# DIGITAL TECHNOLOGY AND ECONOMY FOSTERING INCLUSIVE DEVELOPMENT

## THAILAND EXPERIENCE

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## Abstract

For over a decade, Thailand has been internationally recognized as a regional centre for ICT growth and development, and its ICT Policy Framework has been an exemplary model for the development of an effective telecommunications and ICT regulatory environment (GSMA, 2015).

In 2014, an innovative E-policy framework called Smart Thailand 2020 was introduced. Its main principal objective is to boost accessibility, making ICTs a basic commodity for the entire country through ongoing improvements in infrastructure and mobile broadband penetration under its four main Pillars: Digital e-Commerce, Digital Entrepreneurs, Digital Innovation, and Digital Contents. ICT literacy also promoted to provide opportunities for all marginalizes. Since 2006, CCDKM has trained both offline and online 348,820 Thai marginalized people. From 2013-2015, 80.000 plus people got trained on digital literacy and entrepreneurship skills via all 2.000 plus telecentre nationwide networks. As for 2015, Thailand's GDP has likely grown between 3.5 and 4.5 percent, because the Government has been accelerating Digital Economy holistically.

## Background

For over a decade, Thailand has been internationally recognized as a regional centre for ICT growth and development, and its ICT Policy Framework has been an exemplary model for the development of an effective telecommunications and ICT regulatory environment (GSMA, 2015).

In 1995, the country launched an ambitious project to address the goal of ensuring access to education for all through technology. In 2002, the National ICT Master Plan, a comprehensive policy framework for ICT development, was created and the Ministry of Information and Communication Technology (MICT) was established. Since the policies were enacted, there has been a tremendous boost of the ICT sector. In recent years, both the Ministry of Information and Communication Technology (MICT) and the Ministry of Education (MOE) have set development plans to build both infrastructure and people's ICT literacy with the mission to "create a labor force of adequate ICT professionals that are knowledgeable, skilled and information literate, in order to develop Thailand in a sustainable and stable knowledge and innovation based society" (2009).

In 2014 till currently, a new policy framework called Smart Thailand 2020 was introduced. The principal objective of the new plan is to boost accessibility, making ICTs a basic commodity for the entire country through ongoing improvements in infrastructure and increased mobile broadband penetration (MICT 2011-2020).

Thailand recognizes that ICT literacy provides opportunities for women to fully and equally participate in the digital economy and society, and exercise their right to speak, share ideas, access information and build knowledge. The existing 2,000 plus Telecentres scattered across the country and set up at sub-district administrative offices, community centers, health care centers, schools, and the USO NET Community Centers, provide access to ICTs and the Internet in rural and remote areas with a focus on digital literacy. Furthermore, thus far, Smart Thailand has also resulted in the establishment of some 400,000 public Wi-Fi access points (GSMA, 2015). These developments are expected to continue as the country becomes a leader in ICT development in ASEAN.

However, as research shows, there are several challenges when it comes to telecentres in Thailand; for instance, how to ensure their sufficient sustainability, organizational stability, and programmatic flexibility to allow these spaces to survive once the immediate round of funding allocated for their set-up runs out. In fact, many telecentres in Thailand have shut down and there is growing awareness that the first generation of telecentres which provided a basis for introducing the Internet and basic ICT literacy (particularly in rural areas and among marginalized and disadvantaged groups) has now become obsolete. Most of Thai telecentres have been transforming themselves to be the Community Co-Working Space or the Community One Stop Services Centre instead.

## Success stories of E- Inclusive development

Since 2006, The Ministry of Information and Communication Technology of Thai-

land (MICT) has supported CCDKM to train both offline and online 348,820 Thai marginalized people, ensuring gender equality. This was made possible by leveraging the network of over 2.000 Telecentres scattered all over the country. From 2013-2015, 80.000 plus people have been trained on digital literacy and entrepreneurship skills. The main supporter of these projects under the priorities of the Digital Economy Policy Plan Pillar 4, namely: Digital e-Commerce, Digital Entrepreneurs, Digital Innovation, and Digital Contents.

NBTC (the National Broadcasting and Telecommunication Commission of Thailand), and other partners, i.e. the Ministry of Social Development and Human Security, the Office of Women Affairs, and CCDKM has joined its hands to topping up for the previous digital literacy program of other agencies such as the Telecentre Women (TCW) Project opened the opportunity to young and adult women like the homeworkers, out-schools girls, women farmers, women vendor, handicap girls & women, aged women, etc. to gain ICT knowledge and skills enabling them to become self-confident and self-sufficient. To bridge the digital divide and reach out to one of the vulnerable groups in the society, the series of training in ICT for young and adult women was timely and imperative (MICT 2013).

Some of its tangible projects and outcomes are as follows:

### E- Women homeworkers
In Thailand, Digital Economy is the innovative R&D Participatory Action Project of CCDKM since 2006. Home-based work is widespread in all regions of Thailand. Most homeworkers use their houses as the workplace for producing textiles and garments, wood products, basketry, artificial flower making, food processing, leather goods and plastics, metal products and jewellery, and then deliver them to the employers or business mediators. This is not the same as production for direct sale. In 2007, the National Statistical Office (NSO) reported that out of the 249,290 households, there were 440,251 people earning their livelihood through homeworking. Of this number, 337,526 or slightly more than three quarters of them were women and 102,725

were men. This study builds on previous research conducted in 2006 on the status of women homeworkers in Thailand and their use of ICT to promote economic empowerment and generate new income opportunities. Since 2006, Thailand has undergone numerous social, economic, and political changes. Acknowledging the problems homeworkers face, in 2010, the Thai Parliament passed the Homeworkers Protection Act B.E. 2553 and a social protection policy came into force in May 2011. The law mandates fair wages, including equal pay for men and women doing the same job. Even though this Act is into effect, most homeworkers are still not aware of their legal rights and keep working under unfair conditions (Chasombat, 1999).

### The Digital SME (Smart Entrepreneur): Microsoft Youth Spark – Enhancing ICT for youth SMEs in Thailand
Microsoft YouthSpark is a global initiative committed to helping young people worldwide create and seize opportunity through ICT skills. The initiative was established in 2013 in partnership with the Population and Community Development Association (PDA) and CCDKM, to equip Thai entrepreneurs aged 18 to 24 with e-commerce and e-business skills that will enable them to develop small and medium enterprises (SMEs) in Thailand, improve business efficiency and growth and reach out to regional and international markets. Since the initiative was established, 48,000 youth, ensuring gender equality, from over 20 provinces in Thailand have been trained and 120 business weblogs have been created for start-up businesses.

### Intel Programs: Youths and community start-up
In Thailand, Intel provides girls and women with access to education and technol-

ogy through programs such as the Intel Teach, Intel Learn and Intel Easy Steps. For 10 years, through the Intel Teach program implemented by the Office of the Basic Education Commission (OBEC), 150,000 primary and secondary school teachers from 76 provinces in Thailand, ensuring gender equality, have been trained on how to integrate technology into classrooms and promote student-centered approaches that will prepare students to enter the digital world. In addition, the Intel Easy Steps program established in 2010, has been providing adult learners, ensuring gender equality, the opportunity to improve their social and economic self-sufficiency through digital literacy. The program is designed to teach participants basic computer skills that are locally relevant and useful to drive Thailand into the digital economy more effectively. In 2012, Plan International Thailand Office implemented Intel Easy Steps to equip girls and women with digital literacy skills in remote areas; since then, the program has expanded to reach people in rural and migrant communities across Thailand. CCDKM also localized and implemented the Intel Easy Steps program and trained 50,000 Thais through the telecentre network. To date, 1 million adult learners, approximately half of whom are women, have been trained with this program.

### E-Crafts
Through the WE.STYLE.FOR A CAUSE initiative, CCDKM has met the demand of thousands of women homeworkers to upgrade through ICT, their entrepreneurial, design and styling skills to fit the trends and requirements of international and regional markets. For the first time in Thailand, local and international trainers, fashion and lifestyle experts, have joined

forces to deliver an innovative, practical and community friendly pedagogy based on hands on experience and collaborative learning. Over 200 women have already benefited from the free simplified trainings on how to build a brand, business communication, social media for business, smartphone photography, product pictures and retouching for commercial use, landscape and tourism photography, financial literacy, and online business solutions to sell products directly to customers.

### Community based tourism

The Very Local Trip Community Based Tourism project integrates the social, economic, and environmental dimensions of development by enhancing the capacities of local artisans and farmers to use ICT and media, to promote and conserve cultural and environmental heritage, including arts and crafts and sustainable Thai agriculture and organic farming methods. The project also contributes to the promotion of Thailand's digital economy, in particular ICT, Tourism and Sustainable Development by: facilitating the involvement of Thai local people and communities in tourism development around natural and cultural heritage sites; establishing business linkages (online and offline) between local communities, tourism enterprises and visitors; providing communication and marketing e-services on local tourism in Thailand; improving the quality of tourism experiences at the local level; strengthening the capacities of local guides on how to use ICT to promote their local experiences on Very Local Trip web-platform.

CCDKM and Very Local Trip have created enormous possibilities for local communities and individuals to promote local tourism through online platforms which symbolize a source of income generation and job opportunities. Local communities recognize that the Internet defines the 21st century business environment and is an enabler of development. Marginalized communities are also aware that unless they master the right skills to access and use new ICTs to access both local, regional and foreign markets, they will be left behind and be caught in the social, economic and technological divide.

**Air Asia's Travel3Sixty magazine (https://www.travel3sixty.com/indigo-dreams/)**

Through innovation and digital technology for inclusive development, CCDKM and Very Local Trip provide solutions to boost programs to empower rural communities and create the conditions for better livelihood and living.

Very Local Trip utilizes traditional media and new media to create awareness about the community local trips through channels including online and printed magazines, social media (Facebook, Instagram, Twitter, YouTube), videos production for web, participation to local and international events, CBT conferences and fairs.

### Smart Farm: SAB – SAFETY AGRI BURIRAM

SAB: a social enterprise and creative space where farmers can link and exchange about organic farming, food safety and sustainable agriculture methods. Founder of Akelada Hotel (the corporate) in collaboration with The Nat Space and CCDKM developed this concept where farmers and members of the ASEAN community can exchange and find new solutions related to fair trade, farmers' market price, and sustainable farming methods to achieve good crop yields without harming the

natural environment or the people who live and work in it.

### Conclusion

Thailand has been internationally recognized as a regional center for ICT growth and development, and its ICT Policy Framework has been an exemplary model for the development of an effective telecommunications and ICT regulatory environment (GSMA, 2015). Especially since 2006, under supported by the Ministry of Information and Communication Technology of Thailand (MICT) marginalized population have been accessing to all kinds of ICT training both offline and online with more than 80.000 people both on digital literacy and entrepreneurship skills. Not only the GDP aspect since 2015, Thailand's GDP has likely grown by between 3.5 and 4.5 percent. E-inclusive development has seen more tangible results under the Smart Thailand and Digital Economy policies.

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✓ https://www.travel3sixty.com/indigo-dreams/ Air Asia's Travel3Sixty magazine. ■

## Global program for assisting inventors

The World Intellectual Property Organization (WIPO) has launched a first-of-its kind global program in which patent attorneys provide pro bono help to inventors in developing countries who want to file a patent for their invention but lack the means to do so. WIPO, in cooperation with the World Economic Forum, officially unveiled the Inventor Assistance Program on October 17, 2016 in Geneva, following a successful pilot effort in Colombia, the Philippines and Morocco.

The program aims to help inventors and small enterprises with limited finances to pursue the patent protection that is key to successful commercialization of a product or new solution. Qualified attorneys help by providing free legal advice to inventors who would otherwise be unable to afford the legal costs of obtaining a patent. Research shows many patent applications are rejected on procedural issues that IP lawyers can help avoid.

The Inventor Assistance Program has already helped a dozen inventors in Colombia, Morocco and the Philippines to file patent applications for the new technologies they have invented. These include a wheel-mounted device that helps vehicles gain traction on slippery ground and a machine that transforms vegetable refuse into animal feed in a novel manner. The lawyers participating in the program have, without payment, helped the inventors draft and file patent applications and follow up with patent offices afterward.

In order to join Inventor Assistance Program, participating countries, lawyers and inventors must meet a set of criteria that is designed to ensure the best fit for all involved, while establishing a mechanism to deter any potential conflicts of interest. The pilot program was launched between April 2015 and March 2016 in the three pilot countries after research showing that many patent applications were being rejected on procedural issues stemming from applicants' unfamiliarity with the filing process and lacking the resources to engage counsel. Ultimately, the Inventor Assistance Program seeks to stimulate an innovative environment where all inventors are able to commercialize their products, bringing economic benefits to them, their families and communities, while ultimately boosting the pool of fee-paying clients for lawyers who helped launch this cycle by foregoing payment.

Leading international law firms, corporations as well as international associations support the Inventor Assistance Program, including the Inter-American Association of Intellectual Property (ASIPI), the International Federation of Inventors' Associations (IFIA), Novartis, Qualcomm, the European Patent Institute and the Federal Circuit Bar Association.

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