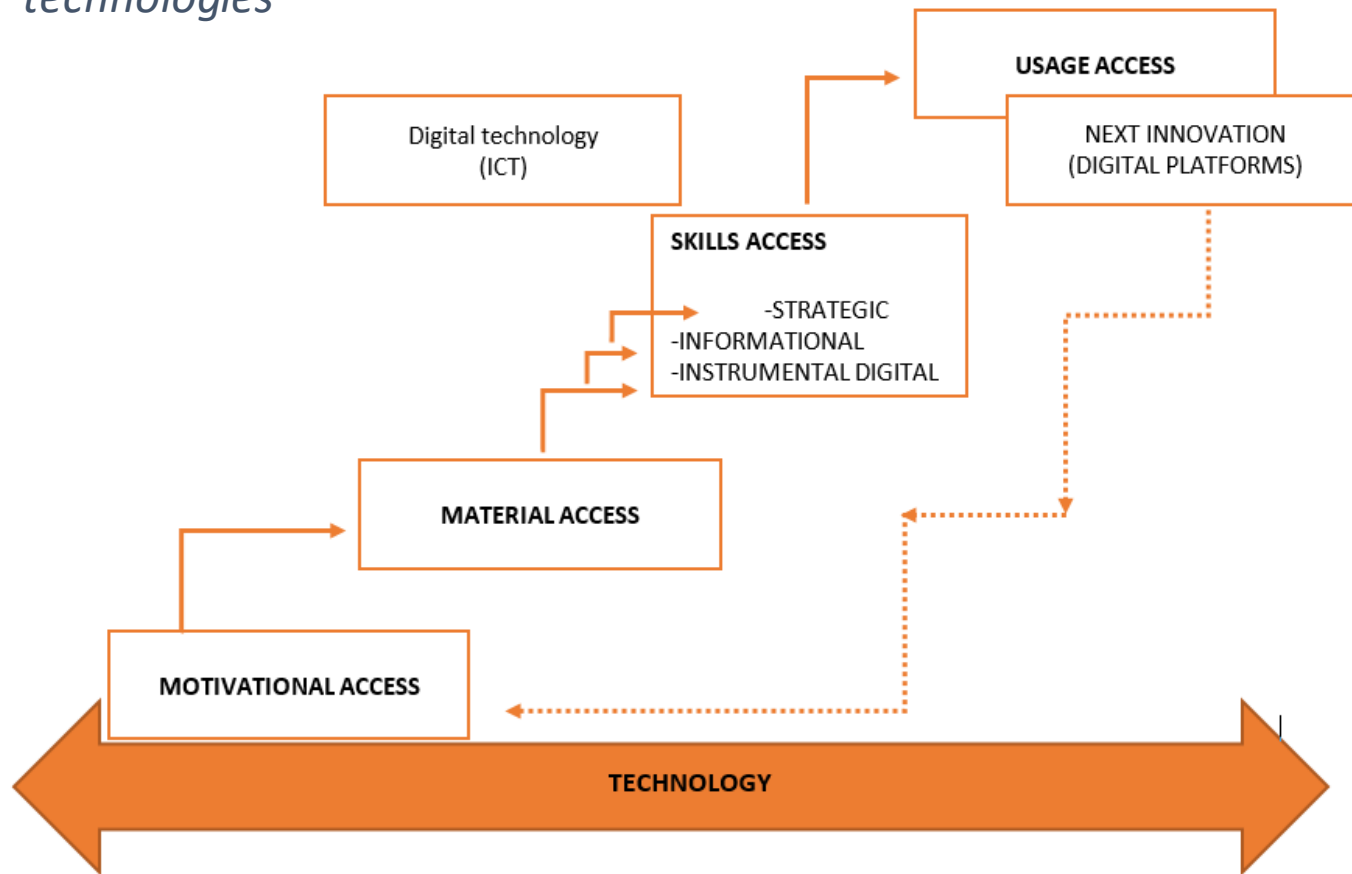


Understanding the Divide: Implications from Developing Asia

FRANCIS MARK QUIMBA

Digital divide can be seen as a determinant of the use of digital platforms

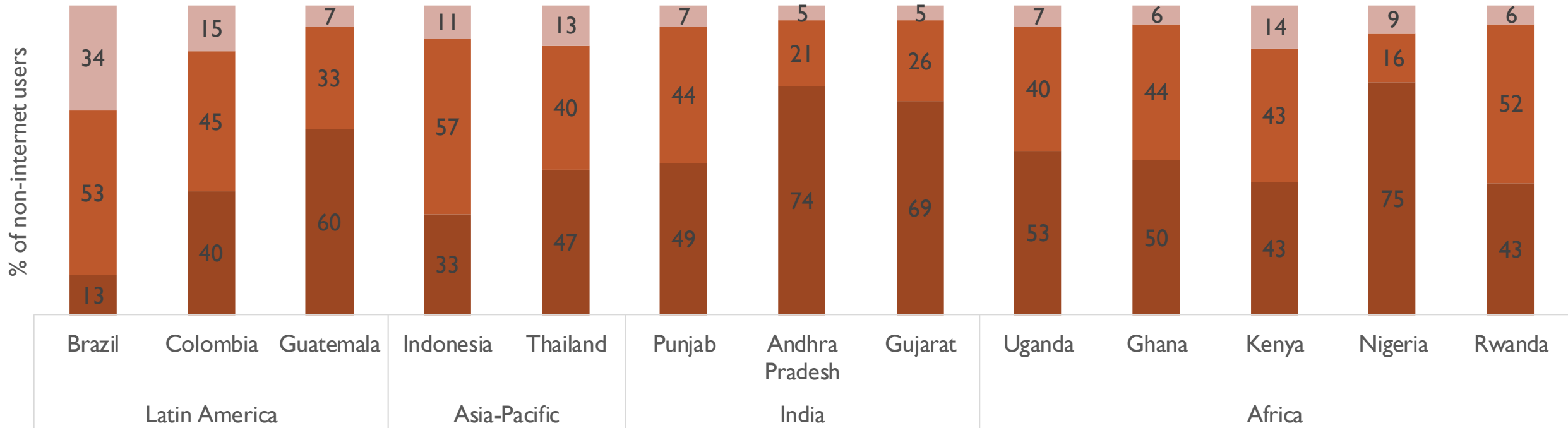
A cumulative and recursive model of successive kinds of access to digital technologies



Van Dijk (2006; 2011) presents a cumulative and recursive model that extends the concept of access from the basic understanding of counting people or groups with computer or access connection at their disposal (material access) to social, psychological or cultural backgrounds (motivational access). Further, digital skills (skills access) or competencies or technology use and applications (usage access) are also included.

One of the main barriers for accessing the internet would be not knowing what it is and what it can do

Awareness and understanding of the internet among non-users (2014-2015)



Source: Wu et al. (2016)

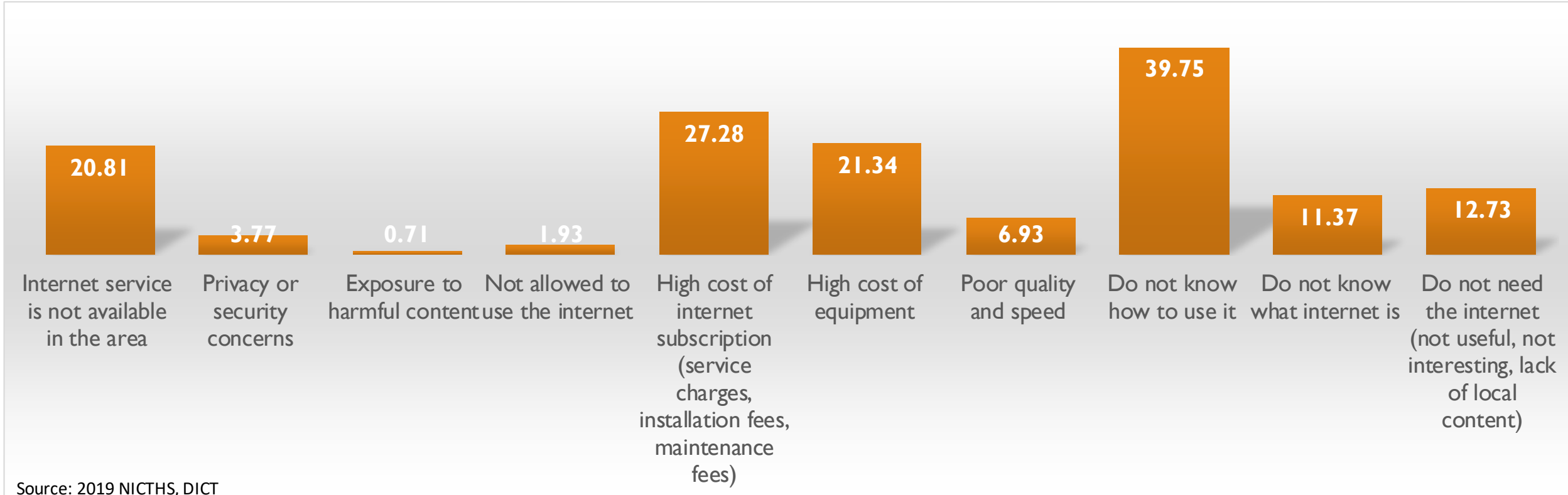
■ Never heard of the internet

■ Recognize the word "internet"

■ Know what the internet is

Barriers to awareness and perception of ICT limit internet use

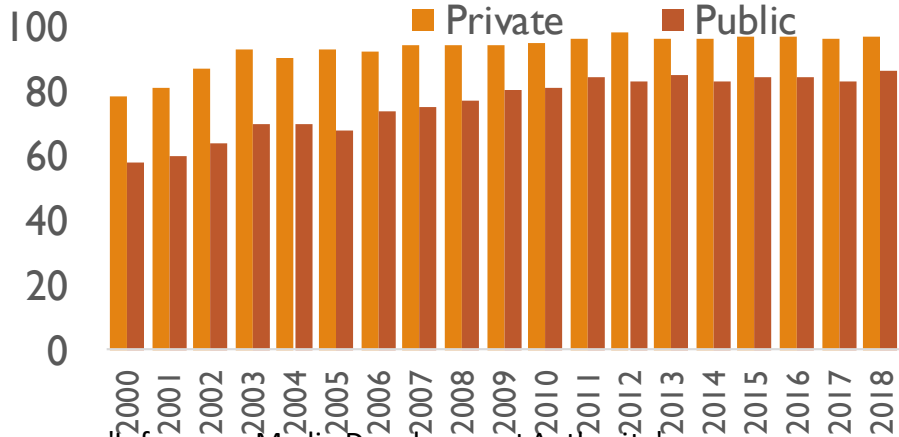
Top reasons for not using the internet of Filipinos



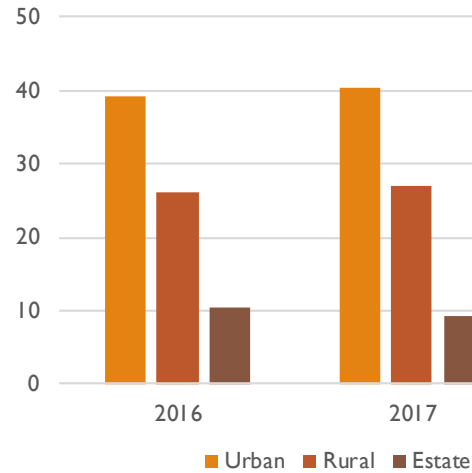
Certain segments of the population have better access to computers and the internet

More affluent areas tend to have better access to computers and the internet

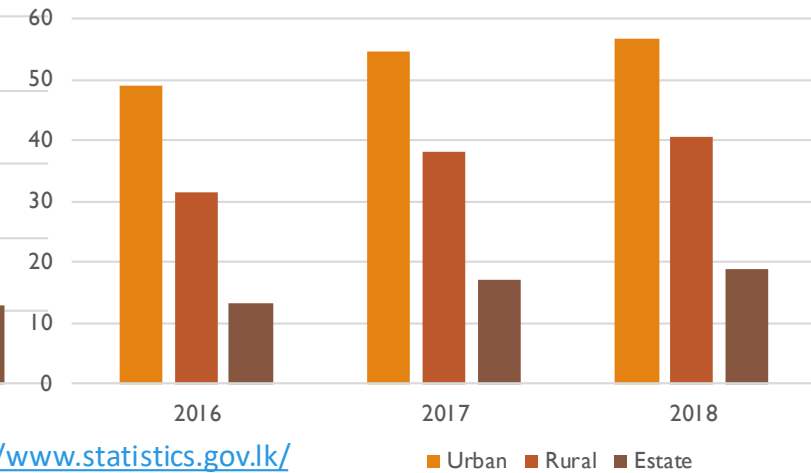
Computer ownership in Singapore, by housing type



Computer Literacy in LKA by area



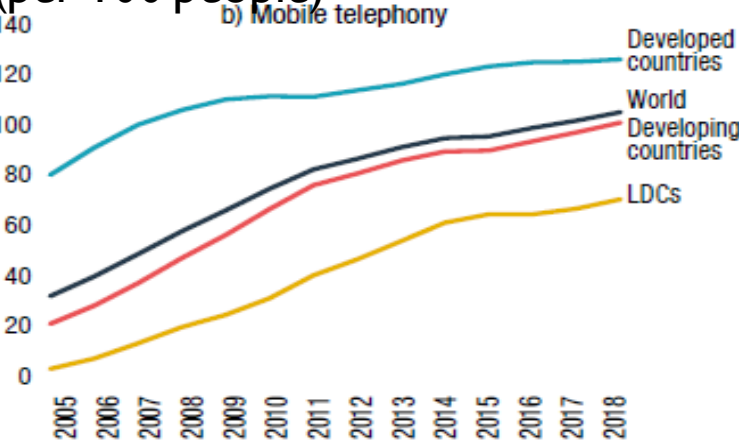
Digital literacy in LKA by area



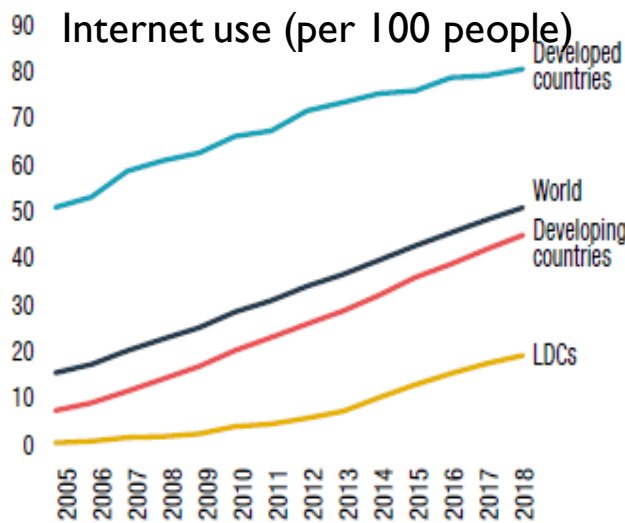
Source: <http://www.statistics.gov.lk/>

Source: - Infocomm Media Development Authority

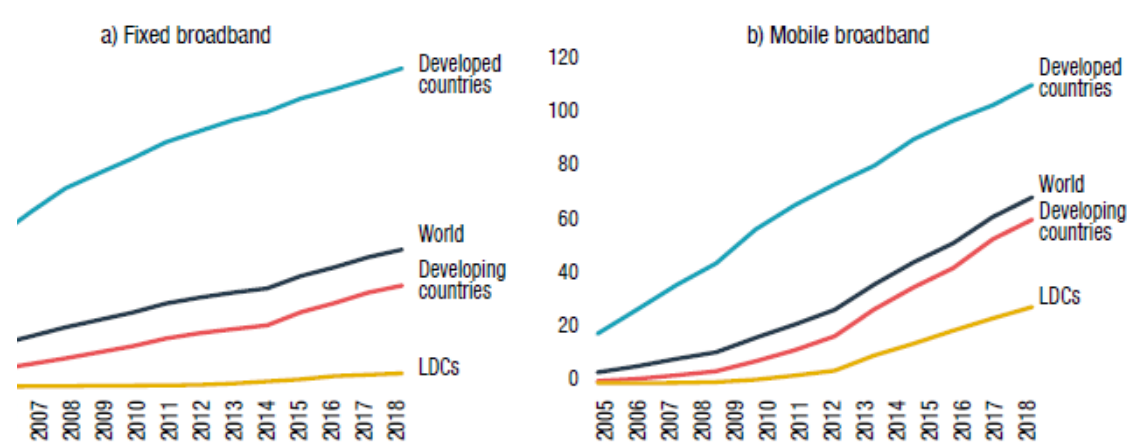
Mobile telephony subscriptions (per 100 people)



Internet use (per 100 people)



Broadband subscriptions, fixed and mobile (per 100 people)



NCTAD, based on ITU Statistics database (<https://www.itu.int/en/ITU-D/Statistics/Pages/stat/default.aspx>).

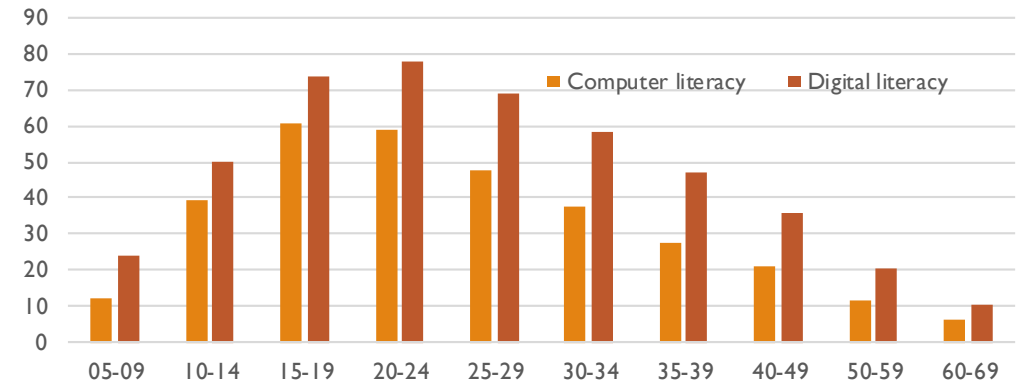
Better digital access for those who are not so old or not so young.

Percentage of Individual computer usage in Singapore, by age

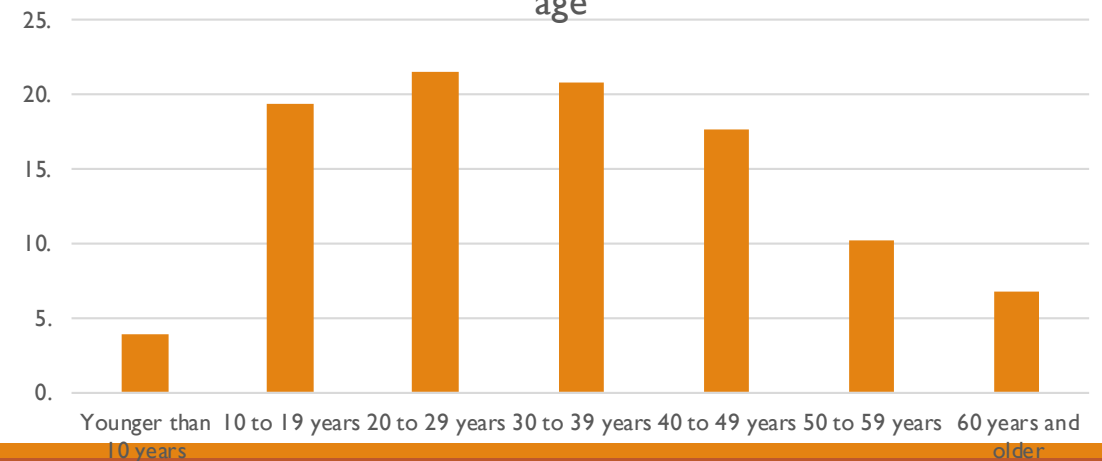
Age Group (Years)	2015	2016	2017	2018
7-14	89	89	93	94
15-24	94	94	95	96
25-34	91	91	93	96
35-49	81	81	86	88
50-59	56	56	62	63
60 and above	25	25	28	33

Source Url: <https://www.imda.gov.sg/industry-development/facts-and-figures/infocomm-usage-house-holds-and-individuals>

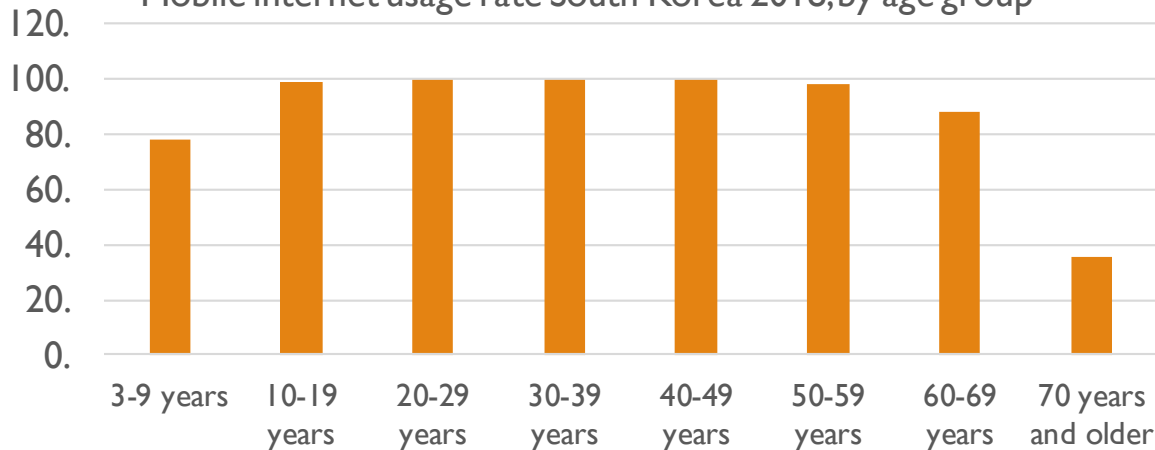
Computer literacy rate and digital literacy rate in LKA (%) by age group



Breakdown of internet users in China in March 2020, by age

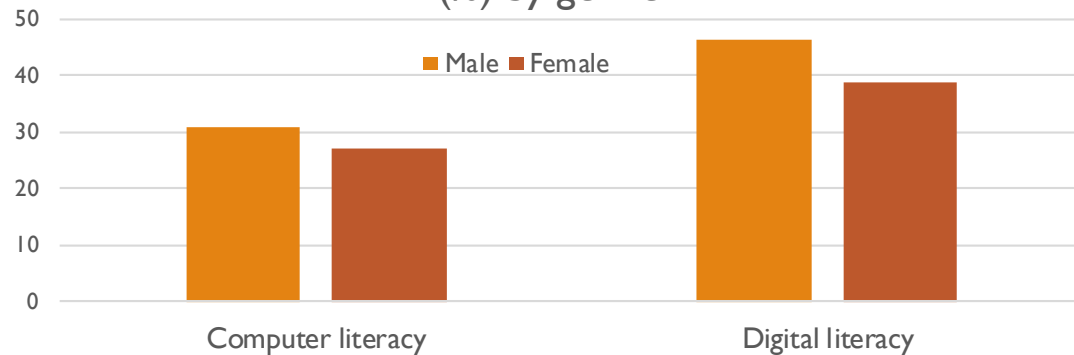


Mobile internet usage rate South Korea 2018, by age group

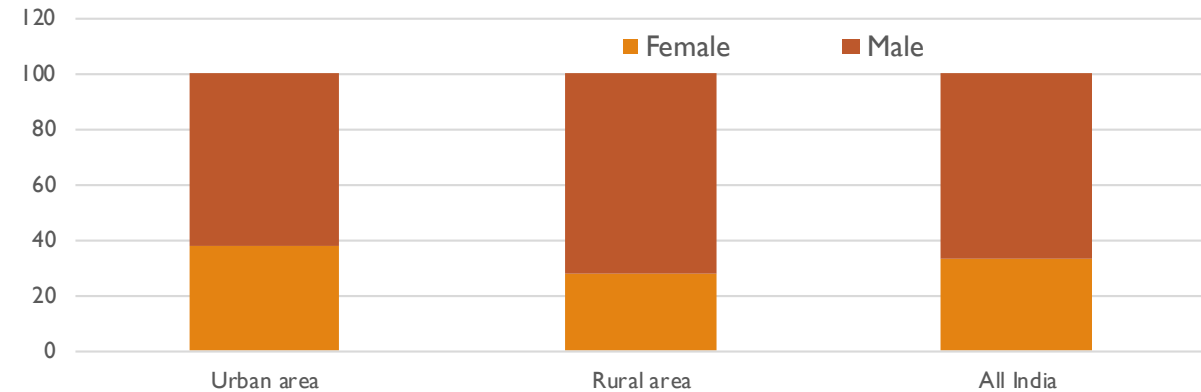


ICT access is commonly better for males than females.

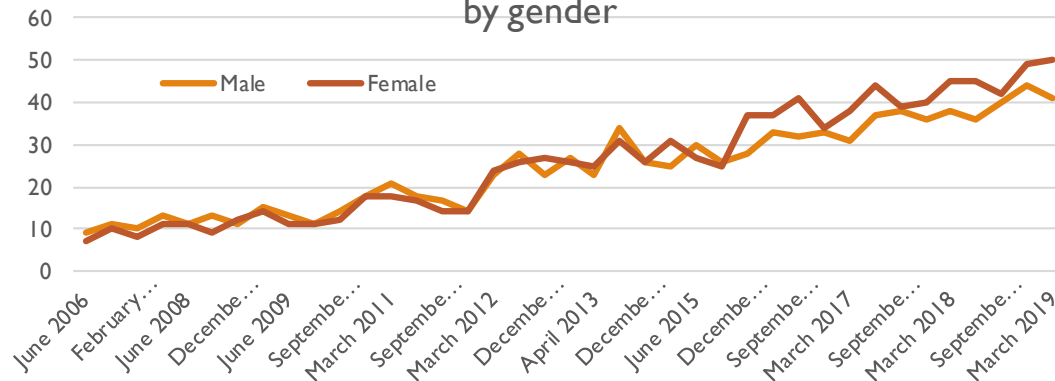
Computer literacy rate and digital literacy rate in LKA (%) by gender



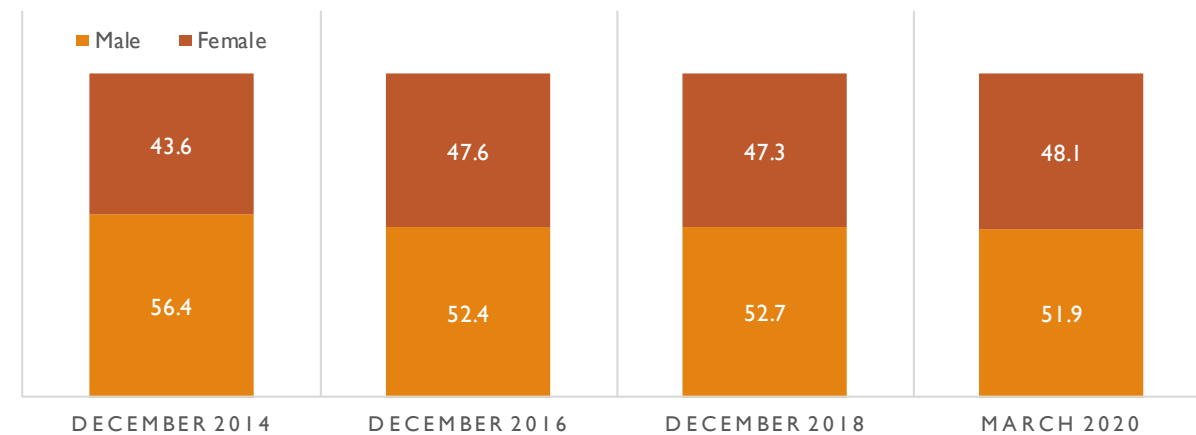
Internet users in urban and rural India, by gender



Monthly internet user penetration rate in the Philippines, by gender

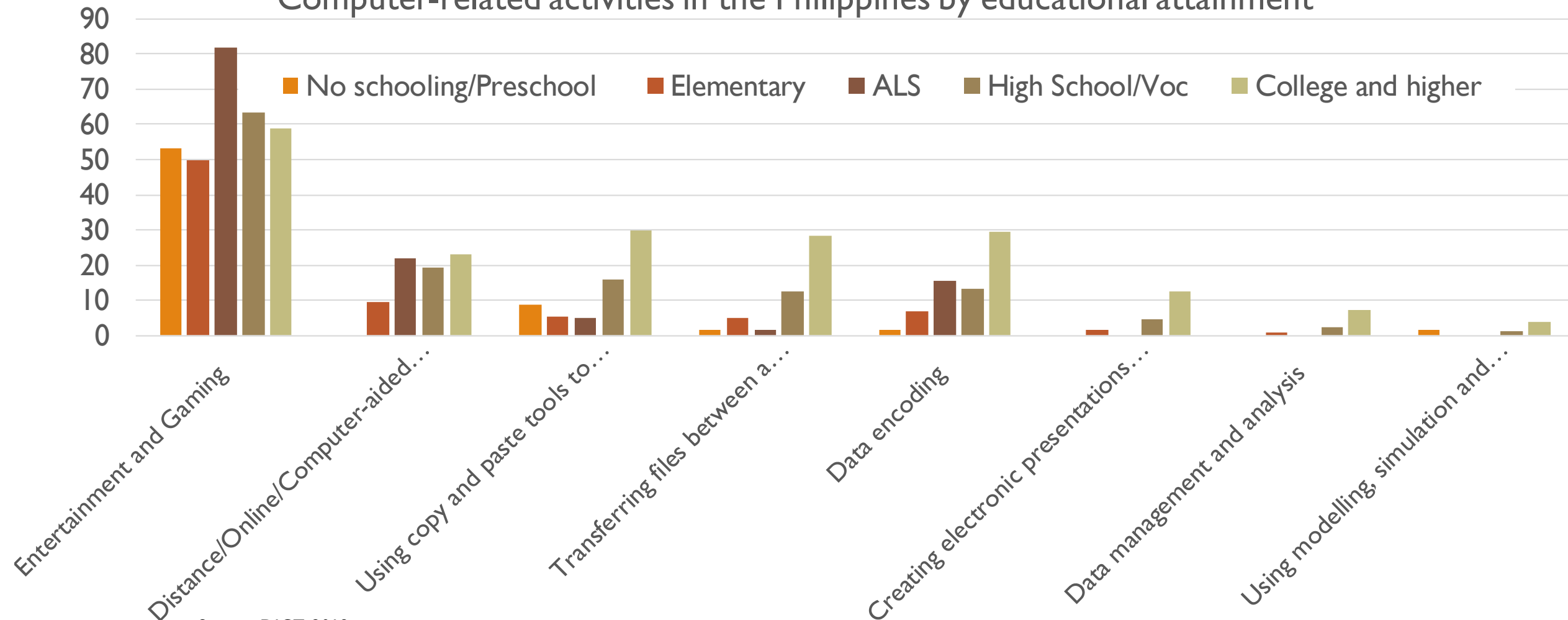


GENDER DISTRIBUTION OF INTERNET USERS IN CHINA 2014-2020



Highly skilled for more productive tasks

Computer-related activities in the Philippines by educational attainment

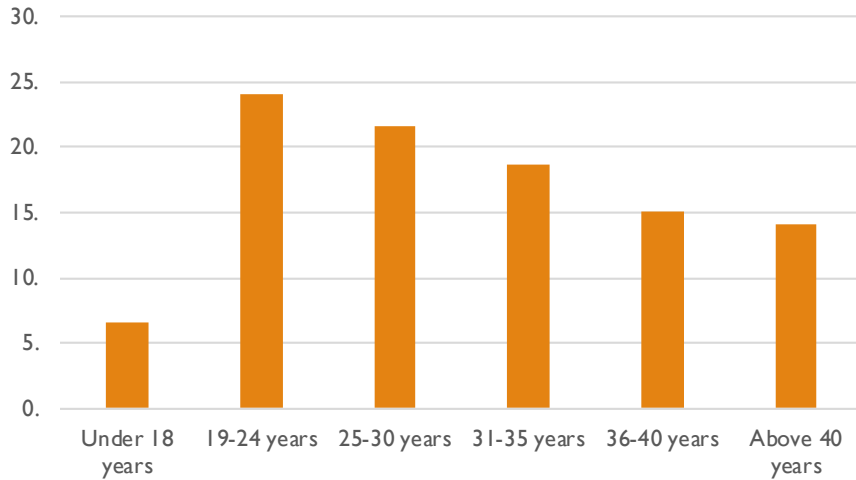


Source: DICT, 2019

These segments are also more likely participate in—and benefit from—the platform economy

Participation in digital platforms is more common among the not so young or not so old

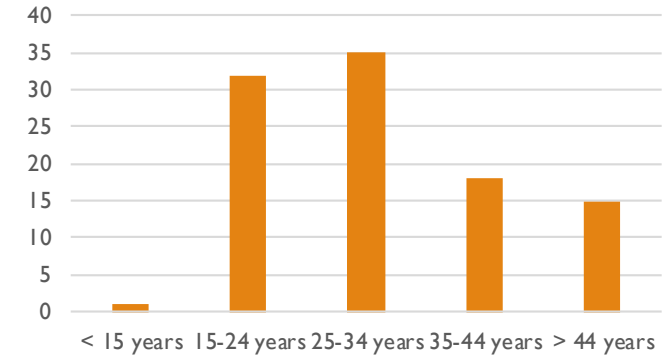
E-commerce app users in China, by age



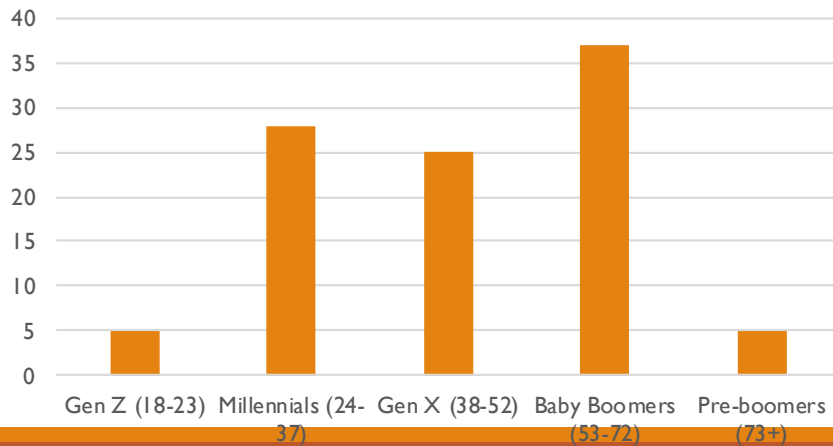
Use of the internet in Japan, by age group



Share of online consumers in India 2016 by age group



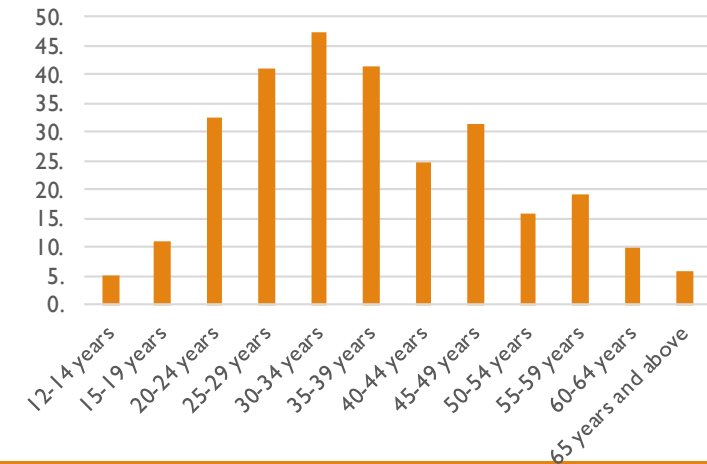
Share of Canadian online shoppers 2019, by age group



Online shoppers and Internet users in the Philippines, by age group

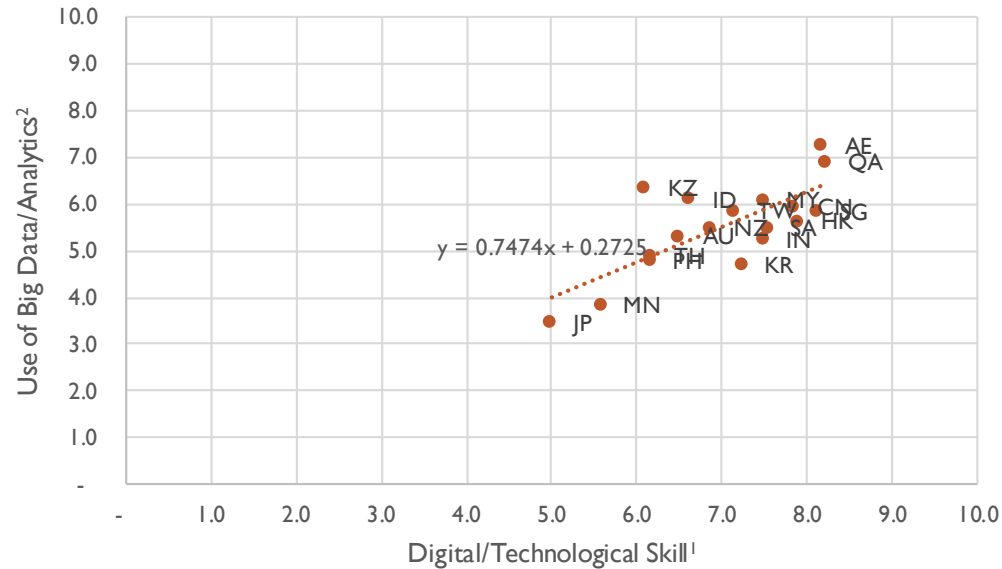


Mobile payment usage in Taiwan 2019, by age group

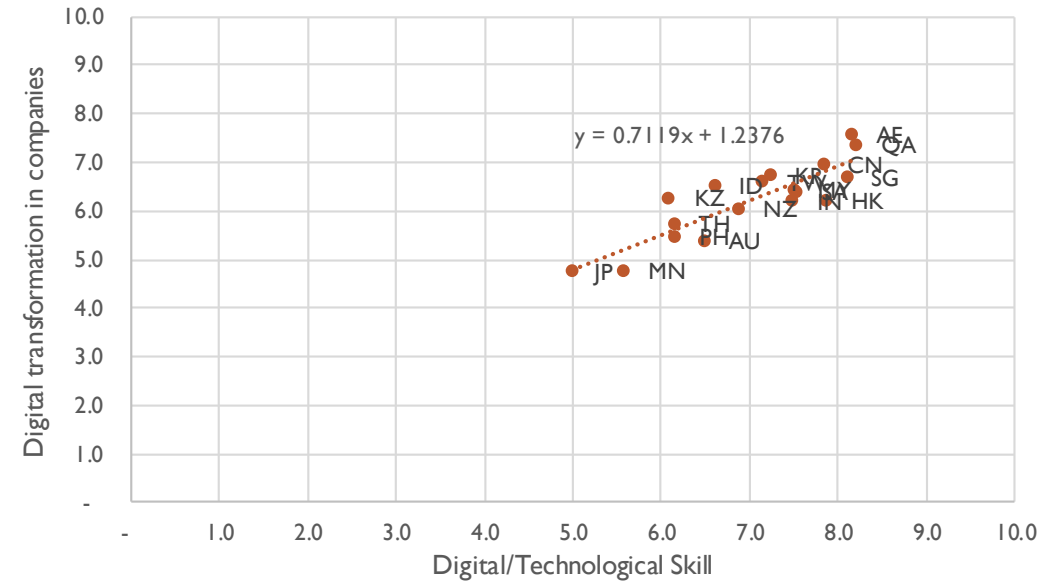


Digital skills are important to maximize the use of the digital economy.

Digital and Technological skill and use of advance technologies in selected Asian Countries, 2019

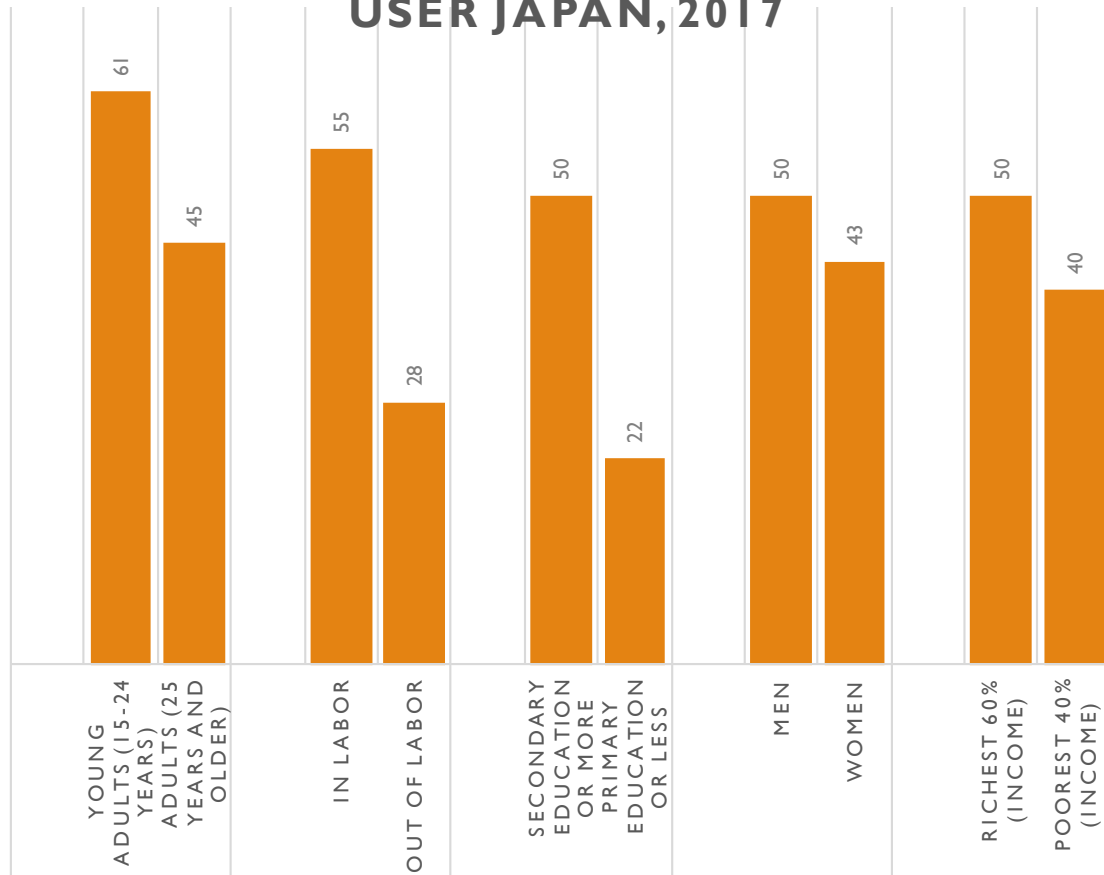


Source: © IMD WORLD COMPETITIVENESS ONLINE 1995 – 2020

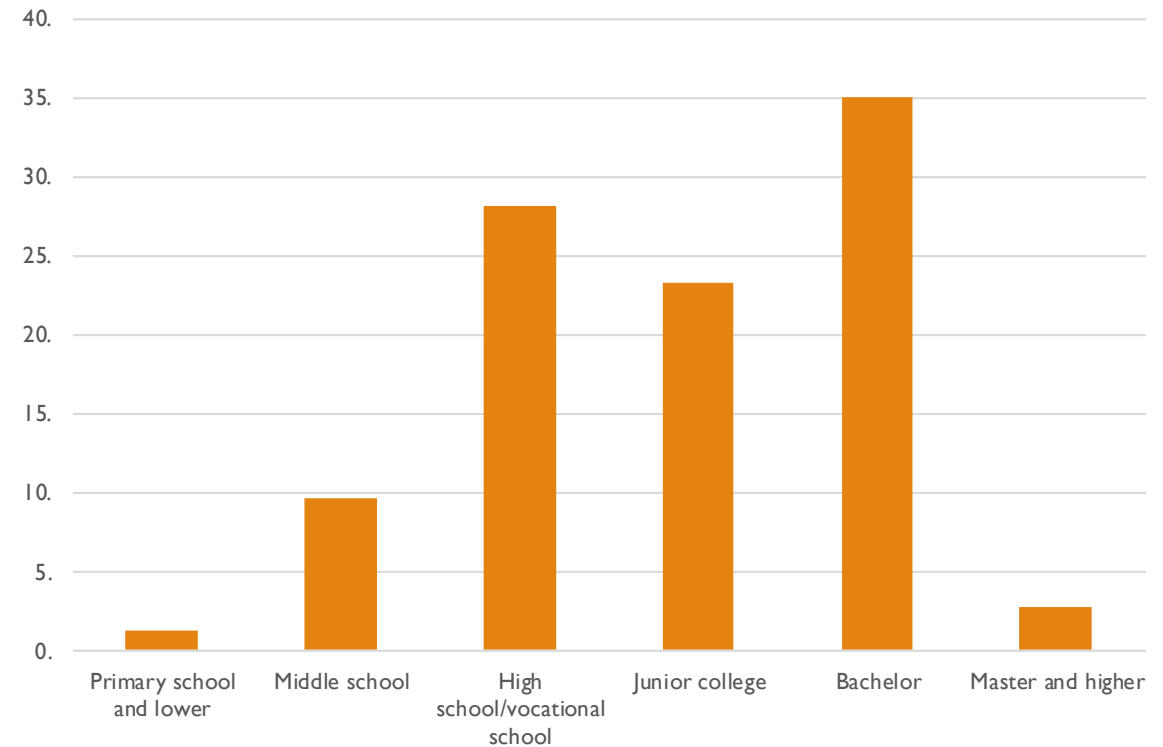


Digital transactions occur more often for specific segments

PERCENTAGE ONLINE SHOPPING USER JAPAN, 2017

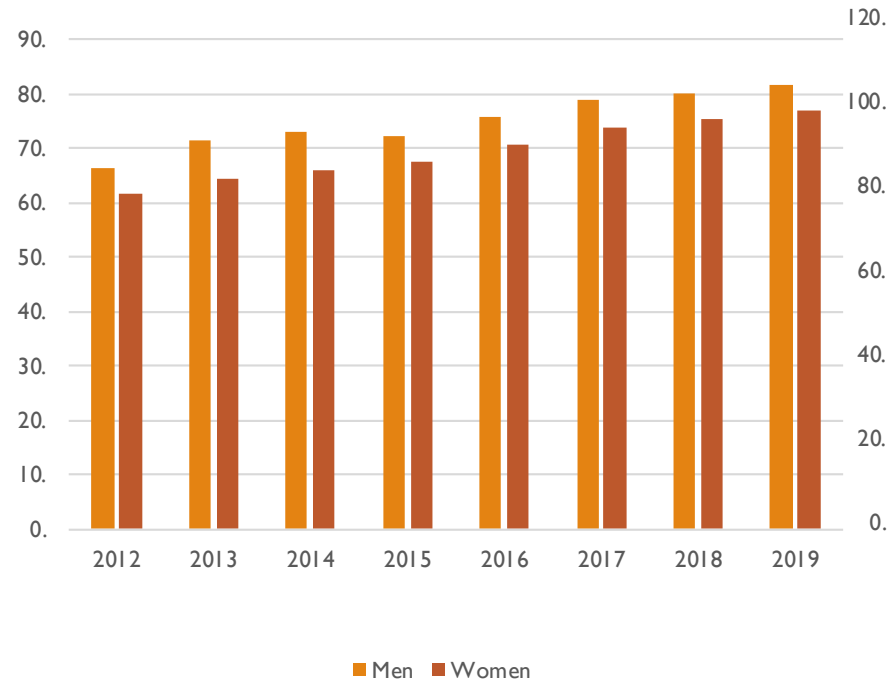


Distribution of mobile banking users in China in 2015, by level of education (%)

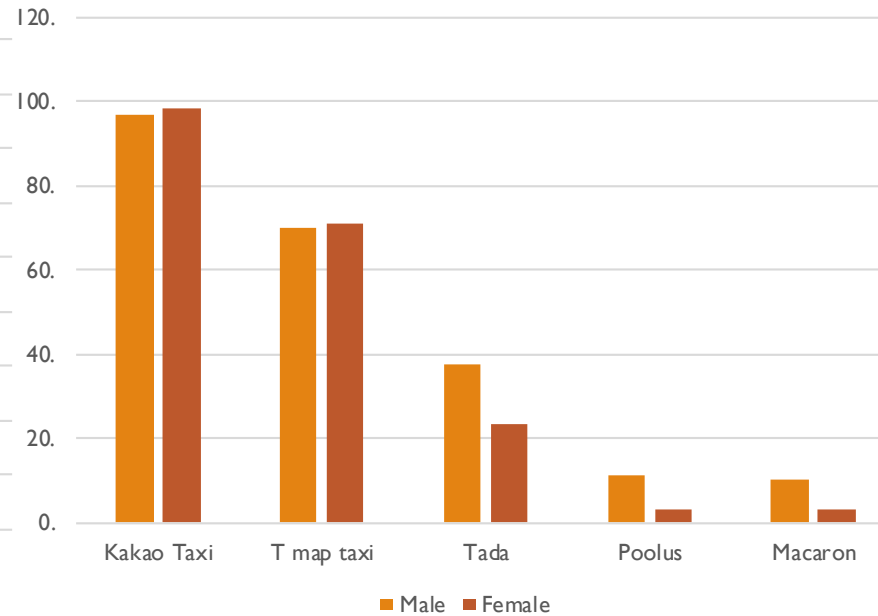


Often, males tend to participate more

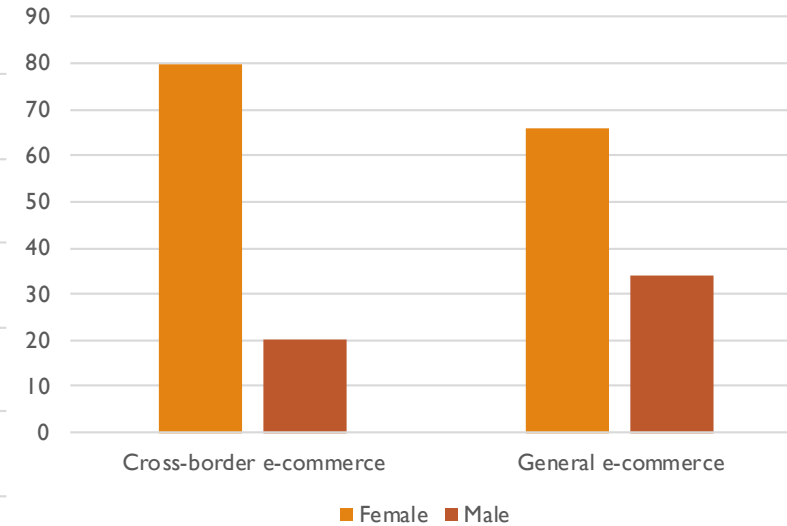
Online shoppers in the Netherlands 2012-2019, by gender



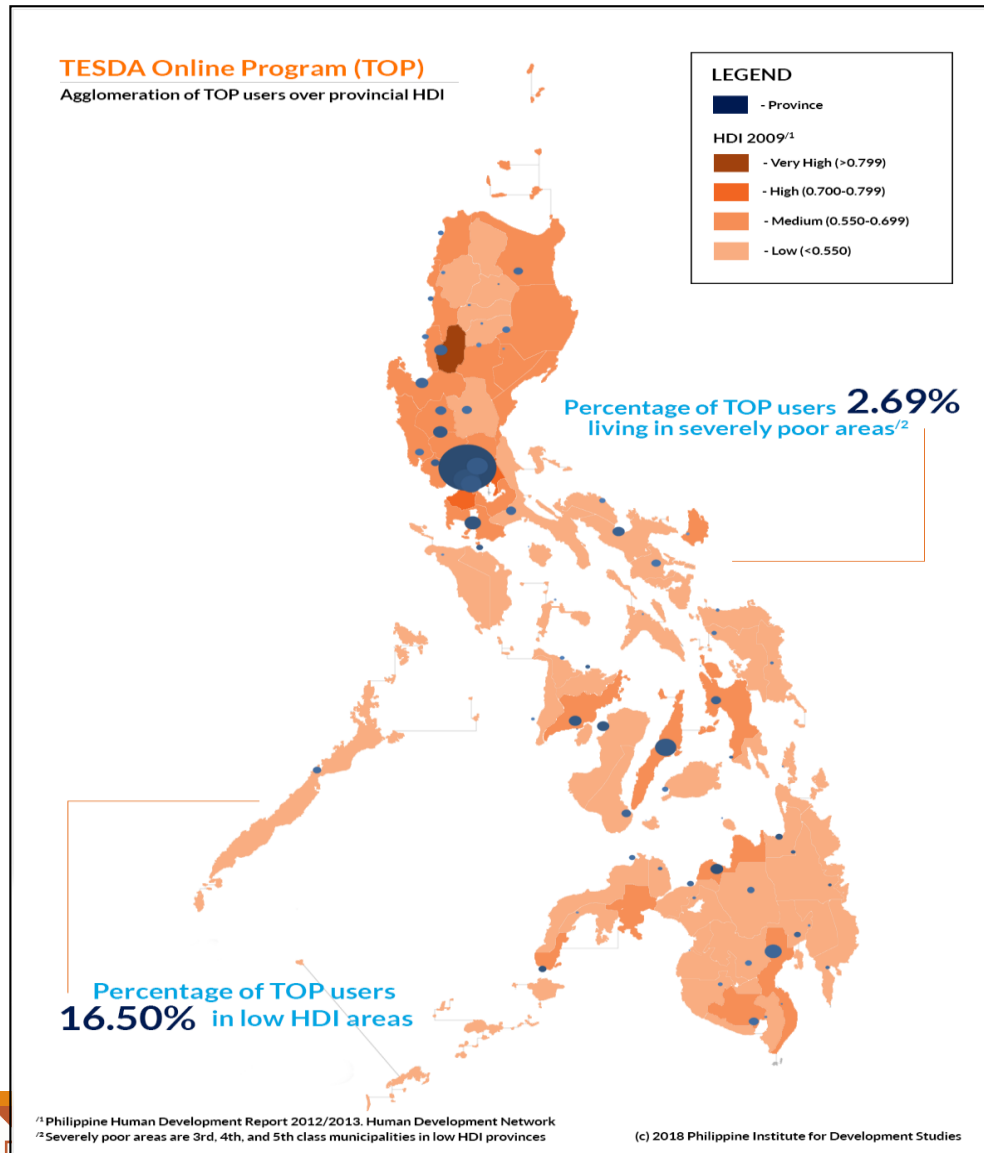
Most well-known ride hailing mobile apps in South Korea as of March 2019, by gender



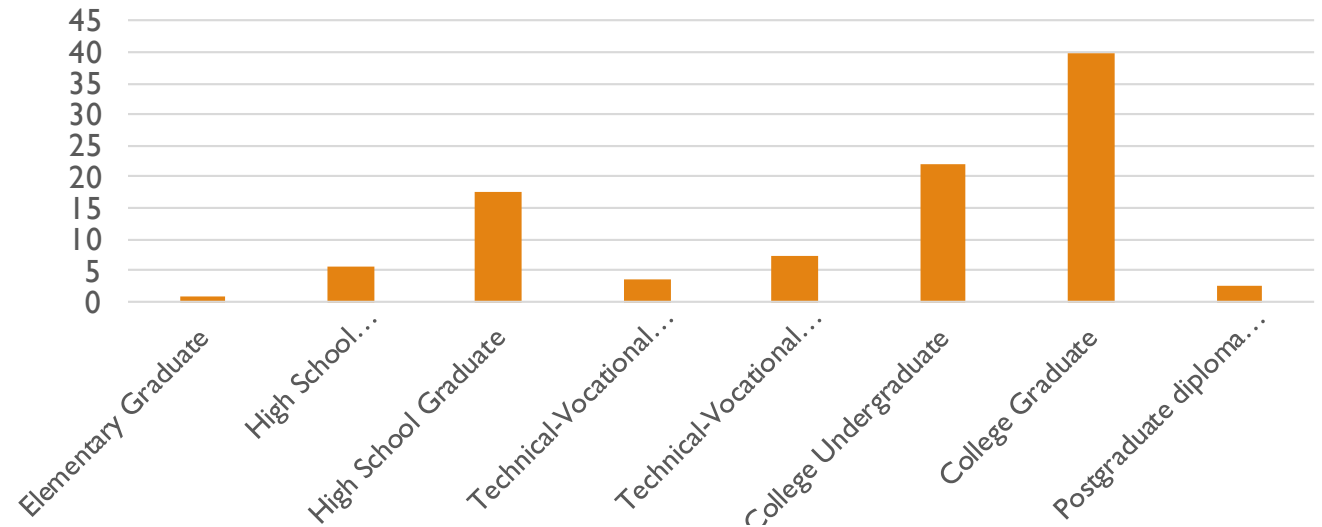
E-commerce type preference China Q2 2017, by gender



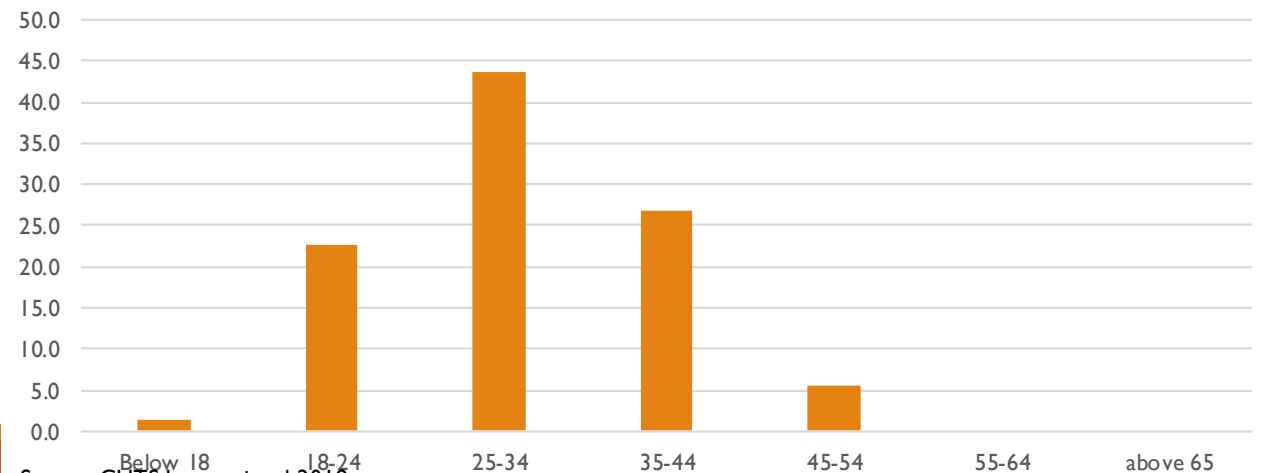
Better access to e-learning



Registered to E-TESDA (Philippines), by educational attainment



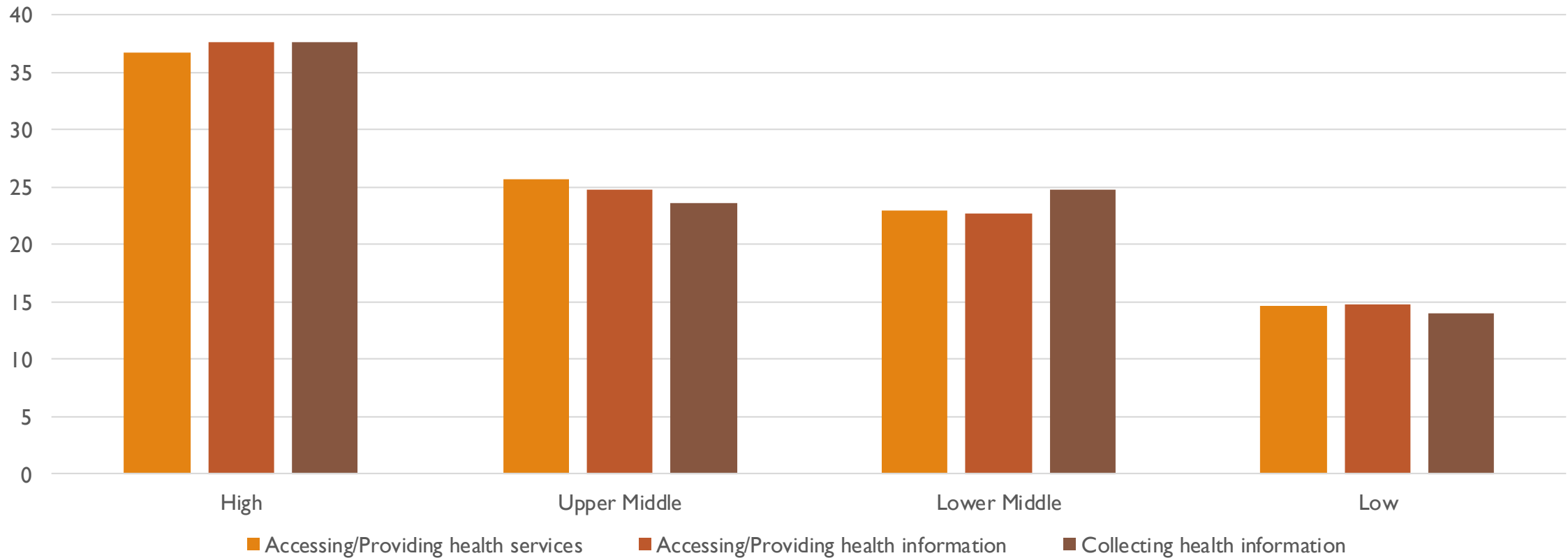
E-Learners in Vietnam, by age



Source: CUTS International 2018

Better access to E-health

Distribution of mHealth programmes, by income group



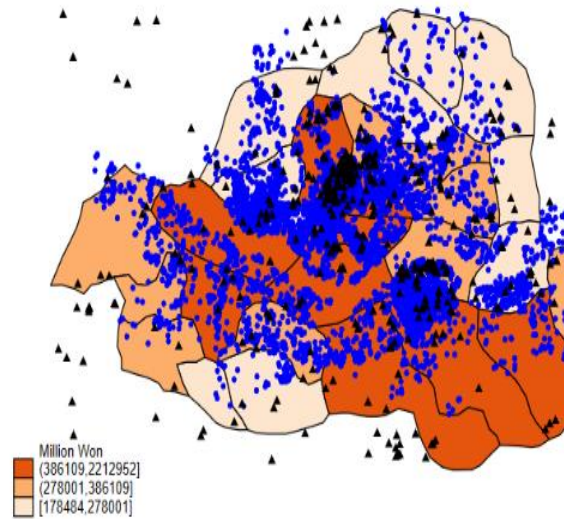
Source: WHO 2016

Platforms also face their own issues
related to usage divide

Usage access of AirBNB

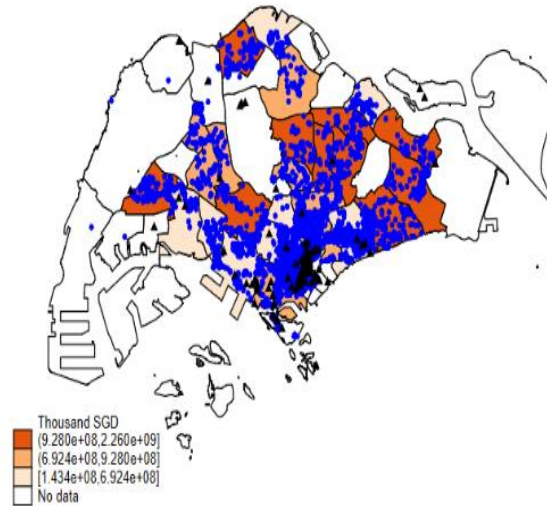
Airbnb listings in selected Asian countries/cities

citytax_2012 (Seoul City 2020)



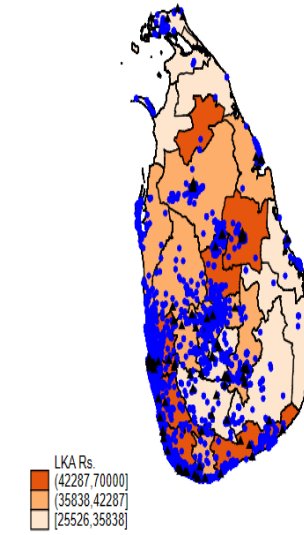
Blue Points: Airbnb Listings (Unweighted); Black Triangles: Points of interest

total_hhi_2015 (Singapore 2020)



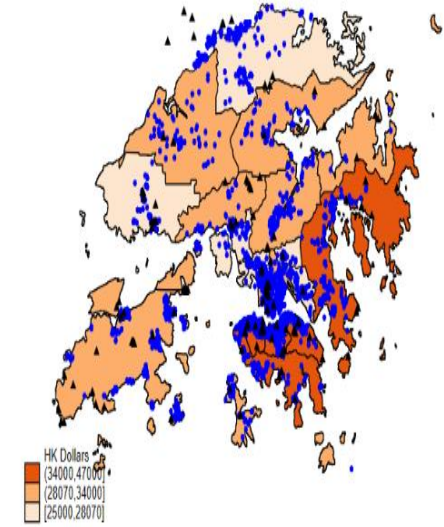
Blue Points: Airbnb Listings (Unweighted); Black Triangles: Points of interest

median_hhi_2016 (Sri Lanka 2020)



Blue Points: Airbnb Listings (Unweighted); Black Triangles: Points of interest

median_hhi_2016 (Hong Kong 2020)



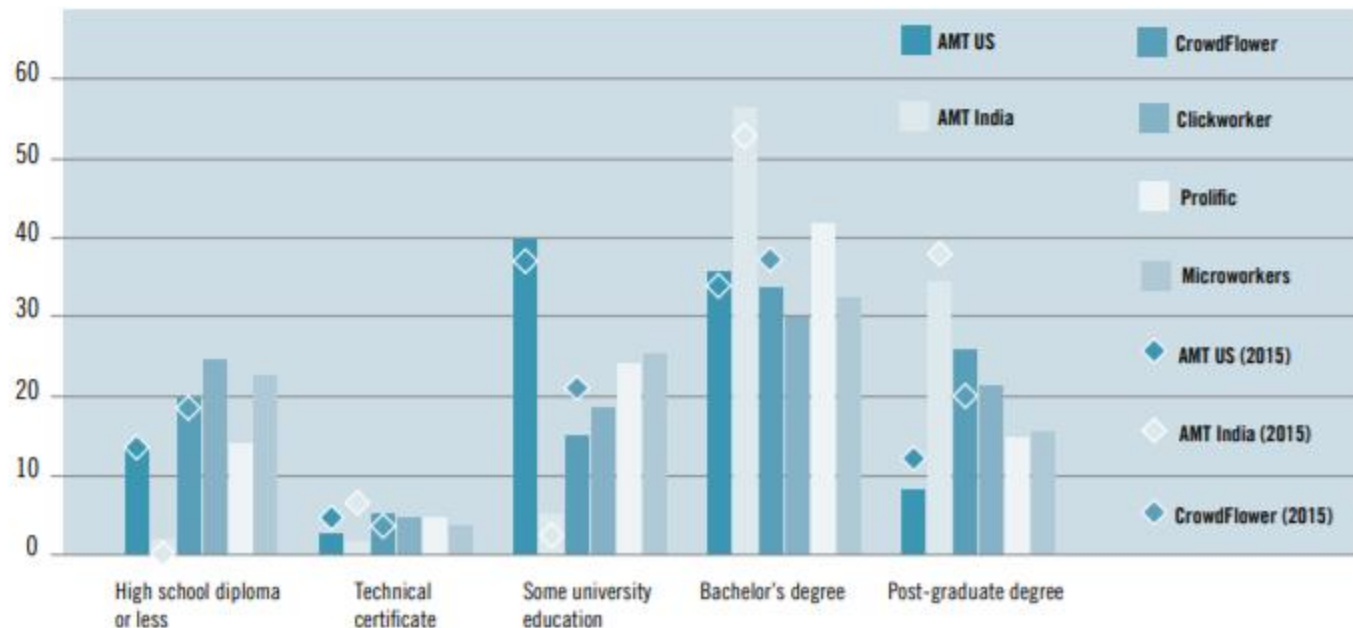
Blue Points: Airbnb Listings (Unweighted); Black Triangles: Points of interest

Source: Generated maps using data from Inside Airbnb and country shapefiles

Average HHI and AirBnB access overlaid together shows that areas in the central districts and richer areas tend to have more AirBnB listings

Crowdworkers are well-educated

Figure 3.6 Educational level of crowdworkers, by platform (percentages)

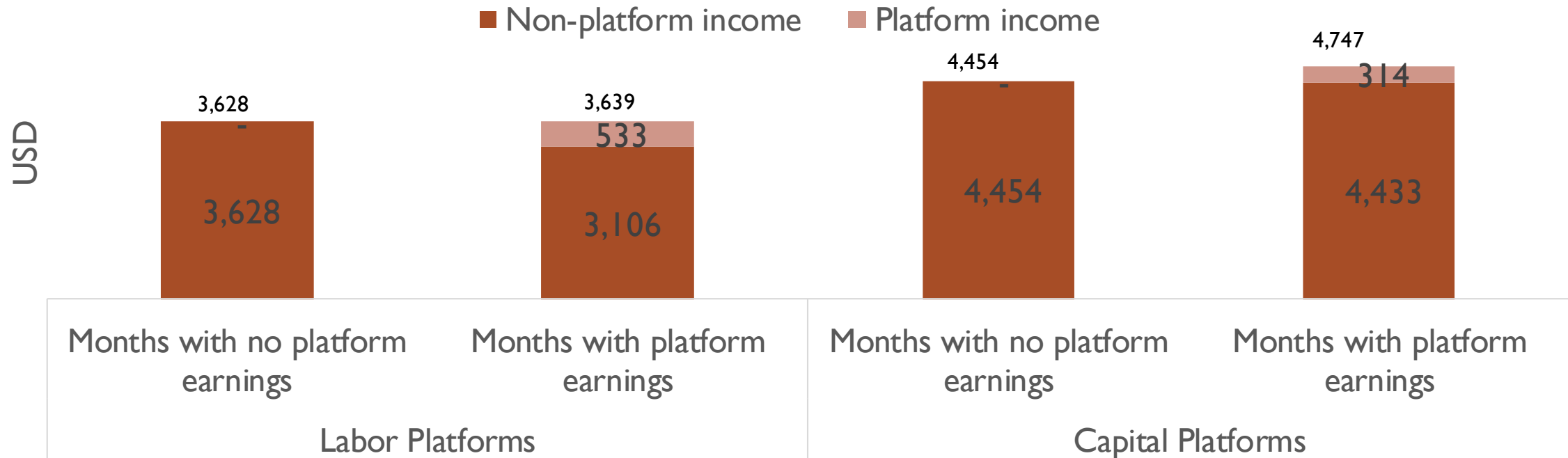


Crowdworkers are well-educated, with fewer than 18 per cent having a high school diploma or less in 2017. About one-fourth of the workers have a technical certificate or have some university education, and 37 per cent have a Bachelor's degree while 20 per cent have a post-graduate degree or higher education.

Source: ILO survey of crowdworkers, 2015 (S1 and S2) and 2017.

Earning more from platforms requires assets

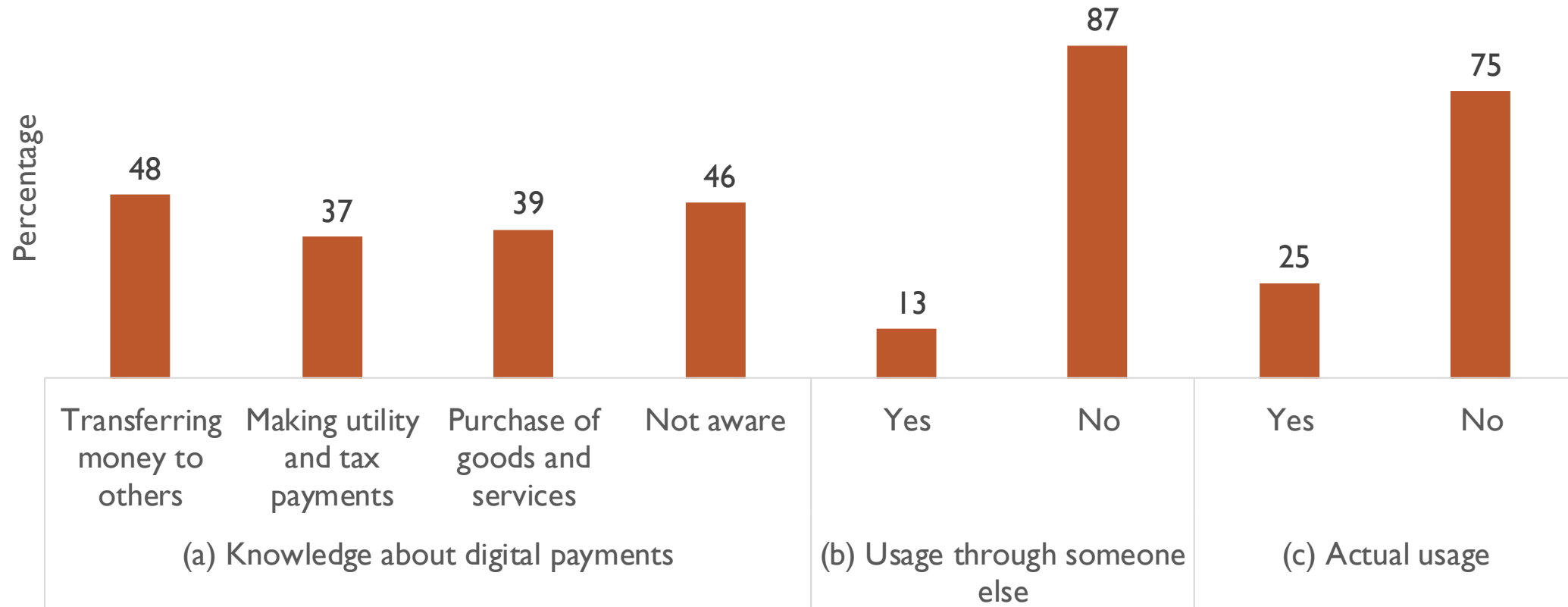
Earnings in months with and without platform earnings (United States)



Source: Farrel and Greig (2016)

People who rent out assets on “capital” platforms like Airbnb or car-sharing site Turo are bringing in supplemental income. That’s starkly different from people who sign up for “labor” platforms like Uber or TaskRabbit. They’re typically working to offset shortfalls in their monthly earnings.

Indirect users of digital platforms



Key takeaways

- 1 Digital divide can be seen as a determinant of the use of digital platforms as barriers to material access, motivational and skills access affect how digital platforms will be used and maximized
2. Platforms also face their own issues related to usage divide which may contribute to higher levels of inequality
3. Policy interventions should address not only the provision of material access but also addressing the other forms of divide.

Policy Recommendations (I)

Access	Policy Recommendations
Motivational	<p>Raise awareness on the implications of platforms and e-commerce</p> <p>Increase trust in online transactions by formulating and effectively enforcing laws and regulations needed to support the platform economy</p> <p>Increase entrepreneurial knowledge</p>
Material	<p>PPP to support national backbone infrastructure especially for the rural areas</p> <p>Impose quality targets for telecom services</p> <p>Invest in hubs, incubators and technology parks to support digital entrepreneurship</p>
Skills	<p>Promote digital financial literacy</p> <p>Build relevant skills to enable active participation in the digital economy especially for older segments of the population.</p> <p>Provide opportunities for women to participate in the digital economy</p> <p>Economies should also recognize the high importance of the use and promotion of multilingualism in the Internet and Digital Economy</p>

Policy Recommendations (2)

Platform	Policy Recommendations
E-commerce	Reduce regulatory burden for businesses Obtain the trust of consumers by handholding on the use of the platform; Increase data security
E-Health	Improve policy environment surrounding e-health which would include the use of digital appointments; digital data collection; e-prescriptions; etc. Increase awareness from both doctors and consumers on Telemedicine
E-Learning	Provide less expensive means of participating in e-learning Public-private partnership is important in the formulation of modules



Philippine Institute for Development Studies
Surián sa mga Pag-aaral Pangkaunlaran ng Pilipinas

Service through
policy research

Thank you



/PIDS.PH



@PIDS_PH



<http://www.pids.gov.ph>

EMAIL: fquimba@mail.pids.gov.ph