Women Entrepreneurs and ICT-based Learning: A toolkit

Why gender matters?

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- Gender issues in a project's development cycle: Gender Impact Assessment
- 3 questions: why the issue is important
 - 1. What are the potential benefits of ICT-learning usage in business by women entrepreneurs in APEC?
 - 2. What are the common features and barriers of that have used ICT-learning to unlock their potential for business success?
 - 3. What can be done to accelerate the use of ICT-learning by women entrepreneurs who have not explored the new trends?

Designing

- What should be considered?
- The roles of ICT for women in business practices and decision making: Innovation accessing, business knowledge learning and integrated solution.

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- How Government can facilitate women-friendly ICT-enabled learning environment:
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Introduction : Why gender matters?

Information and Communication Technology is defined as all materials, tools, resources that can be converted into or delivered through digital forms. These will not only include hardware devices and software applications, but also interactive digital content, internet and other communication devices such as radio and television, web based content repositories, and management information systems.

With multifunction of ICT, it plays a vital role in distance learning environment. Through related infrastructure, contents or material are sent to remote locations, and users could communicate with each other. Information and Communication Technology is also a success factor for creating effective online learning environment with high quality usability, accessibility and system structure that operates it. More important, the basic purpose of ICT-based learning is to improve job-relevant knowledge, skills and entrepreneurship. Basic effects of ICT-based learning are as follows,

Connection: Users could be able to control what content should be skipped or emphasized according to their requirements but also communicate with others to get quick request and response. It is facilitated by ICT access to social networks that could support learning goals, exchange information and practice new skills.

Efficiency: ICT devices are generally an everyday part of life and carried throughout the day, therefore learning materials could be accessible to various users and save time and cost for travelling.

Why do women need ICT?

In recent years, increasing attention has been given to the promotion and growth of women-owned enterprises by both national and international levels. As ICT represents a new channel for learning, which differs from traditional education in many ways. Women adopt ICT for the same reasons as men, such as: to get more information, to carry out family and community roles, to conduct the businesses, to work in the ICT industry, to find resources, or to have a voice in public issues. In summary, women need ICT to compete in the information economy world. Therefore, ICT-based learning could foster greater opportunities for business in many ways such as accessing related information for reducing uncertainty, and participating in economic activities more competitively.

However, there are still cultural and gender differences found in relation to the use of ICT. As ICT-based learning is progressively more important, it appears significant to analyse what the gender differences are in this regard and to reflect on the relative factors and learning styles of those differences.

Target group of users : Policy makers, entrepreneurs & NGOs

If you are any of the three main reader groups:

1. Decision makers in government or donor agencies that plan and fund ICT, gender, enterprise or community development initiatives.

2. Staff in NGO, government, private sector or community organisations that support women- or ICT-related small enterprises.

3. Women who run or want to run enterprises.

The target group needs to:

- 1. Understand the important roles affecting women's enterprises.
- 2. Identify potential areas of conflicting interests that may cause challenges.
- 3. Identify severe risks and key relationships that need to be concerned for women's enterprises.

Hence, the toolkit is designed to help anyone working to support women's ICT-based enterprises, especially for micro and small-scale enterprises. Overall, if you have anything from an interest in women and ICTs, to a direct working relationship with women's ICT-based enterprises, then the toolkit is suitable for you.

Gender issues in a project's development cycle

Generally speaking, gender impact assessment (GIA) is the estimation of the different effects of any policy or activity implemented to specific items in terms of gender equality. It is an evaluation, analysis or assessment of a law, policy or programme that makes it possible to estimate in a preventative way the likelihood of a given decision to have positive, negative or neutral consequences for the state of equality. The European Commission provided important processes in GIA include,

1. Analysis of the gender situation of the women and men in the population or sector to be affected by a policy, program or project;

- 2. Anticipating the gendered effects of an activity on women's access, participation and control over resources, benefits and opportunities;
- 3. Identifying potential opportunities and constraints to attaining gender equality resulting from the design, objectives and implementation of a policy or program;
- 4. Addressing gender gaps in the policy or project so that these will enhance rather than retard the attainment of gender equality.

The mentioned theory could be also related to various stages of project, that is: design, implementation and evaluation. And the following issues should be concerned when organizing new project for empowering female entrepreneurs through ICT-based learning:

Stage 1: Project design

Understanding problems and identifying possible solutions are the starting points for the project. It is vital that having a good understand of the challenges we face, as well as causes, consequences and possible solutions. Here are some elements that we have to notice before we start to organize ICT-based learning projects for women entrepreneur.

- 1. What are the special needs of women entrepreneurs for ICT-based learning project?
 - (1) Are women entrepreneurs' needs considered in defining project objectives?
 - (2) Could women entrepreneurs participate in setting the learning objectives?
- 2. What is the target population of women entrepreneurs in the project?
 - (1) Are there ways in which the ICT-based learning project would increase women entrepreneurs' digital literacy and business skill?
 - (2) Do women entrepreneurs have equal access and control of resources, including low-cost devices?
- 3. What are barriers and constraints that might affect women entrepreneurs' access to opportunities, resources, and decision making? If any negative impacts are foreseen, can the ICT-based learning project be adjusted to overcome them?
- 4. Have women entrepreneurs and gender-aware organizations/stakeholders been consulted in the project planning process?

Stage 2: Project implementation

It is important to plan in as much detail as possible how the strategies would be implemented, particularly for women entrepreneurs. An implementation plan would make it clear to everyone involved what is expected of them and at what stage of the project.

- 1. Does the ICT-based learning project include measures to equalize opportunities and access for women entrepreneurs, including micro or small and medium level?
- 2. Are the governments, private sectors and NGOs will deliver services under the ICT-based learning project gender-aware?
- 3. Do women entrepreneurs have equitable access to related ICT resources, including credit, training, and facilities?
- 4. Are there partnerships that could be built that would enhance outreach and improve the ICT-based learning project?

Stage 3: Evaluation

It is not easy to prove without keeping doubt that the ICT-based learning program has directly resulted in specific changes and progressive outcomes. This is because the project is not carried out in isolation. What we could realistically aim to do is to build a reasonable evaluation to show that the ICT-based learning project has contributed to any perceived change.

- 1. Did the project Improve opportunities for women entrepreneurs to access, use or benefit from ICT?
- 2. Did the project contribute to decision-making on business affairs?
- 3. Did the project improvement in women's entrepreneurship from the ICT-based learning project?
- 4. Did the project attract more women entrepreneurs as beneficiaries?

Why ICT-based learning is important to women entrepreneurs: 3 questions

1. What are the potential benefits of ICT-learning usage in business by women entrepreneurs in APEC?

ICT-based learning offers numerous advantages that support inclusive education. Among the most prominent benefits, the following would be as follows:

- (1)The flexibility of the learning process: female entrepreneurs study at the time most convenient, regardless of age, community or socio-economic status.
- (2)Achieving a better work-life balance: running a business would place demands on daily life and female entrepreneurs may not have strong family commitment.
- (3)Cost reduction: especially for selling products/services in the most profitable markets and making decision on the optimum timing.
- (4)Building a sense of self-confidence: acquiring relevant training, contacting wider network and achieving professional goal.

Accordingly, ICT-learning usage opens new ways for education, communication, and information sharing. Women would have greater opportunities in business from a broader range. In other words, women are no longer limited to the local conditions, but having more comprehensive choices offered worldwide. And then the social status and life quality of women would be hopefully improved because of economic growth, job creation and poverty reduction.

2. What are the common barriers of that have used ICT-learning to unlock their potential for business success?

The common barriers that women entrepreneurs have been faced are as follows,

(1)Business challenges: (a)Limited access to loans or credit; (b)Resistance by funding

The main problems faced by women in running business are constraints in obtaining loans and hard to ensure stable funding. Once women are often financially dependent or do not have control over economic resources, which makes accessing financial services more difficult, particularly where access to credit and/or collateral is gained through other household members. In addition, women would be difficult to mobilize other financial resources owing to be unable to travel on their own to remote areas.

Furthermore, women entrepreneurs are limited in their ability to collect prompt information because of less trained on using ICT-based devices. It would lead to procrastination in processing applications, granting approvals, making payments, and seeking for contracting. With constantly updated and flexible ICT-based learning, women would make changes and find new markets in the diversity of business activities.

(2) Socio-cultural challenges: (a) Gender stereotype; (b) Lack of family support

Women have at least three roles: family, community and business. Although it depends on different culture and expectations about the roles, women are affected by the mentioned elements and limited in ICT-based learning and enterprises. In some countries, information centres or cybercafés are located in places that women may not feel comfortable visiting or easy accessing with culturally inappropriate reasons. Because of most ICT facilities in developing countries are in offices or in shared public access points, women also have problems of gender-defined multiple roles, heavy domestic responsibilities, scarce leisure hours, and public centres not being opened when women would like to visit them. Even though the mentioned sites are open in the evening, women might still find it difficult to visit them and then return safely to their homes in the dark night because of lacking of sufficient transportation system.

Another aspect is about culture. Gender bias or stereotype in attitudes impact women in using ICTs. Throughout the world, many countries traditional cultural attitudes discriminate against women having access to education in technology on the basis of the presumption that ICTs accessing and using is not for women. And women are often discouraged in their entrepreneurial efforts in family and community. In addition, heavy household responsibilities could be challenges and would result in women opting giving up ICTs empowerment.

(3)Infrastructure challenges: (a)High cost; (b)Limited ICT access and coverage; (c)Legal framework of computer security

The cost and ease of connectivity issues are as important as outreach. First, ICT equipment tends to be expensive, both at initial setup and with subsequent costs. To be clear, inequality exists in the purchasing power and literacy levels, thus not all women have prompt ICTs and probably far fewer have access to broadband.

Second, the technology solutions that enable ICT-based learning are crucial to its widespread adoption. For instance, without well-designed and maintained platform, learning would be more difficult. Besides, an application with learning materials that constant crashed or was not user-friendly would affect women entrepreneurs and hinder their literacy in technology and business knowledge.

Third, protection of users' privacy and safety is necessary. As more and more women entrepreneurs start to use networked ICT and interact online, they share personal information without preventing inappropriate behaviour associated with the use of ICT devices. Negative social attitudes such as cheating, cyber-bullying, malicious photographs or messages towards ICT devices are probably serious barrier to women.

3. What can be done to accelerate the use of ICT-based learning by women entrepreneurs who have not explored the new trends?

The goals through ICT-based learning would as follows,

- (1)Empowering women: developing literacy enable them to be truly entrepreneur, have earning and enhance their influence or take more equal roles in the community.
- (2)Alleviating poverty: unlike the traditional or informal situations, entrepreneurial skills and ICT skills are in-demand and supporting women to develop ability to make their business sustainable.
- (3)Developing sustainable information society: through ICT-based learning and providing ICT services such as Internet access, women's involvement may have wider participation of networking of society.

ICT-based learning for women related to at least 3 viewpoints: education, economics, and environment combined with legal framework and infrastructure. Therefore, the following concerns for women are to create an environment of collaboration and sharing, conducive to the creation for optimal utilisation and the potentials of ICT-based learning, and promote development of localised learning content and to enable women to participate in business activities and practical use of shared digital resources.

Designing

For starting a business, there are at least 5 elements of being an entrepreneur: mind-set, finding customers, obtaining finance, managing operations, and marketing. Also, with fast moving of ICT, there is a requirement to continually update technology and associated skills to be able to respond to the changes that market needs. In order to gain markets, women entrepreneurs need to identify the growth of goods or services, as well as specific business opportunities. Then women entrepreneurs should establish a linkage with technology for development and product innovation. Successful factors come from continuous and easy accessible training in information technology, e-commerce and entrepreneurship. This may involve seeking for accessing ICT and learning business knowledge at the same time.

What should be considered?

ICT-based learning content should be created with taking into account the specific needs of women and the conditions in which they live, therefore gender-sensitive approaches should be considered. The issues could be separated into two parts: innovation accessing and the process of starting a business.

Innovation accessing

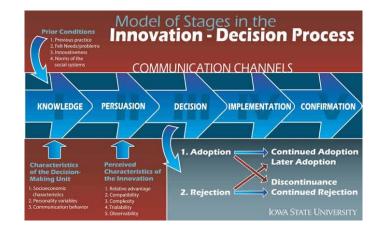
Recent developments in innovation thinking increasingly emphasize on the opportunities that bring about wider change. Diffusion of innovations is related to explain how, why, and at what rate new ideas and technology spread through cultures. According to Everett Rogers, four main elements are crucial to diffusion, namely innovations, communication channels, time, and social systems:

- 1. Innovation: an idea, practice or object that an individual perceives as new.
- 2. Communication channels: the ways in which messages travel from one to another.
- 3. Time: it is relevant to the length of time required to pass through the innovation-decision process, and the relative speed with which an innovation is adopted by members.
- 4. Social Systems: a set of interrelated units that are engaged in problem solving to accomplish common goals.

By establishing the link between innovation accessing and women entrepreneurs' empowerment, it would be related to technology use by capacity building, social change by enhancing entrepreneurship, and barrier overcoming by infrastructure and

investment. Meanwhile, the model of stages in the innovation-decision process that defined by Everett Rogers in 1995, it is "an information-seeking and information-processing activity, where an individual is motivated to reduce uncertainty about the advantages and disadvantages of an innovation." And the process involves five steps that are knowledge, persuasion, decision, implementation and confirmation:

- Knowledge: the innovation could be new hardware, software, methodology, tools, or any technology devices. The main activity in this stage is cognitive. The knowledge of innovation might come through different communication channels such as advertising, word of mouth, or training. And the knowledge-finding activity would be initiated when the need exists.
- Persuasion: The opinion toward the innovation could be favorable or unfavorable. The main activity in this stage is feeling. The individual would seek information and figure them out before having an opinion.
- 3. Decision: The individual decides whether to accept or reject the innovation. There are two possible types of rejection which are active and passive. Active rejection means the individual consists of considering adoption of innovation but then deciding not to adopt it. Meanwhile, passive rejection is an individual is not think to adapt the innovation at all.
- 4. Implementation: at this stage, an innovation is put into practice. It would involve behavior change and the individual could discover the innovation becomes an integrated part of life. In other words, the usage of innovation would be on the regular basis to the individual.
- 5. Confirmation: The individual confirms the decision of rejection or adoption of the innovation. The reason for this change is that information received about innovation would conflict with the previous beliefs.



Business knowledge learning

Innovation that involve women entrepreneurs in the diffusion process that they could address women's needs and have impacts on empowerment in digital and financial literacy. On one hand, it focuses on how and why innovations could widespread. The social, economic and political are key aspects that frame the pathway, shape its process, and map how innovation would reach and benefit women. On the other hand, there are various management challenges for start-up business as it is becoming a bigger industry. Women entrepreneurs increasingly need to learn how to work with regulators, manage risks, reach new customers, organize strategies, and how to best contribute to their business.

It may be related to psychological process, communication channels, and social system/networking. Before accessing ICT-based learning, women entrepreneurs would care these issues as follows: Do I really need it? How could I use it? Would it be to my advantage?

Therefore, ICT-based learning would be practiced for empowerment of women entrepreneurs at least in three aspects:

- 1. Business skills: to assist women entrepreneurs to make decision effectively and match products or services offering the needs and requirements in markets.
- 2. Management skills: to understand and provide continuous training for effective team working and flexible working arrangement.
- 3. Social skills: to interact effectively with potential customers through negotiation skills, and women entrepreneurs could play an active role to contribute experiences.

An integrated solution

With fast moving of ICT, there is a requirement to continuously update technology and associated skills. In order to gain market shares and maintain competitive, women entrepreneurs also need to identify the future trends of goods or services, as well as specific innovations for business opportunities. However, some women were unfamiliar with the use of ICTs, and, therefore, did not use them. Also, low levels of functional literacy hindered ICT use. Therefore, there exists the need for more training in the use of ICTs for women.

The successful factors come from a continuous and easy accessible training in information technology, e-commerce and entrepreneurship. This may involve combining ICT literacy education and business knowledge learning at the same

platform. Under this circumstance, a game-based learning APP would create an innovative, friendly and time-saving way of learning for women entrepreneurs. And it would achieve at least the four basic goals: building self-confidence, flexibility of learning, reducing cost, and getting better work-life balance.

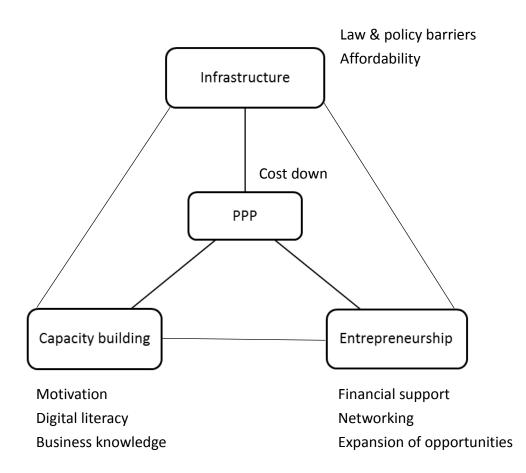
Implementation

Removing trade barriers to facilitate enterprises entry to markets and promoting inclusive growth through sustainable and resilient enterprises would be challenges to women entrepreneurs. What's required is to remove any undue discriminatory treatment in the marketplace that hinder access for women to skills enhancement, training, financing and ancillary support services, and facilitate participation in cross-border business and trade. It will be related to seek to strengthen the integration of gender responsive policies and programs and advance women's economic participation through ICTs to enhance women entrepreneurs' access to opportunities, including to technologies that facilitate fast and more efficient ways of starting up or conducting a business. There are four areas and its background should be concerned:

	Background	lssues
Capacity Building	Training courses in ICT-enabled tools and E-learning could help women entrepreneurs to build self-esteem, business-related knowledge, e-business-related skills and financial knowledge. However, women's high ICT literacy did not pertain to their access of business information. How to convert market information into business opportunities is another challenge in designing e-learning programs tailored for women entrepreneurs.	-How are ICT skills of women entrepreneurs improved? -What are the major challenges in designing capacity building and training using ICT-enabled tools?
Entrepreneurship	Women entrepreneurs generally encounter four difficulties: lack of financing, finding right contacts, access to business information, and lack of business advice, which echo the four barriers identified in the San Francisco	-How do ICTs help to nurture the effectiveness of women's networks and to connect them with resources, learning opportunities and other business networks? -What barriers and challenges for women entrepreneurs to

	Declaration. Also, women entrepreneurs had problems in using ICT to construct social networks for business. Online learning and training not only help women entrepreneurs with better management skills but also provides emotional support for relationship and partnership building.	build up or extend their business network?
Infrastructure	Minimal level of infrastructure should be provided to ensure the quality of ICT-related training projects including up-to-date hardware devices, internet access, day care center etc. While online learning program requires well-designed courses and a system compatible platform, affordable internet infrastructure should be constructed to ensure learning efficiency and inclusiveness.	 -Is there really equitable access to ICT infrastructure between women and men? -What strategies have been adopted to promote such equitable access and what have been their effects?
Public-Private Partnership (PPP)	The PPP or cooperation could provide effective solutions to financial problems and sustainability issues that ICT-learning programs usually face. The PPP should create an enabling environment for infrastructure investment and promote the development of ICT learning as a way to reduce poverty and promote social inclusion, especially in rural areas.	 -What are the challenges for PPP in ICT-learning programs and related infrastructure investment? -To what extent are ICT policies on e-learning programs integrating gender equity and women's empowerment considerations? -Are there any ICT-related projects or practices related to PPP?

And the key elements of ICT-based learning for women entrepreneurs are as follows,



Efforts to empower women entrepreneurs through ICT-based learning need to consider strategic options to reach them regardless their race, education and class. Facilitating agents such as the governments, private sectors, NGOs, networks, and local influential people would be important roles to accelerate the process of innovation adoption by capacity building, entrepreneurship, infrastructure, and public-private partnership.

Capacity building

The element is based on motivation, digital literacy and business knowledge. Women entrepreneurs are given ICT-based training as well as skills in management such as self-assessment in personal characteristics, business practice, marketing, research and development, analysing data, staffing, decision-making, negotiation, etc. Those are related knowledge women entrepreneurs traditionally have less opportunities to access. The development and enhancement of skills and knowledge should be from the grassroots level to marginalized groups, from training and workshops to enhance character build up and proper structures to empower women not only in the macro economy but also from small home-based initiatives, address language barrier and other communication concerns, provide technical support and infrastructure will address business and financial literacy, lead to linkage of markets, provide access to jobs or business ideas, peer teaching/counselling.

Entrepreneurship

The major challenges affecting women entrepreneurs are cultural differences and practices, economic status of their country and their family which affects financial viability, biased gender roles and expectations, limitations to legal avenues and capital funds, support group to build business confidence and share skills and knowledge, economic sanctions, and inability to utilize ICT to source, build, access markets.

An enhanced program for sustainable entrepreneurship status for women through ICT must have regional cooperation and shared vision to seek support and push their agenda from their government to support women-led businesses, access to loans and simplified loan process, provide baseline data and other data source, create a pilot program, develop ICT learning tools and capabilities to access market and develop ideas.

Infrastructure

The active presence of government support in activating its authority to make ICT accessible and effective is crucial. This participation requires the appointment of an ICT specialist who can provide knowledge and vision in improving connectivity and activating robust networking programs. For marginalized countries with limited funds for proper infrastructure support, the support and assistance of regional groups like APEC may provide the proper channels to activate and enhance connectivity weakness. The provisions of incentives for sponsorships and donors and additional support from pooled private organizations and institutions must also be tapped. There is also a clamour for active online support to push infrastructure agenda and get government support and funding. Infrastructure support includes up-to-date hardware devices, internet access even outside of the city, daycare centers, online learning programs with well-designed courses and system compatible platform, affordable internet infrastructure and equitable access to ICT.

Public-private partnership (PPP)

The government plays an important role in providing basic infrastructure and internet access in remote areas, and PPP would be a favourable approach that is not only achieve cost-down for design and implement initiatives but also enhance

participation of NGOs or expert institutions. The dynamics of the support coming from PPPs in terms of scholarships, private collaborations, government incentives, proper policy and implementation support, economic/capital funding, and exchange program, women empowerment programs, can enhance the proper network and cooperation in different countries and the regions. But the crucial and integral part is how to be able to harness these partnerships. And how can initiatives convey proper support channels and meet the needs and demands of women especially in SMEs.

The recommendations presented were to network directly with government or political and authority figures conversant and sympathetic to the cause of women to aggressively push the agenda of crafting legislation, support effective language translation and technical support and pass effective policies and proper implementations of laws that will allow easy access to women-led initiatives in grants funding and organizational support. Another is to create a portal for regional cooperation of women to seek assistance, redress and support.

Conclusion

ICT is applicable to the development of more sustainable, friendly approaches to women entrepreneurs. The rapid growth in ICT in developed/developing countries therefore presents a significant opportunity to help underpin a transformation in global markets, but without a co-operative and focused effort across different stakeholders such as private sectors, expert institutions, NGOs, and governments, the potential for ICT to empower women entrepreneurs is hardly to be maximized.

The elimination of barriers for women entrepreneurs requires a massive change in traditional approaches and mind-sets of society. Hence, the basic requirement in development of women entrepreneurs is to make aware the women regarding her existence, unique identity and contribution towards the economic growth and development. The basic instinct of entrepreneurship could be achieved by carefully designing the basic knowledge along with its practical implication regarding management of being an entrepreneur. Here are some recommendations:

- 1. Focus on capacity building: developing influential local groups of women entrepreneurs to promote innovation diffusion of digital literacy and business knowledge. it is not only an awareness of cultural, financial and societal barriers that prevent women from accessing ICTs, but also require women entrepreneurs commit to learning and being a role model.
- Input support to build on ICT infrastructure: providing common platforms and sharing application development would reduce costs and increase the possibility of success by addressing women's enterprises needs and concern.
- 3. Create business chains linking to engage stakeholders: Fosters partnership between public and private sectors to strengthen business opportunities and women's empowerment. Continuously to understand the needs and risks of women enterprises, and provide a network for women entrepreneurs to increase profit and expand markets.

Case sketch 1: I-KUNA, Chile

I-KUNA, an NGO that is managed by one of the founders of "Acción Emprendedora", focuses its work solely on an e-commerce platform used to connect entrepreneurs with potential buyers. I-Kuna promotes and manages a platform where entrepreneurs can present and commercialize their products. The micro entrepreneurs that participate in the program, would not have access or knowledge to sell online, I-KUNA teach them how to use ICT in order to increase their sales.

The program started in March 2013. The partnerships that the organizers have been establishing are both with the public and private sectors. With the Chilean government, they have partnered with the Institute of Youth (INJUV), Start-up Chile (CORFO) and a private social incubator.

The program is designed attracts mainly female micro-entrepreneurs. Women learning how to use technology can be more than wife, mothers and in charge of their houses. They can make their microbusinesses sustainable, becoming a source of social mobility and opportunities for their children. Participating in the program let them socialize and share their unique products. Which encourage a raise in their annual sales. However, the existence of alliances, between the private and public sector are not enough to maintain a network of support to the low-income entrepreneurs.

All of the participants have completed basic studies, only one of them studied in University, and also the majority consider themselves female heads of their houses. The income of our interviewers varies from 140 dollars until 250 dollars per week. And Chilean family structure enhances the necessity to improve female's involvement with ICT: The children who are students, need support, in special our participants mentioned, that they take care of sons and daughter. Case sketch 2: Gyeonggi Women's Development Center (GWDC), Republic of Korea

Gyeonggi Women's Development Center (GWDC) is a nationally and internationally recognized nonprofit organization that was established by Gyeonggi Provincial Government to empower women through integrated training and Women Business start-up incubating programs.

GWDC provides online lifelong study customized for each individual, "Home Learn". This online education service is providing approximately 400 kinds of courses from basic computer knowledge to advanced ICT, mobile applications. This online lecture service is free for 24 hours.

The intensive IT training courses are available for women who want to be IT professionals. There are 14 to 15 career training courses in IT Education Program. 300 to 350 participants are trained every year, mostly the participants are women who want to re-enter the job market after discontinuous work. The age range is mostly mid- 30s to 40s. The employment rate of these women, are 68% from 1997 to 2013 accumulated.

Programs of GWDC are special in that they have been designed and implemented for women either to have high quality IT professional jobs, or to start businesses using ICT. The GWDC has built a strong and effective partnership with private market-based professional training institutes (Public-Private Partnership). In order to effectively teach professional IT skills to women, the IT Training program has been b designed and operated in a very gender sensitive way.

Even married women in their 30s and 40s can be great human resources through long-term training programs that guarantee the acquirement of highly professional skills. To meet the fast-changing market demands and women's necessities, private professional institutes under the IT education program have specifically tailored their educational courses to catch up with fast-paced market changes, reflecting their emphasis on flexibility.

Case sketch 3: Computer Training Projects of PTTC, The Philippines

The PTTC was established in 1987 as a response of the Philippine government to the growing needs of the trade sector for capacity building. The PTTC is a sub-agency of the Department of Trade and Industry (DTI) that is primarily responsible for the development of training activities designed to hone skills and competencies of the trade sector in product development and marketing activities. Offering an ICT based training program is a major function of the PTTC.

In fact, the training program of PTTC is not exclusive to women because it is offered to support the needs of exporters and traders, regardless of gender for capacity building. Women entrepreneurs saw that ICT will boost their business opportunities. Thus, the training program of PTTC is successful in developing the basic computer skills of participants. It inculcated among participants the value of hard work and focus in life and at work. In the end, the training program encouraged some participants to explore the business application of Internet tools such as the social media and websites.

Most of its courses are short term and can be completed in 1-60 days. There is a follow up training after 6 months. The downside of these features is that they left some participants dissatisfied with their training program. The training program lacked the time and system to gather feedback from participants.

Granting, however, the availability of time to effect the demand of participants, the training program is met with some unanswered concerns. Both the organizers and participants complained of slow internet connectivity, obsolete computer units and software, and traditional course delivery.

Case Sketch 4: Digital Inclusion for Small and Medium Enterprises Project, Chinese Taipei

This project attracts participants from both rural and urban area, creates opportunities for both male and female entrepreneurs to partner and cooperate with other entrepreneurs in either similar or different enterprises; however, it is the importance of partnership and cooperation that is emphasized and reinforced in all its activities. There are at least two specific areas of cooperation in the project. There are at least eight within each e-cluster. Hence, "cooperation" is the key driver of the strategic framework.

An e-commerce platform, established by the Advisory Group and funded by the organizers, is free for each e-cluster to use during its project implementation period. This is to encourage the entrepreneurs who know how to produce quality products but are unaware of, or uncertain about, e-commerce and how to digitalize their businesses. Free training courses introducing the advantages of digitalizing businesses are free for the entrepreneurs.

The fact that most government-funded projects must be implemented within strict, time-based limits, highlights the problems and limitations of Government funded projects, which may be summed up as risking 'unsustainability'. However, in this cooperation-based project, by utilizing all the resources available, combined with the cooperation of the various key sectors and stakeholders, successful solutions were found and the problems and limitation managed; which shows what is possible when participants are helped to achieve economic autonomy.

Free resources provided by government, therefore, lowers the barrier that hampers women to acquiring economic empowerment. The disadvantage is the limited project implementation period. Therefore, because a project may ideally be several years long, it has to be closed by a certain time. Hence, the independency and sustainability gained from the project can be weakened if positivity, stability are not maintained.

	I-KUNA, Chile	Gyeonggi Women's	Computer Training Projects	Digital Inclusion for Small and Medium Enterprises	
		Development Center,	of PTTC, The Philippines		
		Republic of Korea		Project, Chinese Taipei	
Capacity Building	Failing to take participants'	Offered flexibly timed, gender	The major concentration of the	Benefited in numerous internal	
Motivation	schedules into account,	sensitive ICT-enabled tools	training programs is on building	and external ways, such as	
Digital literacy	resulting in a lack of gender	trainings courses.	the basic to advanced	discovered new markets and	
Business Knowledge	perspective.		computer operations technical ways of entering them		
			skills of participants.		
Entrepreneurship	Specifically targets markets	Stressed the importance of	Not have existing practices	An absence of existing	
Financial support	through the web/platform, by	networking among women	using ICT tools to build access	practices using ICT tools to	
Networking	using e-commerce	who overcome their struggles	to capital from training	build women's leaderships and	
 opportunities 		to re-enter the workplace after	programs.	level up women entrepreneurs	
		interrupted careers.			
Infrastructure	These markets are both	Offered courses with advanced	A slow Internet service,	Using internet communication	
Law & policy barriers	national and international, as	IT facilities, cafeteria, a daycare	obsolete computer unit and	services strengthens	
Affordability	buyers can get a hold of a	child service and transport	software, lack of a training	connections and then possibly	
	product and see it even if they from the subway		venue and funding.	can serve as a networking	
	are in another country.			platform	
Public-Private	Well connected with	Supported by partnerships, still	Limited to management	Effective cooperation between	
Partnership	governmental agencies and	needs extra finance to maintain	training courses and curriculum	stakeholders and government	
	private actors	its e-commerce platform	development, still need more	agencies in order to make best	
			financial resources	use of available facilities	

Checklist

Key Elements	No	Minor	Major	Severe
	Barrier	Barrier	Barrier	Barrier
Capacity Building				·
Access to technical and business knowledge training				
Content are made in view of cultural diversity				
Training opportunities are available for women at varying				
levels of education				
Training material accessible to low literacy and non-native speakers				
Flexibility in scheduling and location				
Content is made available to all users regardless of class and race				
Training programs contribute to business opportunities				
Have ability to understand and apply concepts of finance in				
practice				
Entrepreneurship				
Access to equity loans or grants				
Access to networking activities and events				
Inspire entrepreneurial motivation in society				
Eliminate cultural and societal norm				
Access to investors or funders				
Access to domestic and international markets				
Infrastructure		-	-	-
Stakeholders are included in the policy-development				
process				
Enabling legislation and policy to encourage women				
entrepreneurs				
Business licensing and tax rates				
Access to incubators and local centers				
Availability of internet access and connectivity services				

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