A Toolkit for Developing Digital Upskilling Training Program in New Media from the Gender Lens

APEC Human Resources Development Working Group
January 2024
A Toolkit for Developing Digital Upskilling Training Program in New Media from the Gender Lens

APEC Human Resources Development Working Group

January 2024
APEC Project: HRD 04 2023A

Produced by

Workforce Development Agency (WDA)
Ministry of Labor
Chinese Taipei

For
Asia-Pacific Economic Cooperation Secretariat
35 Heng Mui Keng Terrace
Singapore 119616
Tel: (65) 68919 600
Fax: (65) 68919 690
Email: info@apec.org
Website: www.apec.org

© 2024 APEC Secretariat

APEC#224-HR-03.1

Note:

The term “national” and names of public or private institutions used in the text are for purposes of this report and do not imply the political status of any APEC Member Economy.
# Contents

1 Introduction ........................................................................................................ 1
  1.1 The purpose of the Toolkit ............................................................................. 1
  1.2 The objective of the Toolkit .......................................................................... 2
  1.3 How to use the Toolkit .................................................................................. 3
  1.4 The scope of the WEDU Workplan ................................................................. 4

2 Stage I: identifying the field of digital upskilling for women empowerment .... 7
  2.1 Activities ...................................................................................................... 7
  2.2 Principles ..................................................................................................... 9
  2.3 Focus points ................................................................................................. 9

3 Stage II: designing and implementing the training program .................. 12
  3.1 Activities ..................................................................................................... 12
  3.2 Principles ..................................................................................................... 13
  3.3 Focus points ................................................................................................. 13

4 Stage III: implementing the training program and quality assessment .... 16
  4.1 Principles ..................................................................................................... 16
  4.2 Focus points ................................................................................................. 16

5 Challenges & solutions .................................................................................... 19
  5.1 How to integrate interdisciplinary knowledge to develop new mindset training programs ........................................................................................................................................ 19
  5.2 How to apply the training programs for diverse learning conditions and establishing the corresponding evaluation and certification mechanisms ........................................................................................................................................ 22
  5.3 How to the reach of the new mindset training program across various industries to facilitate its generalization ........................................................................................................................................ 24

6 Conclusion & Recommendations ................................................................. 26

References ........................................................................................................... 28
Introduction

1.1 The purpose of the Toolkit

Recently, APEC has been actively engaged in various human resources development initiatives, progressively transitioning towards an integrated approach that combines diverse strategies. This comprehensive approach doesn't solely focus on human resources development but extends its scope to encompass areas such as enhancing the capacities of small and medium-sized enterprises (SMEs) and promoting gender inclusivity. The primary objective is to foster inclusive engagement in economic activities across the region while bolstering women's economic empowerment within the digital job market.

Aligned with APEC's vision for human resources development, Ministry of Labor's Workforce Development Agency Chinese Taipei proposed the "Women's Economic Empowering, New Media Digital Upskilling (WEDU)" project under APEC's Capacity Building Network (CBN) within the Human Resources Development Working Group in 2019. This initiative harmonizes with APEC's 2017 "APEC Internet and Digital Economy Roadmap" and the establishment in 2020 of the "Digital Economy Steering Group,” aimed at promoting inclusivity in the digital economy and fostering increased involvement of diverse groups. Additionally, it corresponds to the "APEC Framework on Human Resources Development in the Digital Age,” officially endorsed by the Human Resources Development Working Group in 2020, concentrating on inclusive digital economic development and addressing challenges faced by disadvantaged group, such as women, particularly in the digital sphere amidst the impacts of COVID-19.

Moreover, the WEDU project adheres to the "La Serena Roadmap for Women and Inclusive Growth (2019-2030)" outlined by APEC. This roadmap emphasizes augmenting women's participation in the workforce, supporting women's training and skill development in swiftly evolving work environments, and advancing women's economic empowerment through data-driven
strategies. Drawing from this roadmap as a blueprint, the project devises essential training approaches that amalgamate digital transformation of the workforce and promote gender inclusivity, ensuring equitable participation for all in the digital economy and fostering inclusive growth.

Among various digital technologies, new media refers to the new modes of communication generated by the application of digital technology in information dissemination. New media includes but is not limited to search engines, virtual communities, digital television, and instant messaging as communication channels. For the female workforce, new media changes the patterns of information sharing and interpersonal communication and offers benefits to economic participation, such as low costs to access new markets and reach potential clients. However, the training frameworks and courses for digital marketing through the perspective of women empowerment have yet to be well explored and developed. Furthermore, there are insufficient examples of integrating a gender perspective into the training program and courses. Therefore, by consolidating the experiences and outcomes from the WEDU project, the Toolkit for Developing Digital Upskilling Training Program in New Media from the Gender Lens (below abbreviated as “Toolkit”) has three main purposes:

- Providing APEC economies with a feasible and comprehensive approach to developing training courses from the gender perspective;
- Promoting the collaboration between public and private sectors in designing training programs;
- Suggesting a framework for training courses and assessments that enhance digital upskilling and raise gender awareness.

1.2 The objective of the Toolkit

The Women’s Economic Empowering, New Media Digital Upskilling (WEDU)
The project aims to integrate gender awareness into digital marketing strategies and operations, fostering talent development and anticipating positive impacts on individual growth and organizational performance. The project's outcomes include gathering best practices, conducting exploratory research, designing training packages and evaluations, as well as facilitating international training programs. Additionally, the training package titled "Training Package: Gender Power in Online Marketing" was disseminated to all APEC economies through publication in March 2022.

The uniqueness of the WEDU project is to facilitate the public-private partnership on the cross-cutting nature of gender equality. Specifically, the WEDU project focuses on digital marketing to explore the intertwined relationship between human resource development, women empowerment, and digital skills. Several key objectives were targeted as follows:

- Consolidating domestic public and private sector resources to innovate training courses and methods;
- Conveying a gender-sensitive new mindset for human resources development strategy and training programs;
- Proposing a training framework to empower women on new media technology and benefit from economic participation;
- Exploring the multiple perspectives and diverse strategies of human resource development plans.

### 1.3 How to use the Toolkit

The WEDU project is a multiple-year project and has yielded several outcomes, including the collection of best practices, a comprehensive training package, and a pilot international training class. As a result, this Toolkit is to facilitate the sharing of experience in public-private partnerships for developing digital upskilling training programs in new media through the gender lens.
The details of the new mindset training package, titled "Training Package: Gender Power in Online Marketing," was released in March 2022. This training package provides illustrates three key phases involved in developing the training program: 1) thorough assessment of existing markets, objectives, and audience personas; 2) rebuilding the marketing strategy; and 3) measuring digital marketing effectiveness. Consequently, it is highly recommended to utilize the Toolkit in conjunction with the Training Package for optimal results. “Training Package: Gender Power in Online Marketing” can be found by searching the APEC Publications database or obtained through the following link: https://www.apec.org/publications/2022/03/training-package-gender-power-in-online-marketing

1.4 The scope of the WEDU Workplan

“The Women’s Economic Empowering, New Media Digital Upskilling (WEDU)” project aims to integrate gender awareness into digital marketing strategies and operations, nurturing future talent while anticipating benefits for individual development and organizational performance. The project is structured in phases: Phase 1 involves gathering best practices, conducting exploratory research, designing training materials, and evaluations. Phase 2 concludes the training package, published as the “Training Package: Gender Power in Online Marketing” (March 2022) via APEC publications, distributed among all economies. International workshops based on this package are also conducted to implement the training initiative. Throughout these stages, expert meetings and workshops are regularly held to share the project’s progress and outcomes with APEC economies, facilitating the exchange of perspectives and experiences. In 2023, as the plan enters its third phase, it compiles the experiences and outcomes of each stage. This effort results in the creation of the "Toolkit for Developing Digital Upskilling Training Programs in New Media from a Gender Perspective." Through case studies and outcome sharing, discussions revolve around enhancing female labor participation and
developmental opportunities in the digital economy. This aims to encourage cooperation between public and private sectors in innovating human resource training programs. The toolkit provides APEC member economies with experiences and frameworks for future planning of similar training initiatives, aiming towards a more gender-inclusive and sustainable digital economic future.

**Picture 1: The timeline of the WEDU project**

<table>
<thead>
<tr>
<th>Phase 1</th>
<th>Phase 2</th>
<th>Phase 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>2020 Identifying the field of digital upskilling</td>
<td>2021-2022 Designing and implementing the training package</td>
<td>2023 Developing the Toolkit</td>
</tr>
<tr>
<td>Pilot interviews and focus groups</td>
<td>Expert meetings and workshops</td>
<td>Expert meetings</td>
</tr>
<tr>
<td>Best practice collection</td>
<td>The launch of the training package</td>
<td>Developing the Toolkit</td>
</tr>
<tr>
<td>Three Workshops</td>
<td>Two pilot courses</td>
<td>An APEC Workshop</td>
</tr>
<tr>
<td>An APEC Conference</td>
<td>An APEC Conference</td>
<td>The launch of the Toolkit</td>
</tr>
<tr>
<td>An international class and the launch of relevant certifications</td>
<td>Earn recognized certifications in digital marketing skills, such as I CDL (International Computer Driving License), iCAP (Integrated Competency Application Platform)</td>
<td></td>
</tr>
<tr>
<td>Pre-test and post-test of participants’ analysis</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Using social media as a key to communication, expecting to achieve the vision of responding societal issues, enhancing gender-sensitive perspectives, integrating multiple disciplinary knowledge, and promoting an inclusive, fair, and dynamic digital economic institutional structure through innovative marketing strategies, upgrading digital skills, training potential talents, and transforming institutional processes.
2.1 Activities

During the first phase of the WEDU project, the activities for identifying the field of digital upskilling for women empowerment are as follows:

A. Pilot surveys for the digital demands in a specific industry in response to the contactless economy. Before the COVID-19 pandemic, the International Organization of Labor (ILO) urged that current skills are not yet suitable for future work needs, and newly learned skills may become obsolete rapidly. The lockdown and social distance measures during the pandemic also led the working environment in a contactless environment. The digital transformation and the pandemic require policymakers and industries to refine training programs for upskilling and reskilling in the digital era. Beyond responding to the aforementioned broader trends, the WEDU project also draws insights from the 2020 Gender Labor Statistics Analysis in Chinese Taipei, which revealed that women constitute over 70% of the workforce in the service industry, particularly dominating in the wholesale and retail sectors. Given the era of contactless economies, the retail sector inherently demands urgent digital transformation and a need for manpower in online marketing. Coupled with the higher female labor participation in this industry, therefore the project selected the retailing industry as the targeted industry to conduct pilot surveys to understand how digital transformation impacts the retail industry, differentiating it from the past practice of resource allocation primarily focused on store expansion or equipment procurement, and further examine the technological advancements and talent enhancements required to adapt to changes in sales models and transaction processes.

The elements targeted by the pilot surveys include three groups: (i) digital challenges: the degree of digitalization of the respondents’ daily work (management/contact communication/optimization of services) and how respondents improve their digital effectiveness; (ii) workforce conditions:
recruit frequency, on-the-job training, education and training methods/channels/frequency, the relevance of on-the-job training with digital capability, ranks of trainees and job connotation, and the biggest challenge in handling training courses; and (iii) gender perspective: Respondents experienced or observed gender-related issues, the company’s policies of encouraging women to engage in innovative work, the challenges faced by women in the workplace and how companies can assist them, and whether there is any significant difference in consideration of promotion in line with gender.

B. Select topics for the new mindset training program. The findings of the pilot surveys show that most of the enterprises in the retailing industry are SMEs. These enterprises have acknowledged the changes in technological development and are aware of the challenges faced in digital transformation. The specific issues being identified include: (i) SMEs do not know how to choose suitable digital instruments; (ii) SMEs have difficulty to set clear transformation goals and reallocate resources; (iii) SMEs lack access long-term benefits beyond business operation and short-term profits; and (iv) SMEs are unable to join the supply chain ecosystem.

C. Collect best practices of APEC economies. Besides the pilot surveys of SMEs in Chinese Taipei, the WEDU project also collected the best practices of APEC economies regarding the needs of SMEs and female workforce in the digital transformation and the pandemic. There are three major kinds of policies adopted by APEC economies:

- Introducing the concept of digital transformation for talent training and relying on public-private partnership or the cooperation with industrial associations, such as the Entrepreneurs’ Program launched by the Australian Government Department of Industry, Science and Resources, the collaboration between the Philippines’ Department of Labor Regional Employment Bureau and exporters for experience sharing in the Philippines, and the creation of National Centre of Excellence for
Workplace Learning (NACE) by led by Nanyang Polytechnic with the support of the Ministry of Education in Singapore.

- Responding to the impact of the pandemic on informal economy workforce, including Indonesia’s COVID-19 response plan of improving skills and productivity for women, youth, and rural groups, and the training programs provided by Infocomm Media Development Authority and Enterprise Singapore.

- Enhancing infrastructure and resource allocation, for instance, Indonesia’s establishment of employment information system which offers digital skills vacancies, the Philippines’ Technical Education and Skills Development Authority enhancing resources for regional Technical and Vocational Education and Training (TVET) Innovation centers and upgrading training infrastructure, and the creation of life-long learning centers by SkillsFuture Singapore.

2.2 Principles

Concerning industries with a higher concentration of female participation, observe and understand the changing demand for human resources and the utilization of digital technologies in one or more sectors. Additionally, examine the working conditions of women in these industries/sectors and the digital gap they might confront. Through preliminary interviews, focus groups, and pilot surveys, identify the comprehensive digital skills required by these industries and determine appropriate training topics. Finally, collect best practices from APEC economies to identify the digital skills for female workforce needs.

2.3 Focus points

A. From the perspective of individuals: How to explore individual potential abilities to assist their participation into the labor market force, utilize
the characteristics of new media such as digital, interactive, and virtual elements, cultivate cross-disciplinary skills, and develop talents for translating professional knowledge? In addition, how to empower various groups, including women, to enhance their communication abilities and effectively engage in receiving, integrating, and disseminating information?

B. From the perspective of industries: How to use new media to improve skills, promote digital transformation, and upgrade business models and management methods? How can we recruit and train employees with innovative and forward-thinking perspectives to ensure the effective continuation of transformation or upgrading outcomes? Meanwhile, have the public and private sectors moved beyond the standpoint of "bridging the digital divide" and established appropriate skill training goals, curriculum content, and evaluation criteria to support critical talent development.

The pilot survey of small and medium enterprises involving the retailed industry in Chinese Taipei

To understand digital skill utilization and identify the gender gap among small and medium enterprises (SMEs) in the retail industry, the WEDU project initiated a pilot survey in 2019. This study encompassed four events: two initial interviews and two focused group interviews. The two initial interviews targeted small and medium enterprises with a scale of 30 people. In contrast, the focus group interviews cover a range of business scales: those with fewer than ten people, those with fewer than 100 people, and those with over 100 people. Three topics were covered by these interviews, including digital challenges, workforce conditions, and gender-related aspects.

This design serves two purposes. Firstly, it aims to comprehend the gender ratios within SMEs of different operational scales. Secondly, it utilizes qualitative interviews as the foundation for subsequent quantitative research through questionnaire design.
Analysis of survey data

The majority of SMEs still adopts the traditional marketing approaches such as outdoor billboards and leaflets, and mailing flyers. In terms of digital marketing, although some companies have utilized social media, electronic newsletters, and blogs on web platforms for promotion, the adoption rate remains low. Particularly, the use of digital technology to enhance internal management and optimize company services varies across businesses. There exists a divergence in perception and levels of digitization among companies. This situation is also reflected in internal talent development, where employee skill enhancement mainly relies on self-improvement and experiential learning through peer mentoring. Companies haven’t systematically provided training courses aligned with their business objectives.

Conclusion drawn from the pilot survey

The proportion of women engaged in digital marketing is not low, and there is no gender bias evident in the hiring stage. However, when it comes to promotions and higher-level positions that require diverse digital skills, gender differences gradually emerge. Women exhibit lower acceptance of technology-related assessment criteria or enthusiasm for digital learning. Gender equality awareness has not been integrated into the curriculum design, faculty training, or knowledge translation within digital marketing courses.
3 Stage II  
*designing and implementing the training program*

3.1 Activities

In the second phase of the WEDU project, the activities for launching the training packaging and conducting an international class are as follows:

A. Identifying digital marketing as the topic for the new mindset training program and the related aspects. According to the findings of pilot surveys and best practices, the WEDU project identified social media as the key to facilitating digital marketing as the topic for the training program. In addition, the purposes of the training program for upgrading digital skills were specified, including innovation of market strategy, digital upskilling and reskilling, potential talents, and transformation of institutional process of selecting digital instruments and operability.

B. Improving the initial design of the training program. The original training program was created based on the initial vision of the digital upskills training program. It consists of three units: (i) digital marketing and market analysis; (ii) online marketing strategy planning, and (iii) internet marketing outcome analysis. However, the content of the training program needs enhancement by incorporating feedback and exchanging viewpoints from both the public and private sectors. Several issues were raised by the public and private representatives, including the feasibility of the training program, the application of the training program in other industries and fields, and the collection of outstanding examples of gender-sensitive digital marketing.

C. Implementing the training program through an international class. The training program, viewed through a gender lens, was executed during a seven-day international class. The pre-test and post-test of participants on digital literacy and gender awareness provide feedback to assess the feasibility of the new mindset training program. Nevertheless, it is essential to pay close attention to the language employed, class materials, teaching
methods (physical, online, or hybrid), and certifications linked to the training program before initiating the international class. Certificates would be awarded exclusively for the Internet Marketing Outcome Analysis unit within the training program.

### 3.2 Principles

Developing the vision and structure of the training program in line with the findings of pilot surveys and best practices, while improving the content and ensure the feasibility of the training program through public-private collaboration.

### 3.3 Focus points

**A.** For the gender perspective: Incorporating a gender perspective into online marketing activities is a continuous process from ideation to presentation. Three primary issues to integrate gender aspects into the digital marketing are: product policy, role setting, and narrative methods. The contribution of the gender perspective in digital marketing training is for breaking through the collective consciousness of gender stereotypes, pursuing innovative marketing, integrating public interest into marketing goals, and responding to social issues, and approaching potential consumers.
The market analysis for online marketing integrated with a gender perspective

The main idea: Societal perceptions and attitudes toward gender equality vary based on gender, generation, education level, and residential area. However, these perceptions evolve and provide marketing opportunities for engaging with targets or exploring new audiences.

Examples: Audi automobiles and Heineken have tried to break the traditional conception in commercial promotions that “cars” and “beer” are products primarily associated with men. Their advertisements advocate that women are equally capable of driving well and enjoying beer, expanding the target audience beyond the predominantly male demographic.

- Audi Campaign: “Let’s Change the Game”, https://www.youtube.com/watch?v=Tstc6NmNAus
- Heineken: “Cheers To All Fans”, https://www.youtube.com/watch?v=0m85z3mzVxQ

Exploring market positioning through innovative gender concepts

The main idea: By analyzing demographic data and big data from online activities, the intended audience can be targeted precisely, enabling nuanced profiling. Meanwhile, tailored marketing approaches can be devised for diverse audience segments based on generations, cultures, genders, and lifestyles, achieving market differentiation and marketing efficiency.

Examples: The Hotel Royal (Jiaoxi) in Chinese Taipei issued a series of commercial promotions titled "Mazu on Holiday" in 2019, which relies on a popular goddess -Mazu- as a social influencer. Through Instagram pictures, it shows that Mazu shares her vacation snapshots, connecting with females as the target audience that might experience guilt because of consuming and relaxing from their family duties. This campaign effectively engages females by providing original and engaging topics in the cultural context.

B. For the industrial aspect: Because different industries possess distinct marketing needs, illustrating the incorporation of a gender perspective in marketing strategies can add value to each industry. By tailoring and designing course materials based on the requirements of each industry and showcasing how gender perspectives are integrated into training programs through these educational materials can further ensure the acceptance and execution of the training initiatives.

C. For the digital aspect: The sophistication of digital technologies is vital to the gender digital divide. As the availability of fundamental digital tools increases, the digital gap decreases. However, we still need to be mindful of the diversity in individual digital needs. By addressing differences in training specifics, we can increase the flexibility of curriculum delivery to better cater to the learning requirements of participants from various backgrounds. This, in turn, will bolster employees' abilities to analyze consumer feedback and elevate their acumen in identifying marketing content.

D. For the scope of trainees: While the training program is contributed to women's empowerment and reduces the digital gender gap, it is questionable of the potential trainees of the training program. If the training is limited to female trainees, it will hinder the extension of the gender awareness effect to different genders. On the other hand, if the audience and participants are not restricted to females, the outcomes could differ from the purpose of the training program on empowering women's digital skills. Therefore, to maximize the training benefits, the project defines potential trainees as follows: 1. Digital skills and online marketing training institutions, instructors, and public sector officials. Through training such individuals, it aims to enhance their gender sensitivity in related training or policy design. 2. Female employees who have been involved in or have potential needs in online marketing within their roles. The project overseer will establish screening criteria to ensure participants possess relevant experience and can apply the training to benefit female laborers, female entrepreneurs in economic empowerment, and to make training institution programs and public sector policies more gender inclusive.
4.1 Principles

The completion and feasibility of the training program depend upon the connection between different units in a training program and relevant recognized certifications related to each course unit, a comprehensive gender perspective integrated into the training content and the quality assessment, and whether the training content can meet the diverse learning needs of the trainees.

4.2 Focus points

A. The differentiation lies in integrating a gender perspective into the training program and whether the analysis results reflect such a perspective: "How to interpret data" and "interpretation behaviors have a gender perspective" must avoid marketing disasters or PR crisis caused by gender stereotypes. Therefore, the focus of the course is to enable corporate representatives, planners, and executors to realize the merit of gender awareness and gender-sensitive strategy to bring new business opportunities and explore potential clients. Meanwhile, the content needs to propose the way against potential negative factors in online marketing and avoid commercial risks or business crises caused by improper actions.

---

**Exercise-sharing gender-sensitive presentation delivery and data analysis**

The main idea: To assess the trainees' capacity, lectures can request trainees to share their case study by presenting three key points: (1) Introduce the concepts of presentation design, chart design, and layout arrangement; (2) Explain the differences between photo and presentation design on social platforms, highlighting the themes and imagery conveyed in the showcased works; (3) Illustrate the tools utilized in creating the presentation.
B. The expected audience being empowered: The empowerment outcomes would be different from the perspective of consumers or trainees. The former is through case analysis to interpret the meaning of gender to improve marketing content to meet market expectations; the latter focuses on identifying women's hidden and low-quality employment in the existing training courses and addressing their insufficient skills as well as disadvantaged situations to design training and propose solutions for providing women with better employment opportunities in the labor market. While the disruptions or obstacles to breaking the invisible ceiling in the labor market do not differentiate in the Asia Pacific region, the level of gender awareness varies. Therefore, the feasibility of marketing methods developed by the training program in other APEC economies would depend upon gender awareness.

C. Demonstrating the disparity of pre- and post-training on digital capacity and gender awareness: Individual analysis or output checklist could be used for gender issues to assist trainees to review Internet marketing business plans.

D. The assessment for digital skills and gender awareness: The quality assessment must be designed for digital marketing skills and gender awareness for trainees. Furthermore, considering that the gender perspective varies to different extents across various units of the training program, evaluating gender awareness should encompass both general indicators for the overall training program and specific indicators for each course unit.

The general indicators encompass acquiring a foundational comprehension of gender-related content in diverse analyses or strategic planning of Internet marketing. They also involve establishing a process for evaluating gender awareness and discerning gender issues within marketing analysis and commercial plans.
The specific indicators are: (i) digital marketing and market analysis: Understand gender differences in customer group analysis items (such as region, age, ethnic group, education), and understand the actual needs of different genders/customers and increase the possibility of expanding the market; try to construct a competitive strategy based on gender issues and identify promising marketing targets to highlight the market difference; (ii) online marketing strategy planning: The presentation of marketing content should help break through gender stereotypes and avoid gender discrimination, increasing the empowerment content of vulnerable genders and enhance the sense of self-worth, and integrating the value of diversity and inclusion into marketing content to see the needs of different ethnic groups; and (iii) internet marketing outcome analysis: Whether gender-aware marketing texts increase effectiveness, analyzing visitor behavior to understand visitors' acceptance of gender-aware texts, and modifying or strengthening the gender awareness marketing plan by using digital marketing analysis tools.
5 Challenges & Solutions

Over the last three years, the WEDU project has organized domestic and international workshops and seminars to explore gender-sensitive and gender-responsive training courses and potential benefits for women empowerment and vulnerable groups. Drawing from viewpoints shared by stakeholders across diverse domains, the challenges in developing and applying the new mindset training programs encompass three aspects: first, fostering interdisciplinary knowledge integration to develop the course content; secondly, establishing corresponding evaluation and certification mechanisms tailored to the novel training courses; and finally, extending the reach of the new training program across various industries to facilitate its generalization.

5.1 How to integrate interdisciplinary knowledge to develop new mindset training programs

5.1.1 Challenges

The APEC Economic Policy Report of 2021 pointed out four major factors shaping the future of work: technological change, climate change, globalization, and demographic change. Among these, the Fourth Industrial Revolution, driven by technological advancements and the accelerated growth of e-commerce during the coronavirus disease 2019 (COVID-19) pandemic, has been instrumental in speeding up the breadth and depth of digital technology applications. Digital technology, on the one hand, can enhance work efficiency and expand business operations; on the other hand, it can lead to the disappearance of certain jobs and the closure of businesses that cannot embrace new digital skills and technology. Therefore, while seizing the opportunities and business prospects of the digital economy, attention should also be paid to the well-being of the people and social rights, especially vulnerable groups such as women returning to the workforce, SMEs, people in rural areas, and indigenous peoples.
Many organizations reckon that, from experiences during the pandemic, digital technology can promote the participation of women and female-led businesses in economic activities. Therefore, it is suggested to utilize digital technology training to assist the aforementioned groups in their digital transformation, thereby enriching the workforce with more resources for the new media era, while also addressing gender inequality issues stemming from economic development. However, there are challenges to achieving these goals:

(i) The fixed mindset of existing training programs and courses: Training programs for skill upgrading or reskilling primarily focus on narrowing the skills gap and strengthening workers' workplace abilities. However, they do not consider the gender awareness that the training course content might involve or consider the gender disparity among the participants in the training courses. Taking digital marketing as an example, existing training course or trainers mainly teaches trainees potential digital technologies and methods to produce commercial advertisements and promotions and share case studies. Seldom of them could guide trainees to think about gender discrimination or bias caused by marketing content and statements, which might solidify gender bias in society. Neither of them introduced the trainees using data analysis to understand the gender traits and identification of consumers to ensure the effectiveness of product marketing or to use a gender perspective to explore new potential customers and markets.

(ii) The various conceptions and perceptions of gender issues: The scope of gender perspectives varies. Taking the Asia-Pacific region as an example, APEC's focus on gender equality mainly discusses the equality of social and economic status and treatment between women and men within the binary gender context. However, individual APEC economies differ in developing gender awareness and related policies. For instance, Chinese Taipei has legislated gender equality laws, i.e., the Act of Gender Equality in Employment and Gender Equality Education Act, since the millennium. These regulations have expanded the scope of gender equality to diverse gender identities, preventing discrimination from sexual orientations, gender identities, and
biological traits. Society is also open to discussing and respecting diverse gender identities, covering transgender, non-binary, and agender identities. Consequently, a marketing curriculum integrating gender perspectives may vary in applicability across different cultural backgrounds, social contexts, and economic entities shaped by religious beliefs.

(iii) The gap between the audience and objectives of gender-sensitive training programs: Gender-sensitive training programs include courses incorporating gender awareness, dismantling gender biases in the content, and considering the gender differences among the course participants. For example, women might have concerns about caregiving responsibilities that could hinder their participation in in-person classes or prefer digital training courses. Therefore, the gender-sensitive training programs might not equal the courses with more concentrated female participants. Furthermore, suppose the initial goal of a gender-sensitive course was to enhance women’s economic participation and digital skills to reduce the employment gap between genders. In that case, the audience might be limited to females. In contrast, if considering raising gender awareness stressed and diminishing gender bias, the training courses should be open to the male population. As a result, developing gender-sensitive training programs would confront the difficulty of deciding the audience and clarifying the expected outcomes.

5.1.2 Solutions

(i) Promoting the interdisciplinary knowledge integration and collaboration to change the mindset of existing training programs and courses to embrace gender and other social perspectives;

(ii) Enhancing the experience sharing on gender-sensitive training programs across APEC economies and encourage APEC forums, especially the HRDWG, to develop the APEC framework or guidelines for producing gender-sensitive training courses. The APEC framework or guidelines can give clearer ideas for economies on how to engage in gender-sensitive training courses and achieve APEC gender-related priorities;
(iii) Identifying the purpose and expected outcomes of a gender-sensitive training program at the initial stage and gradually improving the scope of the training program in line with social and economic needs.

5.2 How to apply the training programs for diverse learning conditions and establishing the corresponding evaluation and certification mechanisms

5.2.1 Challenges

Gender-sensitive training courses for digital skills aim to enhance the economic participation of women or female-led businesses and promote awareness of gender equality. However, whether these training courses align with the goal of breaking gender frameworks and unleashing the potential of female workers and female-led business might be compromised due to the design of instructional methods, learning environments, and the outcomes of a training program. Specific challenges include the following:

(i) The teaching method needs to balance convenience and effectiveness of learning: If training courses are conducted in person, it might prevent workers who need to balance caregiving responsibilities or face transportation challenges from participating smoothly. On the other hand, if the teaching method is conducted online without corresponding support measures (such as participants' internet quality, assignment submission, and skill assessment), it might fail to ensure the learning progress and outcomes of the participants. Therefore, balancing the learners' convenience and the effectiveness of learning for the target audience is one of the challenges in developing digital skills courses.

(ii) The learning environment and teaching methods have not taken into account the needs of people with disabilities: Training programs and courses in digital skills serve as tools to enable economically disadvantaged and marginalized groups to achieve economic participation and ensure digital
economic equality. However, when discussing the development of training courses for the digital economy era, missing issues are the enabling learning environments and teaching method for individuals with disabilities. For individuals with disabilities, especially those with severe disabilities, digital devices are crucial for engaging in economic and social activities. However, an unfriendly instructional environment might block their access to these training courses. For instance, the external environment of the classroom might lack disability-friendly facilities and infrastructure, making it difficult for learners to access the teaching venue. The indoor space might not have sufficient walkway areas and suitable heights for wheelchair accessibility. The course content and materials might lack visual elements or subtitles to aid visually impaired or deaf learners. Even in the case of online instruction, where learners can study in their familiar environments, the absence of visualization might impact their learning outcomes.

(iii) Developing innovative training programs requires corresponding capacity assessment and certifications: Apart from imparting new skills and knowledge, training programs are crucial in offering a series of tests and assessments to provide objective and credible outcomes that confirm learners have progressed in relevant skills and expertise to a certain level after undergoing training. Therefore, training courses that grant skill certifications or examination certificates serve two purposes: guiding learners in planning to upskill and reskill by understanding learning directions and providing companies with more objective and streamlined references for talent selection.

However, when developing new training programs, how training institutions proceed with assessments and grant certifications poses a significant challenge. For example, the WEDU project promotes a gender-sensitive training program for digital marketing. The training program covers three main areas: the application of digital skills, marketing strategies, and gender awareness. Most of the existing skill assessments and certificates in the market are mainly focused on digital skills or marketing strategies instead of combining three skills. It means that the training institutions must develop new
assessments and certificates tailored to the new mindset training program. Therefore, providing corresponding capacity assessments and certificates can enhance learners' willingness to engage in training and serve as a driving force for training institutions to develop innovative courses.

5.2.2 Solutions

(i) At the initial stage, training courses can be tailored by identifying the target audience and skill level and selecting an appropriate instructional method by considering the learning facilitation, learning outcomes, and teaching quality. Meanwhile, the training institution can proceed with learner feedback and tracking to review and adjust the instructional method.

(ii) Training institutions can consult or collaborate with organizations for people with disabilities. On the one side, to deepen training institutions' understanding of the needs of individuals with disabilities regarding digital skills, on the other side, they can understand these learners' space and equipment requirements and customize teaching methods and learning environments accordingly.

(iii) Whether it's the instructional approach of training courses, inclusive learning environments for learners from diverse backgrounds, or the development of assessment and certification for innovative courses, the government's support in terms of policies and funding will be a powerful resource. Therefore, the collaboration between public and private sectors contributes to the development of innovative training programs.

5.3 How to the reach of the new mindset training program across various industries to facilitate its generalization

5.3.1 Challenge

While marketing is a tool that involves packaging product images and targeting customer groups to promote goods, the customer targeting and product promotion, the marketing approach in various industries remains
different because of the diverse contexts. As previously mentioned, gender perspectives also vary in development across different societies. Therefore, how to extend the reach of the training courses across diverse industries and enhance the generalization poses a challenge for cross-cutting digital training programs.

5.3.2 Solution

Taking a step-by-step approach based on pilot surveys and industry research, selecting a specific industry to develop a training curriculum that caters to its digital needs. This foundational model can then gradually provide improvement guidelines to accommodate digital skill applications required by enterprises of various scales and positions within the designated industry. Finally, as the sectors and levels of application for the training courses become more diverse and enriched, the generalization and influence of such courses will be elevated. This, in turn, will help facilitate the diffusion of gender awareness and perspectives into other training courses.
Conclusion & Recommendations

According to 2023 global data, approximately sixty percent of the global population uses social media, averaging over two hours of usage each day. The rise of social media paves new opportunities for marketing and business operations. The pilot survey of the WEDU project also indicated that social media is one of the most accessible initial digital technologies for women and SMEs. However, the purpose of the WEDU project to develop a new mindset training program is not only aiming to leverage the viral impact of social media as a new marketing tool, but also showcasing the achievements of integrating gender perspectives into vocational training. This effort aims to deepen and perpetuate the core essence of skill development. Additionally, it seeks to popularize gender perspectives and reduce potential gender biases and discrimination in the digital online environment.

Over the past four years, the WEDU project has demonstrated the feasibility of integrating gender perspectives into training programs and shared this developmental experience with other economies through workshops.

Nevertheless, the WEDU project and the Toolkit are the starting point in exploring cross-cutting collaboration between human resource development and gender awareness. The WEDU project encourages all economies to lead both the public and private sectors to gradually break down gender framework during the process of developing gender-sensitive and gender-responsive training programs. The exploration progress’ ultimate goal is to replace superficial gender stereotype with recognizing the substantive essence of things. Moreover, inspired by market innovation and the freedom of choice, all people and businesses are motivated to explore their potential as they receive training in new thinking ways and new skills.

Therefore, based on insights from participants engaged in the progress of developing the training package and in international class organized by the WEDU project, there are several suggestions for further actions to strengthen the promotion and development of the new mindset training program:
Foster mechanisms and channels for collaboration between the public and private sectors and secure sufficient financial and policy supports from the government to develop innovative and interdisciplinary training programs and capacity certificates;

Cultivate talents with interdisciplinary communication and collaboration and establish a talent database (including course developers, trainers, and instructors);

Create a database for trainees participating in the new mindset training program to build a human resource networking within an economy and across Asia Pacific economies and strengthen this network through a communicative platform and continuous workshops;

Facilitate access to information about the new mindset training programs and the connection with the related public and private sectors;

Continuously update the course content in line with the technological advancement and expand the application scope to various industries and vocational positions.


