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DigitALL for Her: Futurecasting Platform Work for Women in Rural Philippines

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Abstract

The global megatrend of the rise of digital platforms has increased labor opportunities for both men and women. Developing countries such as the Philippines have the potential to capitalize on this expansion, but opportunities may be limited where fundamental access issues exist. Gender norms and care work also play a role in determining access to opportunities and explaining alleged wage disparities. This study investigates the vision on digital jobs for the Philippines, the challenges faced, the key policy issues about digital jobs, and how the future of digital jobs looks like from the frontier of current practice and lived experiences of those specializing in online freelancing in rural areas of the Philippines. With gender and development in the countryside as the main interest of this study, we distill insights and identify key themes from a series of qualitative data collection sessions using a critical narrative approach, as well as a trendspotting and futurecasting approach to understanding the frontier. According to the literature, early adopters of online freelancing in the countryside face significant challenges in terms of access to skills, motivation, material, and usage, as well as other fundamental barriers that limit opportunities, despite ongoing programs to support the expansion of the ICT industry beyond Metro Manila and key urban cities. Policy recommendations are developed with the goal of levelling the playing field for women interested or engaged in platform work in the countryside.

Keywords: Platform work, freelancing, gender and development, countryside development, ICT

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1. Introduction

Online markets are digital platforms that provide chances to both individuals and businesses. Platforms are a collection of online digital arrangements that employ algorithms to organize a company's operations (Kenney and Zysman 2016). Platforms can be divided into three categories: Platforms for service providers, labor platforms, and retail platforms are all examples of platforms. Platforms that provide services, such as Airbnb, make it easier to monetize idle assets and exchange financial services through alternate channels like crowdfunding and crowdsourcing. Work is mediated through Upwork, OnlineJobsPH, and Amazon Mechanical Turk, for example. Retail platforms like Shopee and Lazada make buying and selling things easier.

Non-traditional jobs are nothing new, but more recent ICT developments have given rise to a subset of workers who find clients in digital platforms. The platform economy, sometimes also called the sharing economy or the gig economy, refers to the labor market where workers are matched to clients via an online platform. Following Bukht and Heeks (2017) definition, the platform economy is part of the digital economy that has the ICT sector at its core. The World Bank (2019, p.2) defines it as where "organizations contract with independent workers for short-term engagements" and states that the platform economy has created an upward trend for short-term work.

Work in the platform economy is no different from that of traditional jobs. What platforms changed were the way firms hired workers, the workers' working conditions, and the workers' place of work (Pinedo Caro et al. 2021). Essentially, digital platforms are alternative marketplaces with reduced transaction and search costs for both workers and firms (Quimba et al. 2020). The platform economy allows companies, especially those that lack resources, to form a workforce with various backgrounds and perspectives on a contractual basis, bringing flexibility of employment on-demand and filling up talent gaps (BDO Limited 2018). To workers, the platform economy makes jobs that provide flexibility, work-life balance, and an alternative income stream more accessible (Illuzzi and Tang 2021).

The global megatrend of the rise of platform work

Part of the demand for platform workers is for firms that outsource online. Online outsourced work from developed countries trickles down to platform workers from developing countries, thus creating work opportunities (Heeks 2017). Most, if not all, platform work is short-term (World Bank 2019). On average, workers in developing countries had a lower hourly income

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than those from developed countries (Rani et al. 2021). Still, work in the platform economy seems to be on par or better than other opportunities available to workers in developing countries (Hunt and Samman 2019, Heeks 2017). The majority of platform workers only work part-time; a smaller portion of workers has platform work as their primary source of income (Pinedo Caro et al. 2021).

Data that shows the size of the platform economy is challenging to come by, especially in developing countries (World Bank 2019, Heeks 2017). Pinedo Caro et al. (2021) argue that statistical analysis of the gig economy will not be reliable until surveys properly define and draw clear lines on what a platform worker is, though there have been attempts to capture the platform economy.

Developing countries also have opportunities created by the platform economy. Kuek et al. (2015) suggest that developing countries could exploit their capacity to work on lower complexity tasks for more competitive wages in online outsourcing; they warn, however, that where infrastructure and talent are unavailable, the impact of online outsourcing is likely to be small. Rani et al. (2021) support this in their report as they argue that only a portion of platform workers come from rural areas because of limited ICT connectivity.

The changing nature of work

Platform companies usually generate value by creating a network effect that connects and facilitates interactions between customers, products, and providers (World Bank 2019). This changes how work is organized. To illustrate, a firm that wanted to accomplish a task (e.g., data entry, design, social media marketing) or a project would have needed to hire an extra employee, but instead, it could look for a platform worker whom they could hire on a task or project basis.

Technological change benefits high-skill workers but hurts low-skill workers (World Bank 2019). Demand for routine job-specific skills is declining, and demand for advanced cognitive skills, socio-behavioral skills, and skill combinations is expanding; these changes can be observed in both new jobs and existing jobs (World Bank 2019). In Volini et al.'s (2019) survey, firms found future jobs to be "more digital, more multidisciplinary, and more data- and information-driven." Firms must have greater flexibility to strategically use the platform economy (Volini et al. 2019).

English-language proficiency, IT proficiency, and technical skills will make platform work more accessible to those who already have access to ICT (Heeks 2017, Kuek et al. 2015). However, the platform economy does not seem value the educational attainment of the worker, especially in developing countries. In developing countries, workers with higher educational attainment are not paid higher than those with lower educational attainment, and many platform workers felt that their skills are underutilized with the tasks they perform (Rani et al. 2021, Pinedo Caro et al. 2021).

Rationale of the project

The project's rationale is based on the observation that the rise of digital platforms has increased market labor prospects for men and women alike. These platforms have benefited both businesses and individuals by bringing marketplaces together in the quickest, most efficient, and most convenient way possible. Labor platforms, for example, allow businesses to tap into a pool of diverse and geographically distributed human resources. In contrast, individuals with generalist or specialized human capital can take advantage of economic opportunities not typically available in their local labor market at a competitive rate.

Workers have a sense and perception of freedom thanks to digital platforms, which allow them to choose how much, when, and where they work. Firms that want to match specific tasks, assignments, and projects with competitive talent might use the flexibility of outsourcing to freelancers who are not confined to locally available personnel. Outsourcing is considered to increase efficiency, particularly when talents are matched to assignments in nations with higher comparative advantages. Workers, in turn, have flexible, free, and open access to a larger pool of labor opportunities with globally competitive unit salaries that are not influenced by the relative wage situations of participating countries.

Due to the realities of the care economy and housekeeping, most women have found this flexibility to be a major selling point. Labor platforms can help accomplish the SDG targets of women empowerment and gender equality (targets 5.b, 5.c, 5.5) and poverty elimination by playing a role in economic inclusion (target 1.1).

However, challenges remain. In an ideal world, men and women have equal access to opportunities, but there are disparities in opportunities and wages. For one, women are more likely to be responsible for housework and care work, which competes with the time they could otherwise devote to their careers. For example, Peña and Bayudan-Dacuycuy (2022) found that, while male and female entrepreneurs have the same responsibilities, women entrepreneurs face more care work.

According to the World Bank (2019), the flexibility provided by platform work allows more women to enter the labor force. According to Kuek et al. (2015), women in India use online outsourcing to earn money while providing care. Nonetheless, Bayudan-Dacuycuy and Kryz Baje (2021) discovered in an online survey that more hours spent on care work reduced hours spent on platform work. Hunt and Samman (2019) also discovered that more women than men participate in crowdwork in low-income and middle-income households, despite the fact that women are less likely to have access to the internet.

Men and women have different areas of expertise. According to Rani et al. (2021), women were more likely to perform tasks related to business services or sales and marketing, but not technology and data analytics tasks. One of the promises of platform work was that employees would not be discriminated against because of their gender or nationality, but Pinedo Caro et al. (2021) found that women earn 18.4 percent less than men, indicating that the gender wage gap exists even in digital jobs.

Finally, there are fundamental access issues to consider. Most rural families lack access to internet infrastructure and do not own their own computers or phones, making it nearly impossible for them to capitalize on the income-generating opportunities presented by the rise of the platform economy. Even if they had physical access, they would still need to learn how to use these devices in order to reap the benefits of digital technology. According to van Dijk (2006), there may be instances where a community's culture explains a refusal to use digital technology rather than a lack of access to digital technology. He contends that the unwillingness to adapt digital technology was most often due to computer anxiety and technophobia—all of which are significant factors in determining how far advocating for digital jobs in rural areas, particularly for women, can be successful in the short term.

Thus, the purpose of this research is to investigate the emergence of platform work and to determine how and whether gender and development considerations play a role in improving the state of play of freelancing beyond key urban areas in the Philippines. The study specifically asks the following questions:

Digital fundamentals and vision

• What is the vision on digital jobs in the Philippines? What are the challenges experienced in the countryside? By women?

Policy and public programs infrastructure

• What are key policy issues about digital jobs, especially in the countryside, that require attention if the goal is to drive greater participation of women?

Futurecasting digital jobs in the Philippines

• What is the future of digital jobs as could be seen from best practices and trendsetters on the frontier of digital jobs adoption in the countryside? What are some key lessons and opportunities for the short-run?

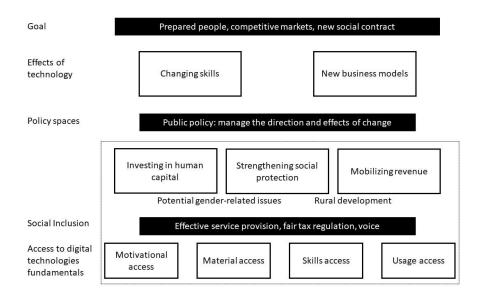
2. Research Design and Methodology

Conceptual framework

Following and adapting World Bank (2019) research on the changing nature of work, Rani et al. (2021) research on the global digital platform work phenomenon, and Quimba, Rosellon, and Calizo (2020) research on access barriers, the study investigated themes and issues within policy spaces directly related to the promotion and facilitation of digital platform work in the Philippines. Figure 2 depicts the policy infrastructure and, as a result, the key areas of investigation in this study.

As a result, the study assessed the following dimensions, which were mapped based on the identified policy spaces directly responsible for creating digital platform work opportunities: human capital and development (e.g., DepEd, CHED, TESDA, digitaljobsPH), social protection and welfare (e.g., SSS, PAG-IBIG), and the overarching enabling environment for ICT-based jobs led by national government agencies (NGA) like DTI and DICT.

Figure 1: Policy infrastructure and key issues in digital platform work



Sources: Adapted from World Bank (2019), Rani et al. (2021), and Quimba et al. (2020), with modifications.

We evaluated whether the envisioned participants in the digital economy have the necessary access to digital technologies while exploring digital platform work opportunities, providing preliminary insights into the goal's fit with the economic and technological conditions on the ground.

Given the conceptual framework used, it is possible that gaps in necessary access to digital technologies emerged as we surveyed the effectiveness of providing digital jobs in the countryside in the first place. Even before any potential gender-related issues are considered, this outcome could indicate critical steps to take to maximize the potential of digital jobs in the countryside.

Furthermore, the acknowledged novelty of platform work in the Philippines' countryside but the possibility of significant trends from the ground as already present in DICT's initial efforts through its digitaljobsPH program encouraged the use of a more nuanced qualitative study that balances descriptive facts through trendspotting and futurecasting methodologies.

Research approach: Trendspotting and futurecasting

Trends are subtle yet emergent patterns that serve as empirical indicators of what may eventually reach the mainstream. The researchers were able to use trend spotting to amplify facts and actual experiences of early adopters of platform work within the relatively limited scale in which the phenomenon occurs. Trend spotting methodology is used in applied social sciences such as marketing, management, and innovation studies to identify potential future

themes (for example, see Du & Kamakura 2012, Andreassen et al. 2015, on the use of trendspotting as a scholarly methodology).

On the other hand, futurecasting as a methodology complements trendspotting and more traditional qualitative methods of generating future insights, particularly in research areas with a limited set of observations to appreciate, such as early adopters. Futurecasting allowed for the harvesting of insights from lived experiences and qualitative feedback in developing a future-oriented narrative or describing the future state, as well as the realistic and nuanced steps to get there. An example of futurecasting use can be found in Barlow and Stone (2017) and Girves, McAllister, Selfe, and Youngs (2012).

Furthermore, the paper followed Edmonds and Kennedy's narrative-critical design approach (2017). In order to comprehend the prevalence of digital platform work as well as the nuances of countryside and gender dimensions, critical stories from the ecosystem's various actors were gathered and processed. To maintain the necessary level of scientific inquiry, data generated through dialogic interviews were structured and processed using a critical framework.

Research Design

The study investigated the phenomenon of digital platform work in the countryside and the underlying conditions that make inclusive and decent work possible for men and women. We also evaluated whether there are primary gender-specific concerns among participants of digitaljobsPH and digital platform workers, paying close attention to documented issues on social welfare and protection and equality of access to labor market opportunities.

Qualitative Data Gathering. Depending on the composition of a virtual session, a series of Key Informant Interviews and Focus Group Discussions were conducted to collect qualitative feedback, insights, and personal and professional narratives from respondents from the following respondent classifications: (1) Platform Workers, including digitaljobsPH graduates, digitaljobsPH resource persons who were also platform workers, and online retail sellers who may or may not have received any formal training through digitaljobsPH; (2) civil society organizations; (3) local government unit representatives with the mandate to implement digitaljobsPH at the local level; (4) Platform Owners who facilitate digital platform work; and (5) national government agencies. For validation, recurring ideas and issues were explored further in subsequent similar group discussions and informant interviews. Furthermore, respondents were allowed to share their lived experiences and perspectives on the topic using a qualitative data collection approach.

All FGD and KII on participation in digital platform work focused on motivations for joining digitaljobsPH (a Department of ICT initiative to bring ICT-jobs to the countryside), reasons why workers or resource persons pursued freelance work (as opposed to full-time waged jobs), feedback on both digitaljobsPH as a program and actual work experience as digital platform workers, and feedback on how digital platform work can be made more accessible to women. There were also identified challenges and gaps in participation in both the training program and the labor market.

On the other hand, local government units collaborating with DICT in the implementation of digitaljobsPH were asked questions on participation in the program, challenges in the delivery of the program, and opportunities for greater expansion to the countryside. Respondents were asked if there are gender-related issues to participation and success of the program.

Sessions with platform owners uncovered the value chain in promoting and facilitating digital platform work with a particular interest in ICT-facilitated freelancing jobs. On the other hand, sessions with national government agencies focused on the policy and implementation infrastructure for digital platform work and how these can be improved to enhance access in the countryside and by women.

Qualitative Data Analysis. Key themes were developed for each category of questions, which were classified based on respondent type/group. Themes were identified based on recurring ideas and issues, which were substantiated by qualitative responses that provided nuance and context. When previous studies can help clarify or verify issues revealed in interviews and group discussions, a discussion was developed to compare with findings and insights available in the literature.

Purposeful sampling. The following interview cohorts were convened for the study:

Table 1: Summary of KII and FGD respondents

	KII	FGD (number of participants)		
Platform Workers	Five KIIs:	Online sellers (2)		
	 Bataan 	1. Silang, Cavite		
	2. Pavia, Iloilo	2. Quezon Province		
	3. Antique	digitaljobsPH resource persons (7)		
	4. Binangonan, Rizal	 Cagayan de Oro 		
	5. Pampanga	2. Isabela		
		3. Zamboanga Peninsula		
		4. Butuan City		
		5. Legazpi City		
		6. Lucban, Quezon		
		7. Iloilo		
		Homegrown Agencies/cooperatives (3)		
		1. FOPSco		
		2. FHMoms		
		3. VWP		
CSO	IT and Business Process	Philippine Business Coalition for Women		
	Association of the	Empowerment (2)		
	Philippines			
	Center for Legislative			
	Development International			
	Connected Women			
Local Covernment	Talihan Dahal			
Local Government Unit	Talibon, Bohol Saint Bernard, Leyte			

	KII	FGD (number of participants)
Platform Owner	OnlineJobsPH Shopinas	
National Government Agencies	Department of Education	TESDA (4) SSS (1, together with TESDA) DICT (5)

Note: Total of 37 interviews conducted as of May 25, 2022.

3. Digital vision and fundamentals

Plans to expand the ICT labor market to the countryside are underway; however, fundamental barriers to digital adoption remain.

Online freelancing opportunities have the potential to bring more jobs and higher wages to rural areas from more developed parts of the world. According to Kuek et al. (2015), developing countries should maximize their competitive wages in order to work on lower-complexity tasks. Work from developed countries is outsourced online to platform workers in developing countries, creating job opportunities (Heeks 2017).

There are currently government initiatives attempting to bring ICT skills to rural areas. On the one hand, the Department of Information and Communications Technology (DICT) intends to turn areas outside the National Capital Region (NCR) into Information Technology and Business Process Management (IT-BPM) hubs. The department also has digitaljobsPH, which enables individuals in rural areas with available infrastructure to participate in ICT-enabled jobs through freelancing. DICT and its digitaljobsPH program have a long-term goal of "encouraging" freelancers to become employers themselves, such as creating their own BPOs, "where IT-BPMs typically do not invest until key indicators established in the roadmap Digital Cities 2025 improve." On the other hand, the Department of Education's Alternative Learning System, which serves out-of-school youth, includes basic computer literacy in its curriculum for those living in rural areas.

These, however, are revealed to be nothing more than valiant attempts at improving ICT accessibility to the countryside. For one, despite said efforts, of 64 countries, the Philippines stumbled from 46th place in 2017 to 58th place in the IMD World Digital Competitiveness Ranking 2021, with the big 10-place drop happening pre-COVID-19 (IMD 2021). Even among its Asia-Pacific neighbors, the Philippines ranks 2nd to the last.

IMD attributes this decline to the unbecoming of training and education, capital, adaptive attitudes, business agility, and IT integration. IMD also identified the top weaknesses of the Philippines to be its communications technology capacity to meet business requirements, its number of internet users per capita, its average internet bandwidth, and its distance from the frontier of enforcing contracts and starting businesses.

Table 2: Number of digitaljobsPH trainees, graduates, and graduates with online jobs

		Gradu	tes with e Jobs		
Year	Trainees	Percent of total trainees	Count	Percent of total trainees	Count
2017	597	100.00	597	37.86	226
2018	1,398	98.71	1,380	30.76	430
2019	2,340	87.22	2,041	22.26	521
2020	1,947	60.91	1,186	18.85	367
2021	2,981	66.05	1,969	13.89	414
2022	1,079	66.17	714	25.58	276
Total	10,342	76.26	7,887	21.60	2,234

Source: Data provided by DICT

Even after more than five years of operating, the digitaljobsPH program has created a devastatingly low number of ICT jobs. With a yearly average of less than 500 online workers created, the data suggests that the program has yet to grow out of its training wheels. Several trainers and trainees of the program also reveal that one challenge of the program is meeting the high volume of people who want to enroll especially at the start of the COVID-19 pandemic. In spite of quantity, however, most trainees express their appreciation for the quality of what they learn in the program. One freelancer who trained under digitaljobsPH after 10 years of working in the industry emphasizes how she "still learned a lot."

Digital anxiety in the countryside can slow down adoption.

However, digital technology as a daily mode of working and living has yet to become commonplace in rural areas. According to van Dijk (2006), there may be cases where it is not only a lack of access to digital technology but also a refusal to use digital technology that explains why digital adoption is slow. He claims that most people's aversion to digital technology stems from computer anxiety and technophobia. Firms face the same digital adoption challenge.

Individuals in the countryside, according to a rural LGU representative, "are afraid of damaging the computer when presented with one." Another LGU representative reports that using computers is completely foreign to some people, who are "frightened of how to use a mouse and a keyboard." As a result, they propose "introducing technology at a young age to reduce overall technology anxiety, particularly in the countryside, where digital is relatively new compared to more industrialized cities."

"Some take more time to really get used to using technologies that they only knew as Facebook," says a digitaljobsPH trainer, "but it's not the same when you have to start using it for work." According to a Department of Education (DepEd) representative, "hesitation is common even when you think almost everyone is on Facebook; some do not yet know how to use a computer. They are, however, eager to learn." She facilitates digital-related topics in rural alternative learning settings. "Most people, at the very least, know how to use a cellphone," she adds.

Platform jobs, however abundant in the global market, may not yet fit current countryside realities as basic connectivity and access to appropriate devices remain limited.

Another program graduate adds, "some digital jobs aren't really fit for the countryside in the first place because not everyone is digital-ready or has the basic digital literacy for it; take, for example, the more technical digital job of building a website. How do you teach someone who is 'no-read, no-write' how to make a website?" This is a sobering reality that the program to create digital jobs in rural areas must confront.

Several digitaljobsPH resource persons and all of its trainees agree that having the necessary internet connectivity and essential tools such as a personal computer, tablet, or laptop, as well as time, are required to participate in the training program and, eventually, in the freelance job market. To train and get freelance jobs through platforms, one trainer emphasizes that "one must have the necessary equipment, particularly a desktop computer with decent internet connectivity." According to another trainer, while there are real costs associated with acquiring the necessary devices and subscribing to adequate internet, it is "an investment" for men and women, particularly women, who want to pursue a career as freelancers in the digital economy because it requires more than just having the toolkit; it requires time and commitment. "Being absent for only one week makes it difficult to catch up, so eventually I decided to drop the program," says one trainee.

Participants in digitaljobsPH vary in their access to a working computer with internet connectivity or their essential and material digital readiness. Several digitaljobsPH resource persons report that erratic electricity supply, poor internet connectivity, and relatively high equipment costs make it difficult for those from the countryside to access platform work opportunities. Some report having to share devices with other members of the household, while others report having to commute to an internet café to participate in training sessions or complete the tasks assigned to them by their trainers. "You can't just tell your client, if you have one, 'sorry, I can't perform this task right now because I don't have power at home,'" one trainer says. Some respondents also claim that the type of device and internet connectivity required depend on the complexity of their module or task, mentioning that, for example, general virtual assistance tasks and modules (as in the case of digitaljobsPH) can be performed using a smartphone. However, graduates of digitaljobsPH who have progressed to work as freelance platform workers all report having their basic connectivity suite (e.g., a laptop or desktop computer, internet connectivity) already in place, which they believe is a way to monetize what were previously utility expenditures (e.g., electricity, internet subscription).

One respondent, a graduate of digitaljobsPH, reports that they have fully transformed their home internet connectivity and computer setup into a source of income for the family, overcoming its character as "another expense" on home utilities, which are usually treated as monthly family expenditures. She also mentions that her husband is more likely to transition from full-time employment to freelancing due to the "readiness" of their home setup.

LGU and partner agencies help to bridge the gap in improving access to internet and devices in the countryside.

In some rural areas, the government or an organization provides individuals with technological access through shared facilities. Tech4ED, for example, aims to bridge the digital and educational divides by providing ICT access to the urban poor, people with disabilities, indigenous communities, and rural areas (DICT n.d.a., DICT n.d.b.). In other cases, one civil society organization shares that "donations are used to provide devices to its members." The LGU will occasionally provide them with ICT access.

The challenge for individuals in these cases is physically gaining access to these digital technologies. According to an LGU representative, their community has "four or five island barangays, and [digitaljobsPH] participants mention that the [boat] fare to come to the venue is expensive." One resource person suggests "establishing more centers in each barangay so that people no longer need to commute to the town proper."

Table 3: Number of Tech4ED Centers and ICT access of families

			Number of families in percentage					
Region	Tech4ED Centers	Have a personal computer	Subscribed to Broadband /Fiber/DSL	Used the internet in the last 6 months	Sold something online	Bought something online	Banked Online	
NCR	105	35.7	30.4	66.6	12.6	57.8	25.2	
CAR	79	29.1	12.9	37.1	12.1	35.3	8.6	
Region I – Ilocos	217	24.2	13.2	40.5	10.7	40.7	7.4	
Region II – Cagayan Valley	92	25.3	11.8	31.0	15.4	50.8	18.5	
Region III – Central Luzon	309	22.5	14.5	40.5	14.8	52.9	11.1	
Region IVa - CALABARZON	383	28.1	20.7	62.9	11.5	38.2	11.1	
Region IVb - MIMAROPA	193	18.2	7.8	30.5	14.8	33.1	4.5	
Region V – Bicol	560	15.2	8.3	27.7	9.5	30.0	8.6	
Region VI - Western Visayas	206	15.5	9.5	32.1	9.4	34.7	6.4	
Region VII - Central Visayas	144	17.0	11.0	23.3	10.2	34.3	12.9	
Region VIII - Eastern	116	17.6	9.0	31.5	9.9	31.1	6.9	

			Number of families in percentage					
Region	Tech4ED Centers	Have a personal computer	Subscribed to Broadband /Fiber/DSL	Used the internet in the last 6 months	Sold something online	Bought something online	Banked Online	
Visayas								
Region IX - Zamboanga Peninsula	155	14.5	5.3	24.7	9.8	38.3	11.8	
Region X - Northern Mindanao	182	17.3	12.2	43.5	8.4	22.6	4.5	
Region XI - Davao Region	181	15.8	10.1	30.8	8.7	27.5	-	
Region XII - SOCCSKSARGEN	241	15.6	9.0	23.8	15.3	37.8	10.4	
Region XIII - CARAGA	140	16.3	9.3	28.8	9.9	24.6	-	
ARMM	78	7.1	1.7	10.3	19.2	54.0	-	

Sources: Matched tables from APIS 2020 (PSA 2021) and data from Dean (2019)

Using APIS 2020 (PSA 2021) tables and data from Dean (2019), there appears to be no correlation between the number of Tech4ED centers and the percentage of families who participate in online selling, online buying, or online banking, implying that Tech4ED Centers are underutilized. However, several resource people point out a lack of awareness about these centers. One digitaljobsPH trainer admits that she is aware that there is a center, but she is unsure how it operates.

Yet, many remain unaware about alternative means to acquire requisite devices limiting the proliferation of platform jobs in the countryside, particularly for women with access to the internet.

Other respondents lament the high costs of purchasing devices, even though cooperatives offer some "rent-to-own" programs. Some even claim that there is little to no awareness of the availability of alternative modes of device ownership. "But the real problem is that some people don't know that there are free or low-cost ways to get devices all over the Philippines," a resource person says. "Our challenge for women, mostly moms, is that they don't have internet that would work for jobs that require at least a laptop; all they have is mobile internet," says another. Even so, most places are slow. In some cases, where a cooperative for stay-at-home mothers bridges the connectivity and device gap, real logistics costs prevent these initiatives from scaling, which "unfortunately leads to other talents getting priority jobs ahead of those who do not have the basic requirements for work."

According to one source, "platform clients seek ready-now talents," which could explain how those with the necessary connectivity suite or access to physical offices to perform tasks get ahead in terms of matching with platform jobs. He also claims that this is the business case for

the emergence of new agency models in which the primary task of a firm like his is the aggregation of local freelancers.

digitaljobsPH levels the playing field in terms of skills required to compete locally and globally. However, a lack of confidence, weak communication skills and other 'soft skills' limit countryside potential, especially for some stay-at-home women.

According to Pinedo Caro et al. (2011), the tasks of the platform economy are the same as the tasks of traditional jobs; the only difference is how workers are hired, their working conditions, and where they work. According to Quimba et al. (2020), the platform economy is an alternative marketplace with lower transaction and search costs for both workers and firms. Rani et al. support the idea that what affects the effective wage is the worker's skill and proficiency in completing a task (2021). Pinedo Caro et al. (2021) discover that higher educational attainment has no positive impact on the effective wage of the worker.

According to several digitaljobsPH trainers, platform workers from the countryside have skills that allow them to compete with workers from more urban areas. According to one cooperative, "the only impediment is that they [freelancers] lack confidence and believe it is too difficult to find clients." "Freelancers compete primarily through platforms like Upwork by developing client relationships that necessitate some business development," a resource person recalls. "Confidence in doing business development or finding clients remains a challenge, especially in the countryside where workers believe they do not have what it takes to compete," she says, echoing other resource persons.

An interviewee from a civil society organization disagrees. According to them, "it may be more difficult that there will be some major barriers to how [freelancers] handle international clients than those who have lived in more urban areas and have already been interacting with different types of people." "Even if we have completed the program," a recent digitaljobsPH graduate admits, "the reality is that it is not easy to find ICT jobs, whether on job platforms or even more in the local market; here, in Antique, even small business owners are not aware of e-commerce or the need to even have a website." Another respondent agrees, saying that a lack of opportunities in what they "trained for leads some to move to another province where there are BPOs that they can work for to put what they learned into practice." "Otherwise, the only jobs left for us would be working in the mall as salespeople," he adds.

Platform work makes it easier with international clients. However, as Heeks (2017) and Kuek et al. (2015) point out, English-language proficiency, among other valuable skills, makes platform work more accessible to those with ICT access. In his firm, "[job] applicants receive a curated and automated assessment on their English, grammar skills, basic computer knowledge, and personality," according to one respondent. According to an LGU representative, trainees and graduates of digitaljobsPH in their municipality "are having difficulty creating proposals in English."

Several digitaljobsPH resource people, on the other hand, argue that "[the platform workers'] English does not have to be perfect [to find work]; what they need is to be understood by their client" and that "their English is not the problem." Instead, they point the finger at platform workers' self-assurance and "limiting beliefs."

An experienced freelancer observes that a related issue for female freelancers, in her case working with stay-at-home mothers, is a lack of leadership skills, which is especially evident when they begin to have other workers matrixed to them to form a team working on a more complex task on the platform. They claim that there is still a need to develop soft skills for platform workers, including women, in order for them to be competitive and confident.

The challenge of language proficiency could be alleviated by implementing Digital Cities 2025 and creating an IT-BPM ecosystem in the countryside. Increased demand for platform work from workers' homes could potentially boost workers' English skills and confidence. "That's why the BPO industry is working," one digitaljobsPH trainer speculates, "it's because Filipinos conduct the interviews, so it's not as intimidating as being interviewed by a foreigner."

Although the expansion of IT-BPM to rural sites may increase the competitiveness of local talents, some digitaljobsPH resource persons report that local demand for IT-BPM-related skills remains low, which creates a problem where local talents cannot find jobs in BPO companies or when these companies have not yet reached their provinces. They should, arguably, find a match in the local market, but according to one study, this is not always the case in developing countries, where many businesses, particularly MSMEs, are unaware of the benefits of digitalization and upskilling (UNCTAD 2017).

General virtual assistance is most appealing to enter IT-BPM, but at relatively low rates in an intensifying race-to-the-bottom competition.

Graduates of digitaljobsPH typically work as general virtual assistants. Several graduates describe virtual assistance as the "most adaptable" of all specializations. However, competition for jobs as virtual assistants is fierce, which adds to the category's race to the bottom character. One respondent, however, notes that "virtual assistance is a steppingstone; many like me are interested in learning more about social media marketing and management, website development, and others later."

According to one trainer, general virtual assistants "get lowballed by clients, but those who specialize in more technical niches get valued more." A resource person, on the other hand, explains that this is usually the case because "scholars are taught the introduction and basic tools of each specialization, making it appealing to most people who start with just the basic digital know-how" in digitaljobsPH's general virtual assistance module. However, as many resource persons confirm, many compete for these jobs at rates below the market.

According to several digitaljobsPH trainers, undercutting the competition by charging lower rates is a common problem in freelancing. Given the wage disparity between the countryside and the rates a platform worker could charge, freelancers from the countryside may be more tempted to set a lower rate. According to one respondent, despite being a digitaljobsPH medalist, she set "a low rate of \$3 per hour, totaling PHP 10,500 a month" for her first client. Trainers and resource persons have also observed that platform workers charge low fees for their first few clients but may find it difficult to charge higher fees if they start too low.

One of her students, according to a resource person, was "charging \$5 to \$6 an hour." Nonetheless, when told to charge more, her student was "surprised that the client agreed to her

proposal of \$10 an hour without even flinching." Several graduates of the digitaljobsPH program have also shared that they need to upskill, sometimes by offering low-cost services or working in a BPO before charging clients market rates. They also do so in order to gain more experience, credibility, and confidence in efforts to earn a higher rate.

Men and women have the same opportunities online, but cultural barriers lead women to lower-complexity and lower-waged jobs.

Freelance online opportunities help to close the gender gap by democratizing access to anyone, regardless of gender, because opportunities are aFvailable to anyone searching online, particularly those seeking more flexible work arrangements. According to the World Bank (2019), the flexibility provided by platform work allows more women to enter the labor force. According to one digitaljobsPH trainer, opportunities have "become equal for both men and women as they compete on skills at the same level as what men can offer."

Nonetheless, Bayudan-Dacuycuy and Baje (2021) discovered in an online survey that more hours spent on care work reduced hours spent on platform work. Platform work promised no discrimination based on gender or nationality, but Pinedo Caro et al. (2021) report that women earn 18.4 percent less than men, indicating that the gender wage gap exists even in digital jobs.

Furthermore, even in platform jobs, men and women have different areas of expertise. According to Rani et al. (2021), women were more likely to perform tasks related to business services or sales and marketing, but not tasks related to technology and data analytics. Some people believe that the level of technical complexity of a job determines its suitability for women. According to an LGU representative who assists with the implementation of digitaljobsPH, "less complex digital work such as encoding is more suitable for women than more complex, value-added jobs online that are better suited to male freelancers." According to the respondent, it is "easier for women to encode, for example, than to think of digital designs." Furthermore, she claims that "teaching women at home to encode using Microsoft Word is easier, particularly for married women, and that this task is most easily accessible in every barangay."

Another common misconception is that men and women have different innate strengths and competencies. According to one freelance platform employee, "women are more creative." At the same time, a resource person mentions women's ability to have "better relationships with their clients than men." In both cases, they lament that "men still get paid more than women," with one citing studies demonstrating the disparity in platform jobs across markets, believing that women should be paid more where they are better than their male counterparts.

According to one digitaljobsPH resource, more men are working in more technical digital jobs, such as freelance website development, due to "societal beliefs and expectations." According to her, there is a "mindset that women cannot do tech jobs at all" in places where she provided the web development module of digitaljobsPH, resulting in "only four-five female trainees in one location, and only three or four in Basilan." She claims that some cultural expectations are inherently gendered, limiting women's participation in more complex or technical job categories as freelancers, even if they have trained for it. As a result, she suggests that this pattern could explain "why there are more women than men in general virtual assistance,

infographic design, and social media management," eventually concluding that no job opportunities are gender agnostic. This is consistent with the findings of Cullen et al. (2018), who discovered that online tasks that paid less and were traditionally considered "female work" attracted a higher proportion of female applicants.

According to a cooperative that provides work opportunities for stay-at-home mothers, "traditional gender roles and views on women working are still common problems in the countryside." Even with the concept of women working, there are real cultural barriers in some places. In some communities, women are still not allowed to work, or there is an expectation that women should stay at home. A digitaljobsPH resource person confirms this point, adding, "some gender expectations even stereotype women as not being fit for ICT jobs at all."

All digitaljobsPH resource persons and supervisors interviewed report that women outnumber men in the majority of their courses. Notably, the majority of resource persons have delivered the general virtual assistance course. Some argue that the general virtual assistance module of digitaljobsPH is more appealing to most women than the more technical modules. Other courses that resource people believe will appeal more to female trainees are social media marketing and management, and, to a lesser extent, e-commerce. However, general virtual assistance resulted in greater participation by female trainees. When asked whether the provision of general virtual assistance is a top-down directive by the LGU or DICT cluster, most resource persons claim that the decision was made as a result of both local demand and cluster instruction.

Some of these observations could be attributed to cultural stereotypes of women. According to a DepEd representative who works on alternative learning programs, "women tend to be more organized, clean, and orderly," demonstrating that some perceptions about the competencies and competitive advantages of women platform workers can be attributed to traditional gender roles, which a perceived gender pay gap can only reinforce rather than address or mitigate.

Women, especially mothers, value the flexibility that freelancing provides

More than one source cites the timing of the COVID-19 pandemic as one of the reasons why the program drew more female applicants, stating that "lockdowns paved the way for women to explore training opportunities for jobs that could be done from home." However, a program graduate shares that, while COVID-19 and lockdowns made it easier to attend virtual or remote learning sessions, some women found it difficult to balance "studies with having to look after your children who are now studying from home." According to some sources, not all women who enrolled in the program during lockdowns completed it.

Table 4: Distribution of digitaljobsPH program participants and graduates, by sex

		Completion		Participation		
Year	Female Rate of Completion	Male Rate of Completion	Rate of Completion	Female Trainees (% of total)	Male Trainees (% of total)	Number of Trainees
2017	100.00	100.00	100.00	45.90	54.10	597
2018	-	-	98.71	-	-	1398

		Completion				
				Female	Male	_
	Female Rate	Male Rate	Rate of	Trainees	Trainees	Number of
Year	of Completion	of Completion	Completion	(% of total)	(% of total)	Trainees
2019	-	-	87.22	-	-	2340
2020	64.61	56.55	60.91	54.13	45.87	1947
2021	70.27	59.25	66.05	61.72	38.28	2981
2022²	70.76	57.41	66.17	65.62	34.38	1079

Source: Data provided by DICT

Consistent with what some respondents share, the participation skyrocketed in the program at after one year after the start of the pandemic. This, however, came with a devastating blow to the completion rate of both men and women with both 2020 and 2021 having less graduates than 2019. The reasons for attrition are not clear, but one trainer reports finding "many enrollees who were just curious but did not have the grit to push through."

None of the respondents could identify the reasons for the disparity between men and women in enrollment and in completion, but several interviewees have shared their reasons for persevering. When asked why they prefer freelancing as platform workers, some mothers with young children cite flexibility, particularly in terms of time management, as the primary driver of their preference for freelancing over full-time employment. According to an executive of a policy consulting firm, there is a growing sense of recognition and acceptance among mothers that freelancing allows those who want to earn an income while caring for work responsibilities to do so without feeling like "they have to choose between earning and caring." Another program graduate explains that "because [she had just given birth], freelancing became even more appealing, especially since it is truly working from home."

The resource persons who have spent more than a decade freelancing are at the forefront of platform work. When asked if she would accept a full-time job offer instead of freelancing, the resource person stated that "like her, most would not prefer it." "Freelancing is the best," she says. There is a strong sense among digitaljobsPH resource persons that freelancing as platform workers is an accepted mode of work that is even superior to full-time alternatives. In this sense, the practice's frontier is a common recognition and acceptance of platform work.

Another resource person and community influencer encourages her students to "ask for flexible hours to take care of their kids who have urgent or, in some cases, special needs" when training scholars. She also mentions that some of her students eventually take on "part-time work but prefer to work in the evenings, if they do not have health conditions but have children, because their children are asleep at night," allowing platform workers to maximize their earning potential.

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² The data for the year 2022 accounts only for the first half of the year.

Women platform workers value this level of control. According to one of digitaljobsPH's key influencers and core resource persons, "different jobs have different hours requirements; some require only an hour or two per day for two to several weeks until, say, the website project is completed. Other jobs, such as social media marketing assignments, can be completed in 30 minutes to two hours per day, depending on the business need." Even so, she suggests that "working moms should negotiate a flexible schedule because that is the key differentiator with a corporate job. Otherwise, it's the same as bringing your corporate work home, which provides [them] with no benefits."

digitaljobsPH serves as a support system with its trainers and resource persons playing a central role in nurturing learning and work opportunities.

According to a key resource in the online professional community, digitaljobsPH provides avenues for women who want to achieve "their purpose in life" and financially empower themselves with jobs that they "actually enjoy and grow with." She also emphasizes how freelance platform work allows women to choose how many hours to devote to jobs while balancing their other domestic responsibilities. This, however, is not the reality for many female platform workers.

Conflicting responsibilities between work and home life persist from training to actual platform worker practice. "Even with flexibility as an option, because you work from home, especially during the pandemic, there are times when you feel you actually have less time to do everything, making it difficult to choose between working and caring for your children," a digitaljobsPH graduate recalls. Another graduate explains that it wasn't until her child was older that she "could work again and let work prevail, especially now that we are in a pandemic, I can't work anyway."

"Women are required to perform multiple roles, so they are not only working." For example, they can do call center functions and other types of work from home, but they also need to be more in charge of household chores. Gender division of labor in the home remains an issue in the Philippines. "When we look at the difference between men and women working from home, we see that many women have given up their jobs because they cannot do both," says a policy consultant for a women's economic empowerment organization.

Women participants value their enrollment in the program as an invaluable support system as they prepare and train to become self-employed entrepreneurs, despite their struggles with time management. Many of them emphasize the importance of their resource person or trainer in their development as online professionals, and they provide examples of how their trainers have coached them even after they have graduated from the program. One graduate recalls her trainer being very encouraging, "especially given the program's demanding workload, our trainer ensured that we had the motivation to complete tasks so that we could 'unlimit' (sic.) ourselves."

Much of this can be attributed to the fact that many resource persons take pride in their role as coaching trainees who, like them, aspire to become women online professionals and entrepreneurs, as well as the fact that female participants value the program. As a result, many

female resource persons see their brief as part of their responsibility to "give back to the community" that once saw them as the trainee they are now teaching.

4. Policy infrastructure

Social protection of freelance platform workers still amiss, while social recognition of freelancing largely still in its infancy.

Working a traditional waged job differs from platform work in that companies are not legally required to provide or pay for platform workers' benefits. Many gig workers lack insurance, paid sick leave, or income protection and are financially insecure (Bosworth 2021, Pinedo Caro et al. 2021, BDO Limited 2018), though some startups are already stepping in to help (Bosworth 2021).

According to Ovaska-Few (2019), taxation should be discussed with those involved in the platform economy. The introduction of trainees to guidelines on how to set up a business as a self-employed online professional is standard in digitaljobsPH courses. This overview explains how to register with the Department of Trade and Industry (DTI) for their business identity and permits, as well as with agencies that provide social protection schemes such as Pag-IBIG, SSS, and PhilHealth.

All digitaljobsPH graduates and freelancing respondents who are currently platform workers recognize the importance of "being covered" by social protection programs; however, many share the absence of explicit recognition for online professionals or freelancing as formal sources of income of an applicant. If no such formal recognition is available, another respondent is justified in questioning "whether [they] are protected at all, unless [they] register as self-employed or entrepreneurs," neither of which accurately describes the nature of freelance platform work. One platform worker complains that the lack of freelancing or their mode of work only leads to "more confusion because they do not know whether the government recognizes them."

It is impossible to protect freelancers without first defining what they are. Several platform workers express their dissatisfaction with filing for taxes and benefits because local and national government units lack a thorough understanding of online freelancers and how to classify them.

Any form of social protection must begin with the formal recognition of a type or classification of work, which manifests itself in whether an individual's work is appropriately and explicitly listed as a source of income when registering or applying to join a scheme or fund. Contributions to social protection schemes are mandatory for waged full-time or part-time jobs and are considered monthly income deductibles. Membership in a fund or social protection scheme, on the other hand, is largely voluntary for platform workers.

The government is not the only source of the lack of recognition. Perhaps more taxing for freelancers is the fact that their immediate circle does not understand the nature of their work. When asked if their family and friends socially accept their freelance jobs, graduates and

digitaljobsPH resource persons admit that acceptance is "still a work in progress," as one respondent quips. "My parents have a general idea of what I do, but they frequently question me about why I am always in front of the computer. However, this is changing," says one respondent. On the other hand, as one person put it, "freelancing is appealing, which makes my friends curious and interested to actually explore freelancing after learning that it could generate an income equivalent to or even better than most full-time jobs."

The Social Security System, on the other hand, claims that "there is no bias against women [in platform jobs] because [their] membership base has an almost equal ratio of men and women," clearly adopting a general welfarist stance that the agency's role is to provide protection for all. Furthermore, according to the SSS department manager, "the opportunities and challenges of SSS to cover for men or women are just the same in [their] view... and so are the opportunities and challenges for SSS coverage for both men and women in platform work or otherwise." Disparities, they say, "arise more in rural areas where men are the typical breadwinners." Currently, the agency does not provide gender-specific programs to ensure that more women receive social protection even in areas where they may be underrepresented, as in the agency's example of rural areas where men are the primary breadwinners.

"It's still a developing industry." Our current understanding is that online professionals are self-employed. "I would imagine that some platform providers would consider freelancers as employees," says an SSS representative when asked how freelancers should categorize themselves, especially when applying to join or filing claims. "There should be something in the middle where the platform provider is not yet an employer but would not ignore the needs of the freelancer to be protected," he adds, "and I believe platform providers should have some role in ensuring or facilitating social protection."

Resource people also complain about the lack of official classification for freelancers across agencies. Online professionals, on the other hand, report knowing that this is the case, but they do not consistently claim to be covered by social security, citing that "it is another cost that we were taught to include in the computation of how we charge clients," which "does not always happen, especially when you have just started working as a freelancer because potential clients might think that your rates are too high."

There are currently no laws requiring contracting parties to cover social security costs; instead, there are only voluntary mechanisms that encourage self-employed individuals to register for social security.

Freelancers barely have protection from scams

To address the difficulties of finding work, many platform workers engage in self-promotion on platforms such as LinkedIn. However, with publicity comes the risk of receiving dubious offers. Some express concern about scams and fraudulent jobs; freelancers are vulnerable to bogus jobs. One freelancer discloses, "We are not compensated. Even freelancers require security to protect themselves from identity theft." Unfortunately, one cooperative admits that they can only attempt to protect freelancers "when they receive reports and block the company."

Some freelancers face misinformation even before they begin their careers. "There are a lot of people selling cheap courses and spreading false information like 'anyone can do it,' 'it's easy,' or 'you'll earn Dollars and Dollars and Dollars,'" the platform owner reports, "Freelancers do not become experts as a result of [these courses], despite what is advertised. As a result, some freelancers with low skills but high rates struggle to find work."

The Freelance Workers Protection Act, or House Bill 8817, seeks to enforce freelancers' rights, improve their welfare, and ensure decent working conditions and pay (Cervantes 2021). A written contract is required between any hiring party and a freelancer under this bill. Freelancers are covered by the provision of night shift differential and hazard pay and must be paid within 15 days of the payment date specified in the written contract.

If there is a violation of House Bill 8817 (2021) or a breach of contract, the platform worker may file a complaint with the Department of Labor and Employment (DOLE), and the violator may face a civil penalty of P50,000 to P500,000. This act also requires freelancers to register with the BIR and pay their income taxes on an annual basis. The BIR would also establish a freelancer assistance desk to assist freelancers with their inquiries, registration, and document processing. The Act requires the Secretary of Labor to submit periodic reports to the Senate and House Committees on Labor and Employment, and the DOLE to conduct an information and education campaign on the act's provisions in collaboration with the DTI, BIR, and LGUs.

Financially challenged women miss out on opportunities; gender lens in policy design can restore access for women in the countryside

According to the executive director of a civil society organization that advocates for the use of technology to enable grassroots communities to participate in the economy even in conflict zones, some women may have fundamental difficulties committing to the concept of being self-employed. She does, however, mention that the advantage for women in this case is the "flexibility to opt in and out of a project" depending on how much time they can devote to the entrepreneurial, freelancing job as opposed to full-time employment. Freelancing entrepreneurs are expected to trade off some responsibilities at home. According to the respondent, "because of gender-related barriers, it is important to have gender-specific policies; I believe that if we offer financial stability and focus on the specific needs of women, we can better support women. When women are better supported and stereotypes about care work or household responsibilities are less prevalent, the need for gender-specific policies may be reduced."

While women are interested in participating in the labor force as platform workers, their economic status limits what they can do. According to one respondent, policy should prioritize women in low-income households. These women miss out on opportunities for a variety of reasons, including digital illiteracy, despite the growing popularity of new modes of business transaction, such as online retail selling.

According to a policy center's senior executive, there is a "gender lens to consider when thinking about literacy programs. In the past, financial literacy was considered more for men,

then digital literacy; men are better in both digital and financial literacy today, so there is a need for policy to look into this, especially in rectifying inequalities," she explains. When asked if there were any gender-related mandates on the selection and acceptance of scholars in the digitaljobsPH program, one resource person stated that there was no need for this, especially since more women were applying to join the program.

LGUs and implementation partners on the ground help to bridge the gap, but more help is needed for women in the countryside.

According to several digitaljobsPH resource people and a policy center's senior executive, developing a plan to upskill and develop infrastructure in the countryside will require the LGU to play a significant role. On the demand side, another digitaljobsPH resource person believes that the "LGU should be involved in educating its citizens about the existence and potential of platform work." According to one program graduate, trainees would benefit from "stronger support at the LGU level; it defeats the purpose of having a program like digitaljobsPH if aspiring trainees don't have any facilities to use at all."

According to an LGU representative, a portion of their budget has been allocated to purchasing computers and funding internet connectivity subscriptions for facilities that many women use as platform workers. They claim that these expenses are tagged as part of the requirements to allocate no less than five percent (5%) of their annual budgets to gender and development initiatives because the majority of platform workers are, first and foremost, over-indexed by women. According to the representative, they are also "likely to introduce programs or initiatives exclusive to women" who want to participate in their digital literacy programs. It is unclear, however, whether women who participate in their locally organized digital literacy program progress to platform work, as the LGU had hoped.

After DICT introduced platform work and freelancing to their municipality, an LGU representative says they "were eager at the time to be prioritized by DICT's digitaljobsPH program." Some, however, are wary. Another municipality's LGU representative reports that "local government officials do not appreciate the power of ICT, so the budget for infrastructure remains low" in their area.

On the other hand, several executives from civil society organizations and LGU representatives report that several countryside government units have requested internet access. However, supply cannot keep up with demand. According to a platform worker involved in expanding internet access to rural areas, "there are areas that simply cannot be reached [by telco companies]," and "alternatives are too expensive." This, she claims, has led them to "first uplift those with sufficient access to digital technologies."

5. Futurecasting platform jobs for women in the countryside

As the program expands into new areas, more homegrown agencies founded by digitaljobsPH graduates will make access to platform jobs easier.

Interestingly, practicing platform workers, such as resource persons who are also freelancers, demonstrate real-world success. Most active platform workers curate their own portfolio of

jobs and clients, while all resource persons have excellent, even decades-long clients. "At some point, you keep very close relations with a few clients—they are the ones you are more likely to work with for a very long time, giving you earning opportunities beyond just covering your costs," one resource person says. A digitaljobsPH graduate claims that "all it takes is a little patience to find clients; the 21-day challenge is already one way that builds our confidence to look for more clients after the program." Graduates who choose to be recognized in the program must complete a "21-Day Challenge" in which they are assigned a real-world client with whom they must complete a project.

Two respondents who are digitaljobsPH resource persons are executives of companies that work with rural freelancers. Their firms act as bridges between overseas platform jobs and local talent, much like a hub and spoke model, with the firm's primary role being to connect local talent to platform work opportunities. As a result, these firms manage business development on the platforms and match local talents in a freelancing arrangement with tasks and assignments negotiated through the platform.

One of these two companies serves as a physical office space where freelance platform workers congregate to complete their tasks. When asked about this model, the executive stated that it works well for overseas clients who require employees to be in a controlled environment, "so an office is required." Furthermore, it bridges the gap for many platform workers who may not have access to the internet, a desktop computer, or even reliable electricity at home. It can still work on accounts or tasks if they go to a physical location. He also stated that some freelancers continue to work with their firm after their freelance assignments from the platform are completed, even going so far as "providing them with full-time opportunities if they are successful." Furthermore, he emphasizes that many platform workers, including women and those in rural areas, "prefer to have consistent sources of income, which explains why they choose to work in an agency model rather than directly bargaining for jobs."

Another company operates in a very different way: it does not have a physical office and instead matches and aggregates job requirements on job platforms to available workers in their community. When asked if they have a specific business model, such as retainer fees, the founder stated that no hiring or recruitment fees are charged, except that they help manage requirements and provide free access to job opportunities to their members.

One civil society organization focuses on contracting projects, distributing microtasks with low barriers to women workers such as voice transcription and annotation. Their reasoning for selecting low-complexity, low-barrier jobs is that they "do not want to turn women away simply because of some reason that is beyond their control." Their model pays individuals to train and then puts them through a mock production before bringing the best performers onto a project.

There is still room to improve the search and matching process for Filipinos, particularly those living in the countryside. According to the founder of a firm that caters to stay-at-home mothers, she "really wants to focus on job matching because there is still that opportunity which I could do as an agency; this is consistent with the goals of DICT to provide or create more

jobs by having more agency owners—entrepreneurs—who match local talent with platform jobs overseas."

Table 5: DICT homegrown agencies established from 2017 - 2022

Region	Year Established	Number of Employees	Number of Projects	SEC or DTI registered? (Y/N)	Current Business Status (Active/ Inactive)
Region I - Ilocos	2022	3	10	n	Active
Region I - Ilocos	2020	1-5	1	У	Active
Region I - Ilocos	2020	1-5	10+	У	Active
Region II – Cagayan Valley	2020	1	100	Υ	Active
Region II – Cagayan Valley	2020	1-5	1	Υ	Active
Region II – Cagayan Valley	2021	1	10	N	Active
Region IVa - CALABARZON	2021	3	9	Υ	Active
Region IVa - CALABARZON	-	-	-	-	-
Region IVb - MIMAROPA	2019	only collaborators	3	N	Active
Region IVb - MIMAROPA	2020	3	21	Υ	Active
Region VI - Western Visayas	2020	3	2	N	Active
Region VI - Western Visayas	2022	1	8	N	Active
Region VI - Western Visayas	2022	2	2	Υ	Active
Region VIII - Eastern Visayas	2020	10	20	Υ	Active
Region VIII - Eastern Visayas	2020	-	-	-	-
Region VIII - Eastern Visayas	2022			Υ	Active
Region VIII - Eastern Visayas	2022			Υ	Active

Region	Year Established	Number of Employees	Number of Projects	SEC or DTI registered? (Y/N)	Current Business Status (Active/ Inactive)
Region XI - Davao Region	2017	8		Υ	Active
Region XI - Davao Region	2020	4	3	N	Active
Region XIII - CARAGA	2021	2	10	Υ	Active
Region XIII - CARAGA	2021	1	3	N	Active
Region XIII - CARAGA	2021	1	2	N	Inactive
Region XIII -CARAGA	2021	1	100	N	Inactive
Region XIII -CARAGA	2021	11	5	Υ	Active

Source: Data provided by DICT

According to the most recent digitaljobsPH tally, at least 24 homegrown agencies have been established since 2017. These organizations connect platform jobs, both locally and globally, to local talent. Twenty of the 24 agencies are still active in 2022, with 13 of them registered with the DTI and SEC, indicating that these entities are legitimate and protected by Philippine law. Replicating these successful stories of entrepreneurship after DICT training can provide a solid foundation for platform work to grow across the country and into the countryside.

Men and women will have more freedom in accessing necessary connectivity and device suites, enabling them to participate in online freelance work without moving to the city.

Some cooperatives or associations, such as FHMoms and Connected Women, offer alternative means of bridging the connectivity and device ownership gap that many digitaljobsPH graduates claim is a significant barrier to applying what they learned as scholars through online freelancing jobs.

FHMoms, for example, provides "rent-to-own" schemes to its members who lack the necessary equipment to do online freelance work. According to an FHMoms representative, they provide flexible options for peripherals (e.g., laptop or desktop computer), including a "Wi-Fi para kay Nanay" project to bring internet connectivity to the home. These connectivity and device suites, combined with on-going community support, enable enterprising mothers who stay at home to participate in online freelance projects.

Connected Women, on the other hand, facilitates device donations from a variety of private organizations and individuals. These devices are then distributed to freelance women,

particularly those from remote areas and conflict zones. However, they admit that this is not yet optimal because supply is still insufficient to meet demand. "Sometimes we have to recruit externally because we did not have enough women with devices; this is a major barrier because sometimes they have the competency, but they cannot do their tasks because they do not have a working device," they explain. In such cases, Connected Women matches talent based on the size of their devices, despite having more sophisticated competencies available.

Virtual Workforce Professionals (VWP) is a hybrid BPO that works directly with DICT to match local talent with online freelance opportunities. As a business process outsourcing (BPO) firm, they provide their employees with brick-and-mortar offices and facilities in the areas where they operate; their employees are mostly on freelance contracts but may eventually pursue full-time employment. For men and women who want to participate in online freelance work, physical offices in the countryside bridge the device and connectivity gap. VWP expansion into more rural areas not only creates ICT-enabled jobs, but also brings technology closer to local talent. VWP plans to expand to more locations where traditional and "big call centers" do not, as evidenced by the presence of PEZA sites, which they claim "are not usually found in the countryside." "We cannot wait for opportunities to come to us; we must create them," they add, "we can now have better infrastructure and internet connectivity even outside of urban areas thanks to DICT. This is why our company has grown, because we're hearing that telcos have expanded into new areas, giving us the opportunity to build new sites and create ICT jobs."

As new models for connecting local talent to freelance opportunities emerge, connectivity and device ownership gaps could be addressed, particularly through public-private partnerships. Women, particularly those in the country, can gain more equitable access to the connectivity suites required to participate in platform work through cooperative support or the proliferation of more brick-and-mortar hybrid BPOs. However, much more support is required for devices and better internet to proliferate in rural areas.

Women-focused cooperatives will bridge the skill acquisition and auxiliary support gap much closer to home.

New models of organizing talent in the form of cooperatives and ground-level associations emerge as more online professionals see the market opportunity for consolidating access to talent. This phenomenon could include the rise of new homegrown agencies that help in matching talents as well. On the one hand, cooperatives and associations do more than just match talent to opportunity; they provide auxiliary support systems for sustained engagement and other needs like emotional support.

"We have training programs that happen once a week through our Facebook page called the FOPSCo Academy; we also have FOPS Talk where we feature inspiring stories of other freelancers and provide our members support on an emotional level," says the representative from the cooperative. She adds, "we want to provide them with a community of people that thing that same way and share the same goal, so that everyone can reach their ambitions." FOPSCo also established business centers in different cities to ensure continued engagement with members, aside from running a "virtual co-working space" daily from 9:00 AM to 12:00

PM and 9:00 PM to 12:00 AM, she shares is one way that online freelancers "feel they have officemates."

Cooperatives and women-focused associations, especially those that cater to women in the countryside, like Connected Women and FHMoms also do, deliver more services that ensure a safe transition from training to working online, and a community that caters to helping each other emotionally, which while digitaljobsPH resource persons facilitate in their own ways, could be more sustainable and closer to the talents if organized by members who themselves are women in the countryside taking on online freelancing as their mode of work.

Cottage industries led by women-owned and micro- and small businesses will connect to the global value chain via larger Filipino-owned marketplace platforms.

Shopinas is among the earlier adopters of e-commerce in the Philippines. Established as a marketplace for MSMEs to reach customers looking for Filipino-made products, Shopinas connected entrepreneurs to the demand-side. It helped SMEs distribute their products through an e-commerce facility that is also supported by Shopinas' national logistics network. Entrepreneurs, according to its President and CEO, approached Shopinas in the hope of "expanding their revenue streams" beyond traditional selling channels.

"We give them instant access to markets as they already had, more or less, established businesses but sought to go beyond traditional channels," said the President and CEO of Shopinas. Asked whether there were new enterprises who were just about to enter the market that set up a storefront first and purely through Shopinas, he mentioned that most enterprises were still working on a hybrid instead of a purely digital mode of selling.

Although Shopinas is currently restructuring to become a business-to-business company, some best practices at the frontier of platform work here could be appreciated in its initial attempts to build a business-to-consumer model where MSMEs, largely women-owned or women-led (cf. Peña & Dacuycuy 2022), providing digital services could connect to a marketplace for domestic and global clients looking to tap into the Philippines' nascent countryside online freelance talents and cottage industries that can be transformed by digital.

Cottage industries could be connected to the global value chain through a marketplace system that enables businesses with technology. This will create an even greater demand for digital skills within cottage industries while maintaining their production efforts offline. This is consistent with the Inclusive Innovation Industry Strategy of DTI in which traditional industries are transformed by technology. In other words, in the future, cottage industries are digitalized as well.

According to an online freelancer, "there is no platform or website where the focus is on Filipino talent even when some overseas clients prefer to work with Filipino virtual assistants." In the future, online freelancers can benefit from a marketplace that advocates local talents from the countryside which comes with the benefit of setting minimum social protection standards for online freelancers that is still currently missing in the Philippines' policy framework. Additionally, a common marketplace should reduce the search and matching frictions, especially when overseas clients already prefer to work with Filipino talents.

With online retail selling, virtual marketplaces become more professionalized, making entry into the digital economy more accessible and better organized.

Online retail sellers interviewed for this study participated and facilitated end-to-end tasks, from prospecting to fulfillment, including digital advertising and promotions on Facebook. This includes developing and designing their own social media presence and content promotions to drive their respective selling objectives. One worked as a third-party seller of a manufacturer, while the other promoted and sold her own agricultural products online. Both sold their products mainly through Facebook Marketplace.

Interestingly, both online sellers were proficient in relatively more technical aspects of early-stage e-commerce facilitated through platform-mediated direct selling. Both respondents had a working appreciation for price competition, promotions, distribution, strategies and tactics to sell online, including the application of social media tactics to drive awareness. Both performed these tasks purely online either with the use of a mobile phone or a personal computer. For example, both respondents know how to use Canva, a cloud-based design and publishing platform, in creating content and marketing materials. One of the respondents also knew how to time and invest in paid social media ads to drive traffic to her products and storefront, albeit in both cases the absence of a formal e-commerce system.

One respondent shares, "when selling, I find it very advantageous when I have posts on social media because I continue to receive inquiries about my products, even as I experience some challenges on supply of the products I need to sell." She also mentioned that "although [her] neighbor is selling the same products, *diskarte* (creative tactics) allow a friendly competition to make a sale."

The other respondent shares content-based tactics to drive purchase. She shares, "I take videos of the vegetables I want to sell, write the caption, prepare the video, and post it online first on my private page so I can sell to my friends, then on my Facebook page to promote it to other customers. Other customers also inquire through my Instagram account, although my Instagram is relatively new."

Both respondents were given a description of digitaljobsPH, its modules, and mechanics. Asked if they would be interested to become platform workers as online freelancers, given that their level of technical sophistication would easily qualify them for it, both expressed their genuine interest. Asked if they are likely to continue their online selling, both confirmed in the affirmative, indicating that there is an opportunity to elevate the professional character of online selling in the event they decide not to explore working in other digital job verticals like virtual assistance, website development, social media marketing and management, among others. Clearly, however, these are the verticals that, when used deliberately as part of larger sales and marketing piece, could be professionalized to eventually become formal, registered micro-enterprises that are supported and protected by relevant laws and programs.

Alternatively, online sellers are a prime audience to target to build a larger pool of digital platform workers as they already have, though varying in degrees of sophistication, a working knowledge of platform work. In other words, it is possible that online selling becomes the gateway to more sophisticated digital jobs in the short-term.

6. Policy recommendations

Reinvigorate the Philippines' whole of society mandate to embrace digital transformation that is sensitive to the role that gender plays in development, ensuring that infrastructure and capabilities roadmaps reach women in the countryside. Revisit Digital Cities 2025.

The Philippines' E-Government Masterplan 2022 (EGMP) is a positive step toward articulating the country's digital transformation agenda, beginning with an architecture and roadmap to digitalize public services (DICT 2019). EGMP is aligned with the ASEAN ICT Master Plan's strategies and building blocks, which reinforces its alignment with regional integration goals and international standards. The EGMP framework and roadmaps provide the foundation for infrastructure, website portals, security and e-resilience, and analog components (e.g., organization and policy).

Digital Cities 2025, on the other hand, and the program documents of digitaljobsPH, respectively, translate the country's digital transformation ambitions in terms of IT-BPM expansion beyond Metro Manila and capacity building for digital jobs or ICT-enabled jobs. The DepEd, TESDA, and CHED curricula and program components all include provisions for developing digital skills and competencies for the twenty-first century. However, a comprehensive articulation of digital transformation ambitions across society is lacking.

At the macro level, digital transformation will need to identify and support the components of a whole-of-society transformation agenda, which includes, but is not limited to, identifying a human capital development framework that prepares citizens for digital jobs and how each agency in the learning ecosystem contributes; public and private infrastructure required over time with a focus on ramping up ICT in underserved communities; and a labor market restructuring agenda.

Beyond the building blocks of e-governance and the isolated components of digitalization in various government policies and programs, the new administration would be wise to consider a clearer articulation of how the entire country plans to digitalize.

Build confidence in digital technologies through the digitalization of essential public services that are accessible to users in the countryside.

Accordingly, with EGMP, and the emergence of new preferences arising from the COVID-19 pandemic (e.g., disbursement of cash transfers as relief during the pandemic through e-wallets, application for government loans through web portals), efforts to digitize processes should help to increase usage and encourage users to learn and master the basic use of technology by doing. Consistently providing basic public services through digital means, supported by an advocacy to reduce inefficiencies in the conduct of analog processes that require person-to-person interactions with government agencies, could increase the confidence of users when dealing with new technology albeit with some learning curves to consider in the design and optimization of user experiences.

LGUs are empowered by EGMP through DICT and in partnership with the Department of Interior and Local Governance (DILG) to transform commonly used processes into digitally enabled processes to increase the overall efficiency of the provision of public services from the level of the city or municipality to the barangay.

Confidence with technology can be built by providing the user experiences that mitigate learning curves and encourage usage across demographics. It would also help LGUs and participating agencies improve overall usability of processes and platform if, in the first place, digital processes are in-market and ready for service, which can also lower or flatten the learning curve especially for users who have had no prior digital literacy or technical skills training.

Fully implement the Free Internet Access in Public Places Act, especially in the countryside where telco experiences vary. Consider adopting the Rural Wired Connectivity Act or Senate Bill 2131 to bridge the connectivity gap in rural areas.

Despite increased efforts to bring wired and wireless connectivity to more locations during lockdowns, users continue to experience a crippling lack of internet in some areas. Many people complain about speed and bandwidth in places where there is internet connectivity, both of which are productivity barriers, especially when platform work requires reliable and high-speed internet connectivity.

The Free Internet Access in Public Places Act (RA 10929), which was signed into law in 2017, aims to provide free internet access to the public in national and local government offices, public elementary and secondary schools, state universities and colleges, TESDA institutions, public hospitals, health centers, and rural health units, public parks, plazas, and barangay reading centers, public airports and seaports, and public transportation terminals.

If fully implemented, the law could cover basic and regular internet needs, particularly for users in rural areas who may not have privately owned subscriptions to reliable internet connectivity. Although public free internet services may still be insufficient for enterprise use, their absence at the household level would be mitigated because many of the locations identified in the law are easily accessible should the need arise.

Furthermore, consider the passage of the proposed legislation on incentivizing small or local telecommunications providers to expand internet connectivity in rural areas through tax benefits via tax credits applied on value added tax or income tax (Senate Bill 2131, also known as the Rural Wired Connectivity Development Act).

Strengthen the Tech4ED program by bringing it closer to the homes of digital practitioners to improve access and lower costs of participating in the digital economy. Explore co-working spaces beyond the current footprint of the program.

As a result, efforts to bridge the access gap include the brilliant idea of establishing Tech4ED centers across the country. They serve as co-working spaces for entrepreneurs, particularly those working as online freelancers, in addition to providing critical e-government services in remote areas.

However, those from remote areas continue to have difficulty accessing these centers, particularly those living in high areas, making the exercise relatively expensive. As the footprint of digitaljobsPH expands to more sites further away from city centers, and demand for digital jobs grows, the government should consider bringing Tech4ED centers closer to home, exploring the possibility of building smaller facilities at the barangay level, which could also contribute to the barangay's digitalization.

The national digital inclusion initiative should consider equipping the smaller sites with electric generators when implementing this expansion, as many freelancers complain about intermittent power outages that limit productivity.

This expansion is critical not only for bridging the access gap, but also for promoting readynow digital job opportunities if barriers are removed sooner rather than later, as in the case of digitaljobsPH graduates who are unable to participate in online jobs due to a lack of internet access or a lack of devices to use at home.

Explore diversifying public-private partnerships to address gaps in connectivity, device ownership, access to skills and technical knowledge, and community engagement. Involve civil society organizations in facilitating a bottom-up approach in needs identification.

Public-private partnerships are in place to deliver digitaljobsPH to participants in the countryside. LGUs have also enlisted the assistance of state universities and colleges in the implementation of the training program. Cooperatives and associations seek private initiatives to fill device and connectivity gaps. While these efforts have proven to be effective in empowering rural women to participate in training and platform work, many still find the gap in most rural areas to be overwhelming.

Partnerships and collaborations aid in the expansion of digital inclusion, particularly when the private sector is involved in providing solutions that the government cannot efficiently deliver on its own. Working with device manufacturers to lower the price of laptop computers, telecom operators to lower the price of monthly subscriptions to high-speed internet, whether wireless or wired, and civil society organizations to help identify where the greatest impact would be generated from these efforts are examples of such partnerships that can be scaled up.

Cooperatives and civil society organizations can also provide government with ground-level insights, assisting agencies in identifying areas and communities that would benefit the most from these partnerships. As a result, associations and digitaljobsPH resource persons continue to facilitate sustained engagement across more digitally enabled communities, ensuring households that have transitioned to platform work continue to participate in the digital economy.

Consequently, partner state universities and colleges can continue to penetrate areas with limited or no internet access or communities with low device ownership because they are present in accessible locations nationwide. Areas within these universities can be converted

into co-working spaces, replicating Tech4ED in what could become a hub-and-spoke model of operation for digital practitioners.

Expand digitaljobsPH and provide incentives to its former graduates to form cooperatives, homegrown agencies, and other models of firm organization which could help improve penetration of digital jobs and increase the collective bargaining power of freelancers from the countryside.

Given the explicit intent of digitaljobsPH to encourage the creation of homegrown agencies that specialize in online freelance jobs, the Department of Trade and Industry could help supplement the creation of these new firms across the country by making the process of organizing and formalizing them relatively easier.

More homegrown agencies pave the way for bridging the access gap, particularly if these firms provide new entrants into online freelancing with the necessary connectivity suite or if some initial set up costs are reduced by sharing a percentage of expenses. New organizational models, such as a hybrid agency that assists in matching local talent to platform opportunities or providing a brick-and-mortar office facility for rural talent, reduce friction in the process of becoming a full-fledged online freelancer.

Local agencies, cooperatives, or associations may be given temporary preferential treatment under relevant innovation and startup laws (e.g., the Innovative Startup Act). Some preferential treatment could aid the sector's growth and expansion, particularly in rural areas where traditional domestic industries have yet to digitalize.

Cooperatives or homegrown agencies could work well in situations where participants already have the requisite connectivity and hardware to participate in the platform economy but require local professional support and emotional connections. Relatively small and newly formed homegrown agencies can also serve as service providers to local clients, including receiving outsourced work from their respective LGU. Consequently, more experienced and larger agencies can provide workers with a brick-and-mortar infrastructure to service larger enterprise clients overseas; these operate like smaller BPO companies but are competitive to the multinational and networked players.

CSOs intervene and coordinate to assist women who are disenfranchised or in conflict zones where connectivity and other hardware requirements are scarce or non-existent. This model may be best suited for more manual processes that rely less on real-time or live service. The work facilitated by Connected Women is an example of this model. As a result, this model is more likely restricted in terms of enterprise applications or task complexity.

Consider creating a commission on lifelong learning that will harmonize efforts to equip Filipino adults with technical, "soft", and leadership skills necessary to compete in the highly competitive and distributed digital economy. Harmonizing a human capital framework is its necessary first step.

A unified and fully integrated digital transformation agenda would include requirements for technical skill training as well as the development of "soft" and leadership skills required to succeed in the digital economy. Currently, various learning providers provide aspects of digital leadership, but they do so in silos. On the one hand, while most agencies cover the fundamentals of online freelancing, whether through digitaljobsPH or other related skills through TESDA or the DepED's Alternative Learning System, much more integration is required to ensure that learners have access to skill acquisition throughout their journey as digital practitioners.

Creating a commission focused on lifelong learning could aid in the coordination of the various dimensions of digital practice, which would inevitably include leadership and interpersonal skills, among other things. Above and beyond the core technical skills taught in business certification or degree programs, providing graduates with courses or modules on self-improvement, personal leadership, and leading through others would help to promote the continuous development of digital practitioners.

The commission on lifelong learning can also help to create links and facilitate synergy among national government agencies involved in human capital development in the country, resulting in some program efficiencies than if different agencies pursued similar, if not identical, programs on digital skills and attributes for the twenty-first century.

Boost support and ramp up the expansion of digitaljobsPH to aid in the digital transformation of MSME, LGU, and domestic industries, creating local demand for digital skills and serving as an incentive to participate in capacity-building efforts.

One way to overcome the chicken-and-egg problem in expanding IT-BPM jobs into the countryside is to prioritize the digitalization of rural MSME, LGU, and domestic sectors in more traditional industries. While some LGUs nominate representatives to attend modules, digitaljobsPH currently has a component that serves to equip MSME owners with digital skills.

Expanding digitaljobsPH in collaboration with the DTI and DILG would help generate local demand for digital skills. MSMEs would require specialized digital assistance that only specialists could provide. Similarly, a digitalizing LGU would require more staff to handle technical requirements such as website management, social media presence, and digitizing some analog processes below the national framework.

If digitaljobsPH graduates do not match with platform work overseas, they will still be able to find productive options in their immediate vicinity, reinforcing a long-term development path for digital skills, manpower recruitment, and engagement.

Ratify and fully implement proposed laws like the Freelance Workers Protection Act, seeking to recognize, protect, and boost public support for online freelancers.

The ratification of House Bill 8817, or the proposed Freelance Workers Protection Act, which promotes the rights of online freelancers, is critical to enhancing the image and dramatically improving the perception of online freelancing as a mainstream mode of work. The proposed legislation includes provisions that require contracting parties to enter into a legal agreement.

The passage of the law also formally establishes the tone for social recognition of online freelancing, which is currently ad hoc and limited. If the legislation is approved, online freelancers will be entitled to night differential pay and hazard pay.

However, given that it specifies the legal benefit of requiring the worker "to be physically present in the workplace or those on field assignments" (HB 8817, p. 2), the proposed law may need to further define what determines the 'night shift differential,' which may be inconsistent with the mode of work of most online freelancers, which takes place in their respective home offices. If the mode of work necessitates night differential pay on the part of contracting parties, enforcement may be time-consuming. The government may also need to refine implementing rules and regulations to ensure that, because offshore accounts will inevitably result in timezone differences with contracted workers in the Philippines, new policies do not disadvantage online freelancers relative to freelancers in other markets with narrower timezone differences or no specific policies on time of work or shifts. Government employees from Division Chief and below are granted a night shift differential pay with the passage of Republic Act 11701 (Tilo 2022) while private-sector employees, including those who are in the BPO sector, receive the legally mandated benefit under Presidential Decree No. 442 otherwise known as the Labor Code of the Philippines (HB 5727, p. 1).

There are several proposed laws that are related to online workers, but Serafica and Oren (2022) argue existing policies and programs need updating. Serafica and Oren (2022) also discussed how there have been several attempts and suggestions on how to classify online freelancers, though a formal classification has yet to be established. A formal classification of online freelancers will be the first step in recognizing them, allowing the protection and regulation of online freelancers and providing their security to financial services and social protection. Enforcement, under this law, is assigned to the Department of Labor and Employment (DOLE).

If House Bill 8817 is passed as written, only freelance workers registered with the Securities and Exchange Commission (SEC), DTI, or BIR will be covered under its proposed terms. Thus, the challenge would be to register as many freelancers as possible with these agencies before creating a separate classification for platform workers or digital practitioners to ensure compliance with the law. As digitaljobsPH encourages their scholars to participate in a "21-Day Challenge" in which they seek a client to work with on a real-world brief, DICT should consider including an expedited registration process with the DTI, BIR, and SEC as part of the Challenge, ensuring scholars begin to conduct their freelance business as registered owners or proprietors.

The DICT, in collaboration with the DOLE and DTI, should also consider renewing public calls for freelancer registration as soon as the proposed law is signed and implemented, emphasizing recognition and protection as compelling reasons to register. Chambers of commerce, associations, and cooperatives with ground-level access can be tapped to raise awareness, consolidate members who need to register, and provide logistical support to facilitate an easier and more accessible registration experience for more freelancers, particularly those in rural areas. Reducing or eliminating frictions in the registration process should be a top priority for agencies, effectively improving aspects of the country's continuous programs that improve its overall "ease of doing business."

National agencies such as DOLE, DICT, and DTI should consider a coordinated effort to promote online freelancing as a mainstream source of income and livelihood across the country, with a focus on the benefits to rural men and women. As a result, the DOLE, DTI, SSS, and BIR could investigate how to define freelancing, online freelance work, and digital professionals in the hopes of introducing an official classification for online workers, which is currently subsumed under the general classification of "self-employed" in most agencies (e.g., SSS).

As a result, agencies such as SSS, Pag-IBIG, and DTI could develop programs based on a standardized definition of online freelancing that is specifically designed around the realities of freelance work, such as the lack of regularity in income generation that is common in traditional waged jobs.

In the countryside, respondents report that men tend to have access to social protection more than women because men are more likely to be the breadwinner. There need to be more deliberate efforts to enroll women in social protection schemes as they venture into platform jobs which are currently not part of any mandatory programs.

Review policies on competitive pricing for contracting work in the Philippines, balancing national interests in boosting comparative advantages in IT-BPM with those of personal income generation, which may address, in part, the race-to-the-bottom competition in online freelance work.

As more Filipinos enter and participate in online freelance work, categories such as general virtual assistance will become more crowded with talent, particularly because many see the category as a steppingstone to platform work. With reports of competing talents being undercut by lowering hourly rates, foregoing income, or absorbing costs that could have been covered, it is critical that pricing dynamics in this relatively unregulated category be reviewed. Some practices, such as general virtual assistance, may be considered unsustainable in the long run due to race-to-the-bottom price competition.

Consultation with business associations such as IBPAP, civil society organizations, digitaljobsPH resource persons, and active digital practitioners could provide DOLE and other relevant agencies with a better understanding of the pricing dynamics in this category, allowing them to strike a healthy balance between personal income generation and the national interest in improving and protecting comparative advantages in IT-BPM.

Leaving intensifying price competition in digital jobs would eventually lead to similar situations in other job categories as more talents with specialized skills enter the market, raising new questions about the overall sustainability of online jobs.

Implement a national awareness campaign led by PCW in collaboration with DepEd, CHED, DOLE, and DTI that levels the perception field, breaking down gender stereotypes on the concept, mode, and place of work, especially for the countryside in which gender norms are perceivably stronger.

Historically, low-skilled workers dominated the Philippine labor force, followed by middle-skilled workers. However, the disparity between the two narrowed in 2017; in 2019, middle-

skilled workers outnumbered low-skilled workers in terms of employment share (ADB 2021, p. 27). In terms of occupational groups, workers in elementary occupations, service and sales, managers, skilled agricultural, forestry, and fishery sectors, and craft take the lead, with clerical support work on the rise since 2017 (ADB 2021). With the exception of those in managerial positions, low and middle-skilled work may continue to dominate the labor force, indicating the prevalence of low- and middle-skilled work even on platforms. There is also an increase in employment skill intensity because of increased demand for middle- and high-skilled occupations across sectors.

According to Dacuycuy and Baje (2021), women are more likely to participate in platform work, with more women having done platform work in the past or currently involved in platform work. In their study, clerical and data entry followed by creative and multimedia work dominate the type of work done on platforms, which could influence the gender stereotyping of women to low-value tasks instead of the higher-value work that tends to be more technical (e.g., web design and development, software development, financial services). Platform workers continue to face significant care work demands or expectations.

Gender mainstreaming may take some time in the Philippines to break down gender stereotypes, especially when gender norms regarding work and domestic roles are deeply culturally embedded. To normalize women in technical jobs and to go beyond traditional carefocused roles at home, an orchestrated effort would be required, with PCW leading these efforts in collaboration with other national government agencies like DOLE, DTI, and DICT.

A national awareness and education campaign on the mode, content, and location of work, with a strong gender lens, could make online freelancing more mainstream, particularly in rural communities where women's perceptions may still limit them in traditional social and domestic roles.

DepEd and CHED may also need to reconsider the traditional definition of "successful careers," which must now include novel ways of working outside of the usual confines of corporate work. The content found in basic education textbooks could be refreshed to introduce narratives of successful women pursuing platform jobs from home without sacrificing their sense of responsibility to care for their children.

Consider compensating mothers working from home with non-price benefits to help in resolving conflicts between care work and the desire to work as an online freelancer, providing mothers with sufficient incentives to continue.

Mothers sense a conflict between domestic responsibilities and the desire to work, especially when the place of work merges these two dimensions of women who work as online freelancers, generally working remotely from home. Some report this conflict to be a strong source of discomfort, if not an impetus to drop work in favor of care work responsibilities.

As in Peña and Bayudan-Dacuycuy (2022), introducing non-price benefits like free access to daycare centers at the barangay level could help mitigate the conflicting responsibilities and provide mothers not only with a form of compensation but also a sufficient incentive to

continue participating in the labor market. Mothers with young children would no longer be forced to make the impossible choice between work and domestic responsibilities.

Women in the countryside have also reported non-completion of training programs, job discontinuity (e.g., churn), and difficulty balancing training or work with child-rearing. Although freelance work opportunities give mothers working from home the illusion of flexibility, the reality is that women face these competing demands on a daily basis.

Partnering with civil society organizations and legislating in favor of non-price benefits for women working at home could reinforce the ambition to make digital jobs increasingly accessible and inclusive.

Target online sellers on leading marketplace platforms to upskill and explore professionalizing their services as online freelancers, allowing them to move on to higher value-adding digital jobs that could circumvent the general trend of entering the platform jobs market through general virtual assistance.

The rise of online selling platforms such as Facebook and Carousell, among others, has also enabled more women to engage in informal platform work through direct selling engagements. They have gained invaluable digital skills with a high level of sophistication, resembling parts of what digitaljobsPH modules aim to achieve for their trainees. Some online sellers are skilled in multiple digitaljobsPH verticals, making them an ideal candidate for upskilling.

Actively recruiting talent with ready-to-use skills and competencies could make it even easier for digitaljobsPH to transition online sellers to higher-value-added digital jobs, improving their mobility in the long run. Furthermore, if they decide to continue selling online, they could look into vertical and horizontal integrations that would allow them to generate even more income as they seek to sustain their livelihood through digital means.

Transforming online selling as a professional job could potentially provide a new stream of ICT-ready talents into larger e-commerce firms, avoiding the general trend of entering platform work first through general virtual assistance, where the hourly productive wage is likely to be lower.

Ramp up recruitment, training, and deployment of more digitaljobsPH resource persons through partnerships with the private sector, civil society organizations, and higher education institutions.

The response to digitaljobsPH has been overwhelmingly positive from both trainers and trainees. The scale at which digitaljobPH operates, on the other hand, severely limits its ability to bring ICT jobs to rural areas. As of now, the demand for digitaljobsPH courses is far outstripping the program's capacity.

All digitaljobsPH resource persons are independent contractors. Many started out as program trainees, eager to give back to the community that had nurtured them. Anyone, however, can be trained to become a trainer, which is something to consider. The extent to which capabilities are expanded to more rural locations is determined by resource persons; the limited rate of job creation could be addressed directly by increasing the program's training capacity.

digitaljobsPH may also consider forming a pool of subject matter experts from the private sector and partner HEIs to expand the scale and reach of certification programs, while digitaljobsPH resource persons focus on overall program management in their clusters. This initiative has the potential to reduce the number of hours spent by resource persons while maintaining the high quality of expert content now developed and provided by thought leaders, influencers, and experts from the private sector and HEIs.

Consider building an online marketplace for digital services, enhancing country marketing in platform work, and raising social protection, pricing, and governance standards for Filipino talents.

As the Philippines asserts its competitive advantages in IT-BPM in the global marketplace for platform jobs, and the country establishes a brand of service in online freelancing worldwide, a job search and matching platform made to promote and consolidate access to Filipino talents can reduce frictions and barriers known to characterize participation in global platforms like Upwork. It's also a way to bolster the Philippines' marketing efforts, positioning the country as a top destination for digital jobs, complementing the country's already globally competitive IT-BPM industry.

Prospective clients who have worked with Filipino talent in the past may find it more efficient to look for online freelancers who specialize in promoting ready-to-work professionals in the Philippines.

Furthermore, a local platform designed to promote Filipino talents provides greater uniformity in terms of pricing, which could already include provisions for social protection and other cost components of doing business, which may not fully capture local conditions and needs. This platform could also help to consolidate efforts to increase the bargaining power of online freelancers in lieu of or ahead of any legislation or the creation of a collective bargaining union comprised of digital practitioners. The sponsorship of DICT and DOLE is necessary for giving this platform institutional legitimacy while leaving its management and operations to private individuals from the online freelancing community.

Reinvigorate the role of PCW in ensuring government programs have particular attention to the training and development, participation, and empowerment of women in the countryside.

Although the fact that more women are applying for digitaljobsPH scholarships is encouraging, project implementers admit that no specific initiatives have been put in place to ensure that women have equal access to the program. Furthermore, given the prevalence of gender norms, particularly in rural areas, more deliberate efforts must be made to promote even more specialized, technical, but higher-paying digital jobs to women who can upskill beyond general virtual assistance.

In order to move the digital agenda forward and ensure that women from the countryside have access to opportunities in the digital economy, implementing agencies should consult PCW when designing gender-inclusive programs. Amplifying the promotion of digital jobs to women in the countryside now also ensures that the future growth of IT-BPM outside Metro

Manila will have women not only in entry-level roles but also in leadership and managerial positions.

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