

## Gender perspectives in e-livelihood and e-entrepreneurship

*Aubrey D. Tabuga and Carlos C. Cabaero*

The Fourth Industrial Revolution has ushered in an era of innovations and disruptions to societies' conventional functions and activities. Remarkable progress in information and communications technology (ICT) has opened new and more convenient ways for people to access information, carry out transactions, and connect to the world. Digital platforms serve as matchmakers for buyers and sellers of products and services, facilitating e-livelihood and e-entrepreneurship.<sup>1</sup> Amid the ongoing pandemic brought by the coronavirus disease 2019, these platforms not only provide a supplementary income source for people but also improve the economic participation and empowerment of vulnerable sectors, such as women and homemakers. However, these platforms cannot be harnessed effectively to address inequalities without a facilitative policy environment to narrow the digital divide. Furthermore, a key challenge is to ensure that these digital platforms also promote online workers' access to social protection.

This *Policy Note* presents a gendered perspective on how online platforms can enhance livelihood and

<sup>1</sup> Online entrepreneurship in the 2019 NICTHS covers the selling of a broad spectrum of products and professional services through online platforms.

### Salient Points:

- *Women are on par with, and in some areas, even outpace men in using information and communications technologies (ICTs). For example, more women than men use cellular phones (81% versus 77%) and transact business online (7% versus 6%). However, only around 1 in 20 people, regardless of sex, engage in online selling, with males earning more from it.*
- *Women are more likely than men to engage in online selling. Online sellers also tend to be either married household heads, members of producers' cooperatives, students, self-employed, or unemployed.*
- *Most online sellers are college graduates and are proficient in using computers. Meanwhile, those not using ICT platforms cited lack of knowledge and access to the internet and equipment as reasons for not engaging in online selling. Thus, it is crucial to regularly measure digital skills across the population to develop tailor-made capacity-building interventions for the labor market.*

entrepreneurship opportunities. Using the data from the 2019 National ICT Household Survey (NICTHS), the country's first household survey on ICT usage, this study also provides insights into how policies can strengthen and expand opportunities in online platforms for both women and men.

### Trends in ICT use

*Women are on par with, and in some aspects, even outperform men in ICT platform use.*

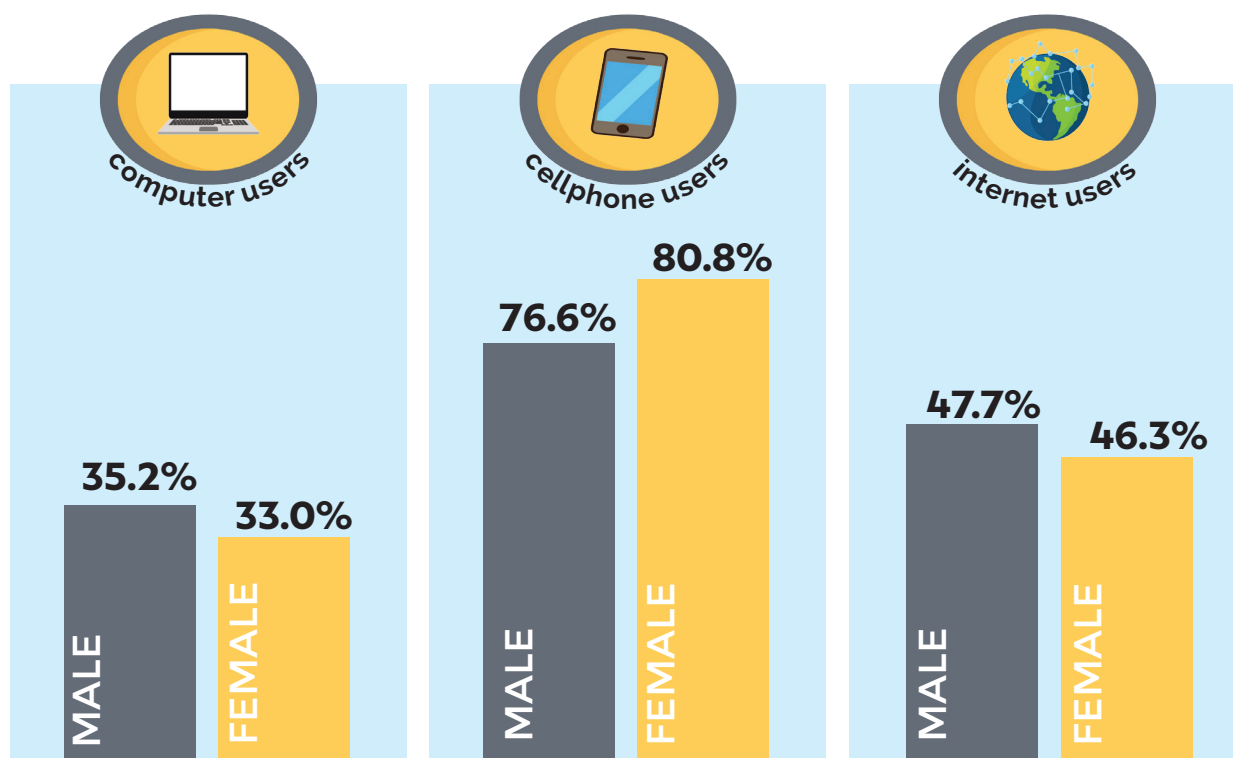
Women are more knowledgeable than men in using ICT platforms. Relatively, more women use cellular phones, conduct business transactions online, and own accounts for buying and selling goods and services online. In addition, women are generally on par with men in terms

of using the internet and computer and owning online bank accounts and electronic wallets (Figures 1 and 2).

*A small and comparable share of women (5%) and men (4%) engage in online selling.*

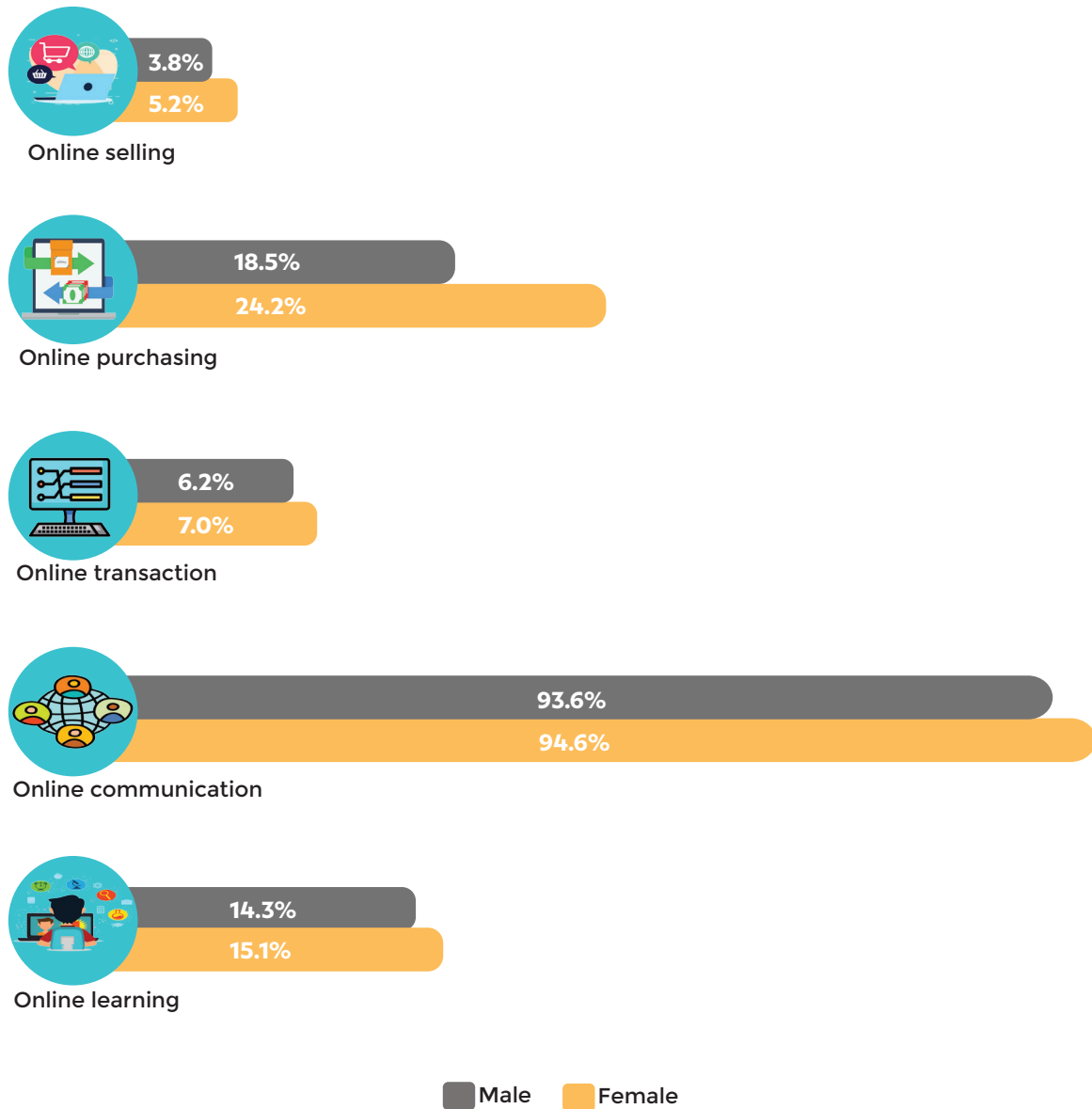
More women than men consider online selling as a good source of income. At the same time, more women would recommend online selling because transacting online is fast and efficient. Yet, on average, men earn PHP 10,898 monthly in online selling, higher than women's PHP 6,041. This income difference may occur because more women tend to be homemakers than men; thus, women have less time for online business (Bayudan-Dacuycuy et al. 2020). However, the NICTHS does not provide information on the amount of time spent by an individual in online selling.

Figure 1. ICT usage of Filipinos aged 10 years and above by sex



ICT = information and communications technology  
Source of raw data: DICT (2019)

Figure 2. Proportion of internet users aged 10 years and above performing online activities by sex



Source of raw data: DICT (2019)

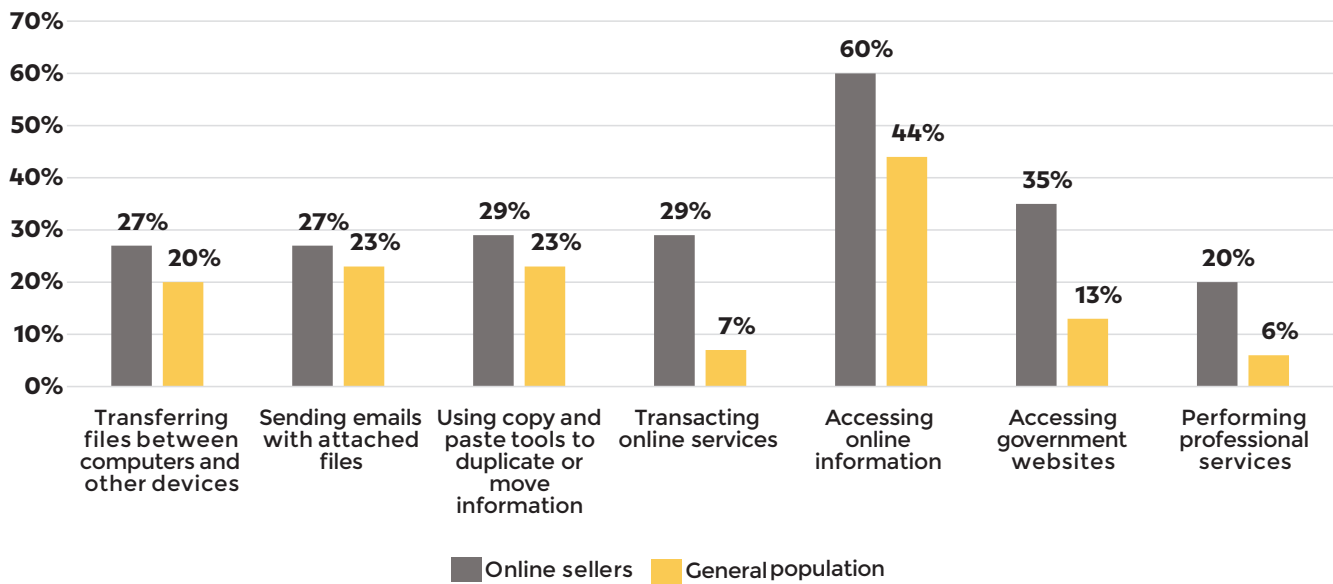
***A greater proportion of online sellers are proficient in computer-related skills compared to the general population.***

A certain level of technical proficiency and digital skills are needed to engage in online entrepreneurship. Figure 3 shows the proportion of online sellers with certain computer-related skills versus the share of the general population with the same set of skills. A greater proportion of online sellers possess computer skills,

such as transferring files between computers and other devices (27%) compared to the general population (20%). In addition, the proportions of online sellers who are knowledgeable in sending emails and using copy and paste tools are also higher.

Internet usage data also show that a higher proportion of online sellers compared to the general population use the internet for the following functions: transacting

**Figure 3. Proportion of online sellers performing certain computer-related skills versus the share (%) of the general population with the same set of skills**



Source of raw data: DICT (2019)

online services (29% of online sellers versus only 7% of the general population), accessing online information (60% versus 44%), accessing government websites (35% versus 13%), and performing professional services (20% versus 6%).

**Females are more likely to engage in online selling than men.**

According to Bayudan-Dacuycuy et al. (2020), women are more likely than men to engage in online work because it offers flexibility to do other nonmarket work. Further inspection of the characteristics of women online sellers revealed that a quarter of them (25%) are employed. This is consistent with the NICTHS finding that online selling is a supplementary income source for many women.

Online work offers economic opportunities for women who often have lower labor force participation rates than men. For instance, stay-at-home mothers who

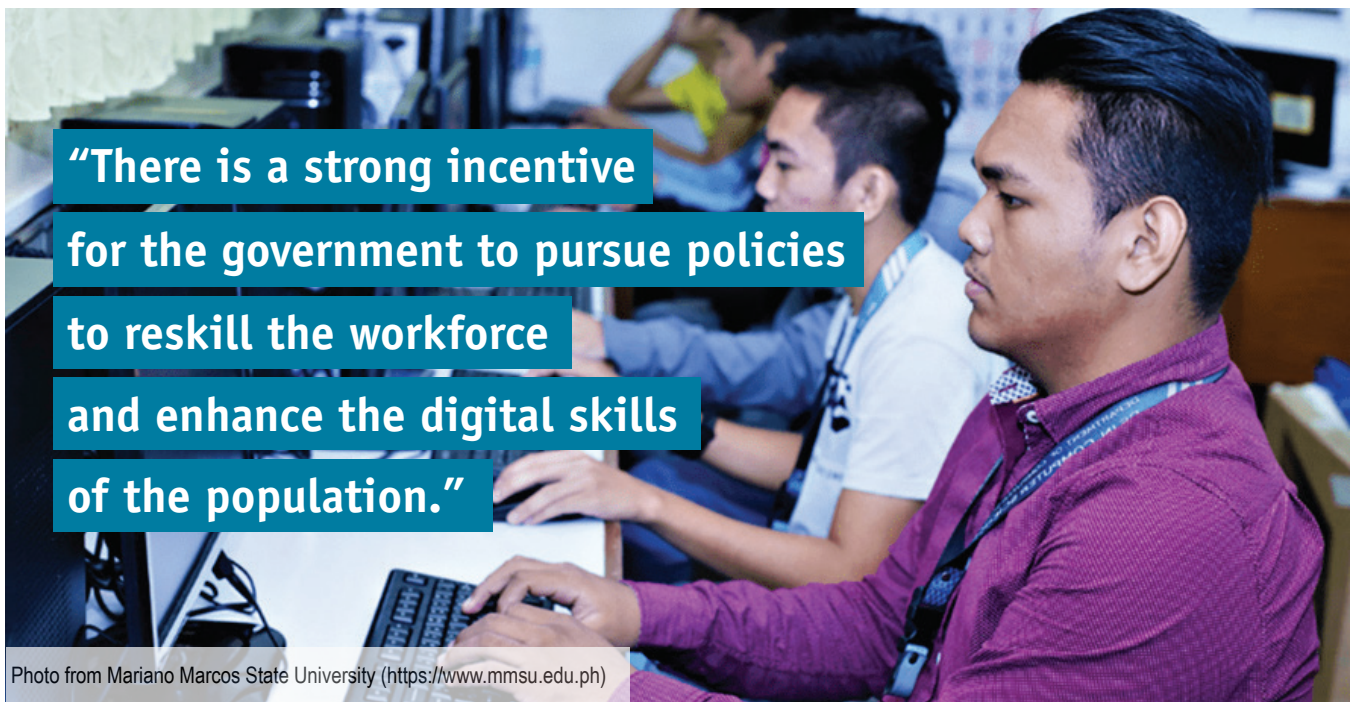
perform socially determined roles like unpaid care work may take advantage of the flexible nature of online selling to earn income.

**Online sellers tend to be married household heads, provided all other variables remain the same.**

There is a positive relationship between age and the likelihood of engaging in online selling. However, NICTHS data showed a nonlinear pattern, as this relationship trends downward among the elderly. Online sellers from urban areas are also more likely to have internet access in their homes. This is anticipated as better internet connectivity, usually available in cities, is needed to sell online.

**Education and skills training are important in performing online work.**

An econometric analysis of NICTHS data unveiled that those who finished only basic education (up to Grade 12) are less likely to engage in online selling than those



**“There is a strong incentive for the government to pursue policies to reskill the workforce and enhance the digital skills of the population.”**

Photo from Mariano Marcos State University (<https://www.mmsu.edu.ph>)

who completed at least a college degree. Further, graduates of ICT-related courses have a greater chance to engage in online selling. Therefore, it is crucial to regularly measure and monitor the digital literacy skills of the population so that appropriate capacity development activities for the labor market can be implemented.

*Compared with formally employed workers, those who are either members of producers' cooperatives, students, self-employed, or unemployed are more likely to engage in online selling.*

This paper also found that online entrepreneurship provides a channel for unemployed individuals and those not in the labor force to find livelihood opportunities outside the formal labor market. Meanwhile, contributing family workers, employers, and homemakers are less likely to engage in online selling than formally employed workers. Homemakers are also less likely to engage in online selling when other factors are controlled for. This contradicts the idea that homemakers are more likely to

participate in online work due to flexibility and mobility. In addition, Anwar and Daniel (2016) noted that online entrepreneurship, more often than not, requires a significant time investment, which is discouraging for homemakers.

*In the Philippines, unlike in many countries, online sellers tend to be unmarried and are less likely to have children.*

This is inconsistent with the view that online entrepreneurship can be a pathway toward greater economic empowerment—particularly for women, many of whom are outside the labor force (often not economically active due to unpaid care work). Thus, there is a need for a policy environment that allows both women and men, in general, and homemakers and unpaid family workers, in particular, to take advantage of online work and digital platforms. Without the right policies, ICT could further widen the existing gender skill gaps and social inequalities.

## Policy recommendations

*There is a strong incentive for the government to pursue policies to reskill the workforce and enhance the digital skills of the population.* The government needs to assess the level of digital skills across the population regularly. Likewise, it must invest in the reskilling of older and less educated individuals on the practical applications of ICT. Such efforts must prioritize the underserved and poorer segment of the population. Finally, it is also important to enhance the general population's knowledge and use of online platforms to improve their ability to reap the benefits of ICT equitably.

*Further research, especially behavioral studies, is necessary to examine gaps in digital skills between women and men from urban and rural areas and how these skills may be harnessed fully.* The NICTHS showed that online platforms offer livelihood opportunities, especially for women who cannot participate in the economy otherwise. Therefore, current and future capacity development programs must focus on enhancing women's and men's life skills and work skills. However, gaining the proper digital skills may not be enough for women whose economic empowerment is likely not maximized because of their disproportionate share in unpaid care work.

*Apart from gender issues, various challenges, such as poverty, gaps in skills, and lack of access to technology, formal institutions, and infrastructure, limit a person's ability to take advantage of online platforms for various*

*welfare-enhancing activities.* Digital platforms should promote social welfare, including access to social protection programs and livelihood opportunities. However, apart from the lack of knowledge to effectively use online resources and ICT tools, the government must also address the challenges of access to technology and formal institutions, such as electronic banking and online government transactions. Finally, improving digital infrastructure, such as mobile internet connection across the country, is vital to allow greater ICT engagement among Filipinos—women and men alike—so that everyone is better equipped to benefit from the digital dividends.

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### Contact us

**Address:** Research Information Department  
Philippine Institute for Development Studies  
18/F Three Cyberpod Centris - North Tower  
EDSA corner Quezon Avenue, Quezon City

**Telephone:** (+63-2) 8877-4000

**Email:** [publications@mail.pids.gov.ph](mailto:publications@mail.pids.gov.ph)

**Website:** [www.pids.gov.ph](http://www.pids.gov.ph)

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*PIDS Policy Notes* are analyses written by PIDS researchers on certain policy issues. The treatise is holistic in approach and aims to provide useful inputs for decisionmaking.

Aubrey D. Tabuga is a senior research fellow, while Carlos C. Cabaero was a research analyst at PIDS. The views expressed are those of the authors and do not necessarily reflect those of the PIDS or any of the study's sponsors.