La Hu and Xinh Mun account for less than 1% of households having computers. The La Hu, Kiang, Kho Mu, Xinh Mun and Ro Mam do not have any household connected to the Internet. Especially the Brau do not have any computer and Internet connection.

Ability to exploit useful information for economic development is still ineffective due to the fact that the application of information technology (IT) and IT infrastructure in EM areas have many limitations. There are a lot of policies, plans and projects on IT to promote socio-economic development; however, there is not any IT project or IT application that focuses on EM people. Technical infrastructure, IT foundation, human resources in central and local ethnic agencies have not met the requirements and needs of development. While it is urgent to promote IT application in the Committee for Ethnic Minorities Affairs for administrative reformation, management capacity improvement and EM people support, there are only limited funds available for upgrading and maintaining IT systems.

2. Current situation of information technology in ethnic minorities areas

The pilot project: “Improvement of computer usage and public Internet access ability in Vietnam” has provided and installed 12,070 computers connected to broadband internet and auxiliary equipment for 1,900 public library points and commune cultural post offices. The project has brought Internet infrastructure to EM people in particular and people in difficult areas in general; nevertheless, not many people have searched information for production and labor.

According to ICT index report in 2016, the percentage of households with computers nationwide was 34.3%. In some provinces in the Northern mountainous region, the percentage of households with computers was low, such as Cao Bang 5.7% and Hoa Binh 7.3%. In the Central and Central Highlands: Dak Nong 8.6%, Gia Lai 8.8%, Binh Dinh 18.0% and Binh Thuan 19.3%.
In the South: Tra Vinh 5.2% and Hau Giang 5.3%. The percentage of schools that teach Informatics in the Northern mountainous area: the lowest were 33.3% in Dien Bien and 45.1% in Bac Kan; Vinh Phuc and Thai Nguyen reached 100%. In the Central and Central Highlands: the lowest were Quang Ngai (60.8%) and Ninh Thuan (63.7%); Da Nang, Thua Thien Hue reached 100% and Dak Lak (94.2%). In the South: the lowest were Binh Phuoc (60%) and Bac Lieu (68.1%); The highest were Can Tho City, Ba Ria-Vung Tau and Vinh Long achieved 100%.

At present, the number of IT applications that are reserved and suitable with the language, culture and skills of EM people is extremely limited. IT applications are mainly in Vietnamese language, lack of many EM ones, developed only for qualified computer and Internet users. Softwares and applications in education are not addressed to EM people, as a result, they rarely access e-learning lessons, e-books but only through traditional books, documents and newspapers.

In the field of health, there are not many IT applications in medical examination, treatment and health insurance payment as well as steering, managing and dealing with diseases and epidemics from the central to local levels. EM people and health facilities have to interact directly without consult, emergency through remote satellite hospital system. Even in many cases, the medical facilities are not qualified for medical examination and treatment, people can not access health facilities.

In the field of transport, the digital map of road system and traffic rescue has not been implemented in accordance with EM areas. Useful applications have not been deployed: phone transportation booking service; delivery service; train tickets booking; traffic management, traffic monitoring, traffic infrastructure management, etc.

In the field of environment, there is no IT application to support environmental monitoring, warning of natural disasters, storms and floods in ethnic minority areas.

The cause of the state lies in the small proportion of EM, low educational level, meager human resources. The average income per capita of EM people is quite low and much lower than whole country’s. Monthly income has not met the living standard for the majority of EM, as a result, spending on mobile phones and other IT equipment is still limited. Because infrastructure, information technology and communications have not been built and covered in all EM regions, computer usage and Internet access ability have encountered many difficulties. Due to hard situation, the investment budget for EM areas is mainly focusing on infrastructure development, life and health improvement and jobs creation; IT application especially in EM has not been paid attention and invested properly. Most of the national programs, plans and projects are on socio-economic development for EM people. Additionally, mechanisms and policies in applying IT for EM people have not been built.

3. Solutions to accelerate the application of information technology in ethnic minority region

Appeal for funds from domestic, foreign organizations, individuals and other sources of social mobilization; increase the use of integrated funding sources in approved programs and schemes and other lawful sources; Prioritize IT outsource services, public-private partnerships; Assign tasks, orders depending on specific tasks.

Upgrade and complete IT platform suitable for agencies exercising ethnic affairs system model to collect, connect, disseminate information, knowledge, feedback, structure visually, accessibly, easily to understand at an affordable cost; Base on the IT applications (cloud computing technology, organization and data mining large blocks - BigData, online communication platforms, interactive television ...) to ensure that ethnic work is effective implementation and support EM narrow the gap of development level... Develop intensive IT platform (Hire specific software development with high efficiency such as collecting and community feedback application - social listening). This approach not only saves cost, solves problem directly, but also suits with present and future reality, with common development trend of society; Concentrate on...
develop applications in education, healthcare, transport and environment; Prioritize investment in software development research and technology transfer projects in conformity with the project development orientations; Apply information security solutions and standards so as to ensure seamless and synchronous connection, safe and convenient sharing and exchange of information among agencies and units in the system of ethnic affairs.

Formulate policies to encourage and support EM people in applying information technology to exploit information for labor and production; Establish policies on IT application training for EM people; Formulate mechanisms and policies to provide funds for the provision of digital information equipment to difficult households.

Organize training courses on e-commerce application for ethnic minority people; Support people to deploy e-commerce on electronic trading platform; Develop joint training forms; improve the quality of IT staff. Focus on intensive training on application skills, effective use and exploitation of IT systems; Set plans of regular training and fostering for province cadres and civil servants in terms of knowledge and skills on IT application, information security and safety in order to be able to carry out computerization processes. Additionally, training and retraining new cadres and civil servants in recruiting skills in using and exploiting information systems to support the people; Strengthen training, raise awareness and promote the capacity of youth and leading cadres to apply IT for socio-economic development.

Raise awareness, first conduct with those who are ethnic minority leaders. Organize training courses, fostering courses and dissemination of knowledge of IT, how to use Internet for searching information... Improve quality, efficiency and diversification of propaganda, knowledge of IT and society through mobile phones/smart devices, television and other mass media in combination with seminars, training programs for ethnic minority people. Develop and implement short-term training to raise awareness and quality of IT application in production activities of EM people.

4. Conclusion

In the context of Industrial Revolution 4.0, it is pressing to strengthen information for EM people in order to develop socio-economy, ensure security and order, narrow the gap between EM areas and other ones in the country, provide information, support, consult for EM people about gender equality, women’s rights, children’s rights, culture, education, health, transportation, environment,...; help EM people to find jobs; introduce successful start-up models which are suitable for EM; promote cultural products, specialties... to domestic and international market.

REFERENCES

