

THE CONTRIBUTION OF PLATFORM LIVELIHOODS TO AN INCLUSIVE DIGITAL ECONOMY IN INDONESIA

Literature review
and stakeholder
consultations

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DFS Lab and RISE Indonesia



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Executive Summary

INTRODUCTION AND METHODOLOGY

This report draws on 15 in-depth expert interviews and over 100 papers and reports to explore seven interconnected themes about the platform economy and digital inclusion in Indonesia. Our specific concern is platform livelihoods—the ways in which an increasing number of Indonesians rely on digital marketplaces and social media platforms to earn a living by working, trading, renting, and creating. Our seven research questions assess the state of the evidence and key unknowns about the scale, scope, and quality of these livelihoods, with particular emphasis on rural areas and the prospects for women's participation in the platform economy.



WHAT HAS BEEN THE IMPACT OF COVID-19 ON PLATFORM LIVELIHOODS?

The COVID-19 pandemic was devastating to the Indonesian economy and to individuals seeking to earn a living. Lockdowns and lack of mobility limited the ability of many small enterprises to sell. The impact on platform livelihoods was therefore mixed. The ride-hailing sector suffered, leading some drivers to replace ride-sharing with delivery. Meanwhile, the pace of digitalization by micro and small enterprises (MSE) increased, with significant jumps in MSE participation on e-commerce platforms.

Any 2021–2022 review must address the impact of the COVID-19 pandemic on the contours of the Indonesian digital economy. The shocks of the pandemic have changed the pace and trajectory of digitalization around the world. All of this study's other animating questions—on scale, earnings, rural participation, digital financial services' (DFS) uptake, etc.—must be interpreted in light of the disruptions and changes brought about by the still-unfolding pandemic.



HOW MANY PEOPLE HAVE PLATFORM LIVELIHOODS IN INDONESIA?

There are many kinds of platform livelihoods—combinations of working, selling, renting, and creating. This makes it difficult to accurately count the number of people involved, particularly when individuals can a) use more than one platform, b) earn part time via a platform, and/or c) employ others to help them with their platform livelihood. There are several methods for enumeration: nationally representative surveys, analytic estimation, and (the approach used in this review) the aggregation of reports from individual platforms.

Evidence from a [2019 World Bank survey](#) suggests at least 1.2 million Indonesians were involved in gig work, mostly in ride-hailing, transport, and logistics/delivery, and 13 million in varying degrees of e-commerce, particularly informal social commerce. More recent bottom-up figures from platforms are proportionally in alignment with these estimates, but they reflect a significant boost due to continued platform expansion and the pandemic.

Reports from the platforms do not distinguish between full time and part time workers and sellers. In gig work, we estimate at least 2.25 million active delivery drivers and ride-hailers.

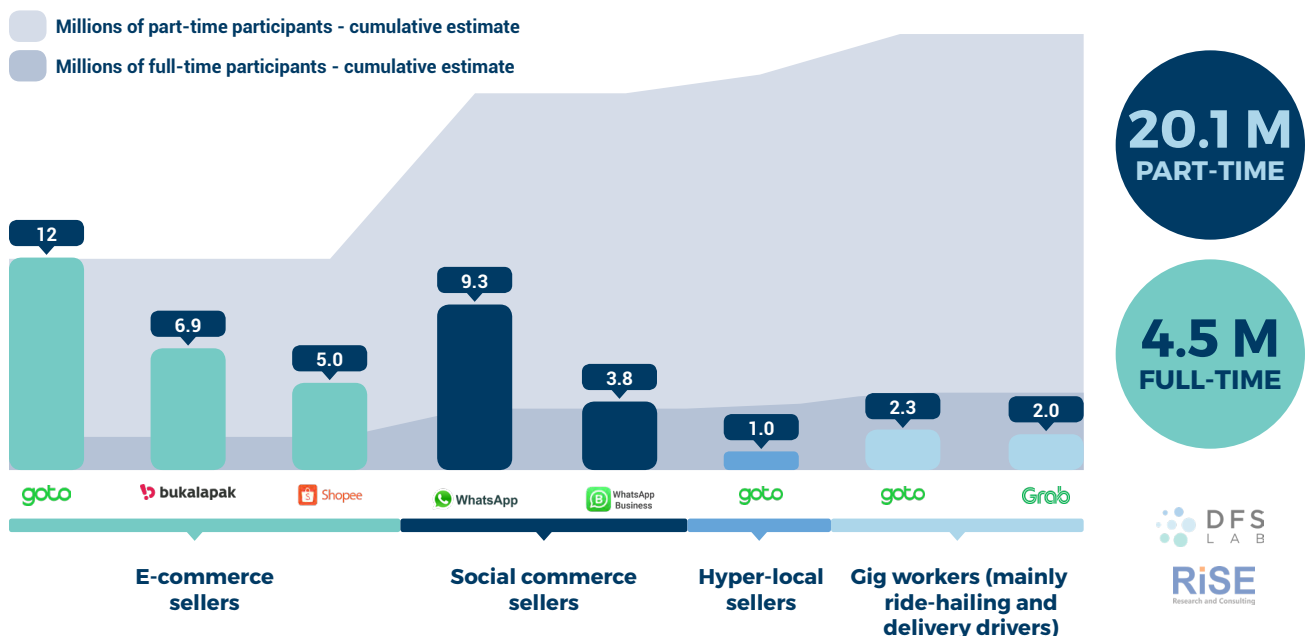


In trading, we identify 12 million e-commerce vendors, 9.3 million informal social commerce sellers, 1 million hyper-local merchants in food prep and rapid fulfillment, and 60,000 farmers and fishermen. We believe these are four reasonably distinct, non-overlapping categories of engagement. In renting, we estimate 221,000 property owners, and in creating perhaps 7,000 high-visibility, high-earning creators.

These reports suggest that in 2022 as many as 20 million Indonesians earned at least some of their livelihood via online marketplaces and/or social platforms. Of these, as many as 4.5 million may do so exclusively. The exclusivity numbers are much smaller because many individuals have multiple sources of income and earn only fractionally from platform sources.

Nevertheless, a figure of 20 million represents approximately 1 in 5 of Indonesian workers. This degree of participation is clearly enough to merit continued attention from policymakers, technologists, and the digital development community.

Figure 1: We estimate that as of 2022, as many as 20 million Indonesians rely on digital platforms for at least some part of their livelihood, using unverified numbers reported by the platforms themselves and by other sources.



Source: RiSE Indonesia, DFS Lab and Caribou Digital research 2022, based on self-reported platform data and World Bank Survey Data (social commerce). *Assumptions: (1) 100% multi-homing within a category, so the highest reported user base by any platform is the whole user base, (2) The ratio of full-time participants to the whole user base is assumed to be 1/6 and 1/3, for sellers and workers, respectively; these deflators are based on benchmark data sourced from Amazon, Tokopedia and the World Bank (3) only platforms with 750,000+ enrollees are included; agriculture and other niche forms of platform livelihood like renting (Airbnb etc.) and content creation/influencing, are excluded given their smaller populations. Further details on sources/methods: see the appendix at <https://www.platformlivelihoods.com/indonesiareview/> The work is licensed under the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International License, see <http://creativecommons.org/licenses/by-nc-sa/4.0/>



HOW MUCH DO PEOPLE EARN IN PLATFORM LIVELIHOODS?

There are some studies of earnings, both of gig workers (particularly drivers) and MSEs (retail kiosks and merchants participating in the [Grab](#) and [GoTo](#) ecosystems). Studies conducted in partnership with Grab and GoTo have suggested there are significant upsides for drivers, in terms of access to and quality of earnings (above minimum wages). Other studies, from [Rest of World/Premise](#), and from [Fairwork](#), may calculate earnings differently and are not as optimistic about whether drivers can exceed minimum wage.

At this stage, the most cautious assessment of the question of earnings is still that “it depends”—on how time is calculated (including idle time), on vehicle costs, on whether drivers and merchants are full time or part time, and on whether one is considering averages or distributions of success. This measurement and assessment challenge is not limited to Indonesia, but is rather a part of shift away from paystubs and employment that comes part-and-parcel with gig work and platform livelihoods.



BEYOND EARNINGS, HOW DO PEOPLE EXPERIENCE PLATFORM LIVELIHOODS?

A few studies illustrate the factors and experiences, beyond earnings, that Indonesian platform workers (particularly drivers) have to weigh when deciding to enter and whether to stay in platform work. There are trade-offs in flexibility, health, and stress—in a workday driven by an algorithm and ratings—and in the low levels of protection given their status as contractors rather than employees. These are similar themes to platform livelihoods elsewhere in the world.



WHAT ARE THE CHALLENGES AND ADVANTAGES FOR WOMEN IN INDONESIA’S PLATFORM ECONOMY?

There is a cohesive body of evidence emerging around gender and three key areas of the platform economy: driving/delivery, in which women face barriers to entry based on discrimination; e-commerce, where women face barriers to entry based on complexity; and social commerce, where women face few barriers to entry, but possibly face challenges in translating entry to advancement. Social commerce is emerging as the most common form of online activity for Indonesian MSEs, and the majority of those conducting social commerce are women. Social commerce is the open door through which many Indonesian women are walking to join the digital economy.



WHAT ARE THE PROSPECTS FOR PLATFORM LIVELIHOODS IN RURAL AREAS?

It's no secret that rural Indonesia presents challenges for the platform economy. A few studies, notably by [Alpha JWC Ventures/Kearney](#), and [Facebook/CSIS](#), deal specifically with the prospects for platforms to support rural livelihoods. There are significant infrastructure challenges, including electricity and internet access. There are challenges of inter- and intra-island transport that can also impact e-commerce. Lower density, purchasing power, and internet-readiness of customers also limit the attractiveness (and increase the cost-to-serve) for platforms of all kinds.

Despite these obstacles, there are some indications that platformization is growing in rural areas: e-commerce is serving rural consumers, there is some spread in ride-hailing (both by the major platforms and by some smaller players), and there is experimentation in the platform agriculture space. However, the next few years will be critical in developing business models and product/service sets that can appeal to rural customers and involve more rural households in platform livelihoods.



DOES FINANCIAL INCLUSION SUPPORT PLATFORM LIVELIHOODS, AND VICE VERSA?

The short answer is “yes.” There is clear interplay between DFS and platform livelihoods in Indonesia. Research suggests many merchants in the [Gojek](#) ecosystem are using digital payments for the first time. Drivers, too, are at the front lines of cash-in and digital transactions and are encouraging many consumers (and other drivers) to switch to digital payments.

The situation is fluid, however, with regulatory changes that allow more merchants (with or without legal entities) to do cash-in-cash-out transactions and the potential that WhatsApp and/or other parts of Facebook may soon offer in-app payments and transfer support.



IMPROVING PLATFORM LIVELIHOODS IN INDONESIA

Our review of the literature and discussions with stakeholders surfaced four clusters of recommendations about how to improve platform livelihoods in Indonesia: deepening DFS interventions for inclusion in the platform economy, promoting education and transferring knowledge, protecting workers, and pursuing improvements to the business environment.

Looking across these recommendations, and across this review's broad assessment of the overall state of platform livelihoods and digital inclusion in Indonesia, we offer these six conclusions:

1. Platform livelihoods are significant. We estimate that in 2022, as many as 1 in 5 working Indonesians (as many as 20 million) rely on a platform for at least a portion of their income/livelihood, while a subset (4.5 million) are likely full-time platform workers or sellers.
2. Many more Indonesians rely on platform selling than on platform working, platform renting, or platform creating.
3. Platform sellers may experience a higher quality of life than platform workers.
4. With low barriers to entry, social commerce and informal trading are important parts of digital inclusion.
5. Dynamics of exclusion remain, around gender (particularly in ride-hailing) and in the rural/urban divide.
6. There are some key unknowns requiring further attention. We suggest:
 - Gathering more nationally representative data about platform livelihoods
 - Taking a closer look at productivity
 - Understanding drivers and pathways of mobility
 - Researching the changing ecosystem, not just the enterprises in it
 - Keeping an eye on disruption and the challenges of change

There is a considerable opportunity for Indonesia to be a world leader and beacon of inclusive digital platform economies—but the policy, research, practice, and technology communities each have a role and must work together to bring this about.



Introduction

In Indonesia, as in many other parts of the world, there is a palpable sense that the digital economy is changing how many people pursue livelihoods—find work, sell goods and services, and earn a living.

One of the most dynamic and widespread elements of this ongoing digital transformation is the spread of digital platforms—both marketplace platforms, which host formal marketplaces connecting buyers and sellers of goods and services, and social media and messaging platforms, which allow for informal exchanges and coordination of all manner of economic activity.

These digital platforms are not merely extensions of analog markets; they are new forums for economic activity, in which information about buyers and sellers is gathered, analyzed, and disseminated in real time. Digital marketplaces grow and adapt. The experience of two people in a marketplace may never be the same; two buyers might not see the same goods for sale, or even see the same prices. Similarly, social media and messaging platforms are not simply replacements for newspapers or telephones. They host new forms of social coordination, buttressed by algorithms and targeted advertising, that have become stitched into the daily lives of millions of people.

Indonesia is home to a particularly dynamic mix of homegrown and regional ventures—like [Grab](#), [GoTo](#), and [Bukalapak](#)—that have blossomed from brash startups into the top tier of global platform firms. International social media platforms have spread alongside these Indonesian ventures, particularly the three-headed juggernaut from Menlo Park: Facebook, Instagram, and WhatsApp.

Tens of millions of Indonesians use these platforms every day, particularly but not exclusively in the major metros (such as Jakarta, Surabaya, Medan and Makassar). For this reason, the future of Indonesia's digital economy—its inclusiveness, dynamism, and place in the world—is connected to the fates and business models of these platforms.

This report combines an extensive literature review with 15 interviews with national expert stakeholders to focus specifically on the role of marketplace platforms (gig work, ride-hailing, e-commerce, etc.) and social media messaging platforms in supporting the livelihoods of millions of Indonesians. As the platform economy is a rapidly changing phenomenon, this inquiry is intentionally interdisciplinary, encompassing multiple sectors and disciplines. This review aims to be both foundational, informing further research, and pragmatic, identifying key opportunities and issues facing policymakers, the development community, and technologists.



DEFINING PLATFORM LIVELIHOODS

The concept of platform livelihoods—the ways people earn a living by working, trading, renting, or creating in digital marketplaces—animates this study.¹ Platform livelihoods is a broader concept than just “gig work”; it includes the ways platforms facilitate the exchange of goods and services by micro- and small enterprises (MSEs), as well as the ways many individuals work. This reflects a long-standing tradition in inclusive development of focusing not exclusively on formal jobs, but rather more broadly on the variety of ways in which households, particularly poor households, often combine labor and small enterprise activities to pursue *livelihoods*.²

As an umbrella term, then, “platform livelihoods” entails multiple ways of earning a living:



Working, often known as “gig work” is a well-known, hotly debated example of a platform livelihood.³ Individuals rely on platforms to find work outside the contexts of traditional employer-employee relationships.



Trading is the domain of (formal) e-commerce and (often informal) social commerce. Individuals or small enterprises offer products and/or services to customers via marketplace platforms and/or social media channels. Almost every kind of MSE can utilize a platform as a sales channel—wholesalers, retailers, manufacturers, service providers, and even artisans and artists can sell products and services via platforms small and large.



Renting is the monetization of assets via a platform. Lending or leasing a tractor or truck by the hour or day and offering a room of one's house on Airbnb fall under this kind of asset utilization, as does lending (renting) money on peer-to-peer loan platforms.



Creating has, literally, captured the online world's attention. Influencers, content creators, and affiliate marketers receive commissions for keeping people's eyes tuned to online platforms, cultivating audiences to engage with advertisements, or changing audiences' awareness and opinion of various brands and ideas. Unlike other platform livelihood activities, creating generally involves at least three parties in addition to the platform: the creators, the audience, and the advertisers.

These four behaviors have well-known archetypes. Freelancing and home care are “working.” Small retail and meal prep for hyperlocal delivery are examples of “trading.” Airbnb hosting is “renting.” Making TikTok content for compensation is “creating.” Yet many recognizable livelihoods are combinations of these activities. Ride-hailing combines working and asset renting. Successful social commerce may combine selling and creating. Thus, it is helpful to think of these four behaviors as elements which can be combined, rather than strict categories to be mapped.

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1. Caribou Digital and Qhala, “[Platform Livelihoods Framework](#).” Note: “The term “platform” is common in industry and specialized discussions about the digital economy. There are many typologies of platforms available, but at the broadest level, Cusumano, Gawer, and Yoffe make a useful distinction between (a) innovation platforms—software (like an operating system or suite) that runs other third-party software and (b) marketplace platforms—digital hosts, usually businesses themselves, that connect buyers and sellers of goods, services, or labor in two-sided or multi-sided markets. We suggest that social media platforms can be understood as either (2a) a special kind of marketplace platform or as (c) a close cousin—monetizing attention to user-created or creative content via advertisements.” See Cusumano, Gawer, and Yoffe, [The Business of Platforms: Strategy in the Age of Digital Competition, Innovation, and Power](#).
 2. Chambers, “[Poverty and Livelihoods: Whose Reality Counts?](#)”
 3. Heeks, “[Decent Work and the Digital Gig Economy: A Developing Country Perspective on Employment Impacts and Standards in Online Outsourcing, Crowdwork, Etc.](#)”; ILO, [World Employment and Social Outlook 2021: The Role of Digital Labor Platforms in Transforming the World of Work](#).

THE PLATFORM LANDSCAPE IN INDONESIA

Indonesian online commerce continues to grow.⁴ [GoJek](#) and [Tokopedia](#) merged into [GoTo](#) to be listed in the Indonesian and US stock markets.⁵ [Bukalapak](#), a unicorn (startup with US\$1 billion), listed publicly on the Indonesian Stock Exchange in August 2021, which will open the door to more significant funding of platform expansions.⁶

Total e-commerce sales in Indonesia are projected to reach US\$51 billion in 2024.⁷ Some of this growth was made possible by government investments in digital infrastructure, policies that facilitate e-commerce expansion, and the rise in online commerce due to COVID-19 pandemic lockdowns. The increase in demand for goods and services through online trade allowed both new and seasoned entrepreneurs to join platforms and the bandwagon of digital commerce.

Indonesia is an important market for social media platforms as well. In 2021, Facebook reported 175 million users in Indonesia, more than anywhere other than India and the US.⁸ In 2021, Facebook's sister app WhatsApp reported 112 million users in Indonesia, exceeded only by India and Brazil.⁹ Indonesia is also one of the top four markets for TikTok, along with China, the US, and Brazil.¹⁰



4. Kendall and Deng, "[Opportunities to Expand Financial Inclusion within Indonesia's Digital Platform Economy](#)."
5. Hidranto, "[Indonesia.Go.Id - RI Berpeluang Besar Menggarap E-Commerce Asean](#)." After the merger, GoJek services within GoTo were styled "Gojek."
6. Jatmiko, "[Tokopedia, Shopee Dan Bukalapak Kolaborasi Bantu UMKM Tumbuh](#)."
7. GlobalData, "[Indonesia's e-Commerce Market Continues to Surge amid COVID-19 Pandemic, Says GlobalData](#)."
8. "[Asia Internet Use, Population Statistics Data, and Facebook Data—Mid Year 2021](#)."
9. Mansoor, "[WhatsApp Revenue and Usage Statistics](#)."
10. Mansoor, "[TikTok Revenue and Usage Statistics](#)."
11. For estimates on gig work worldwide, see ILO, [World Employment and Social Outlook 2021](#).

KEY QUESTIONS

Despite the spread of marketplace and social platforms in many parts of the world, there is relatively scant data on how many people depend on them to earn a living, in Indonesia or elsewhere.¹¹ That said, the majority of those pursuing platform livelihoods are likely to be working, selling, or a combination of the two. The ranks of those renting and creating are likely smaller and more specialized.

Information on who pursues a platform livelihood and with what results is scattered. Such insights are vitally important for the development community, which needs to know more about how platform livelihoods do, or might, extend into vulnerable and marginalized groups in Indonesia, including low-income households, women, and those living in rural areas. This “inclusion imperative” lies at the heart of this review. This review (and the subsequent research projects it will inform) will explore whether, or under what conditions, platform work and platform sales are paths of advancement out of poverty.

Finally, it is important to see platform livelihoods as linked to other elements of digital transformation, particularly and importantly the use of digital financial services (DFS). While there is hope and anticipation in the development community that participation in platform marketplaces might expand financial inclusion in ways that will support the broader financial inclusion agenda, there are few studies of the concrete ways in which platforms and financial services providers might coordinate/collaborate on expanding access to useful financial services.

Given this framing and the state of knowledge to date, this review is driven by (and organized into) seven animating questions:

- 1 Context: What has been the impact of COVID-19 on platform livelihoods?**
- 2 Scale: How many people have platform livelihoods in Indonesia?**
- 3 Earnings: How much do people earn in platform livelihoods? And is it more or less than they were making before?**
- 4 Quality: Beyond earnings, how do people experience platform livelihoods?**
- 5 Gender: What are the challenges and advantages for women in Indonesia's platform economy?**
- 6 Geography: What are the prospects for platform livelihoods in rural areas?**
- 7 DFS: Does financial inclusion support platform livelihoods, or vice versa?**



The majority of available studies address only a sector or two at a time. So, where possible, this review aggregates sector-specific insights across platform livelihoods more broadly. The results are seven descriptive essays on the inclusivity of Indonesia's platform economy, plus an eighth that synthesizes potential actions identified in the literature and from stakeholder interviews.

This review does not assess whether platforms are currently profitable or sustainable in cities, let alone in rural areas. But these factors can't be ignored; each of these sections should be read with the awareness that the platform economy is evolving rapidly, unpredictably, and in ways that are dependent on changing sentiments and valuations in global markets, geopolitics, and global forces such as the pandemic. While no particular platform may be permanent, platformization is likely a durable part of the overall digital economy, in Indonesia and beyond, and certainly worthy of attention.

METHODOLOGY

Review

Over 100 publications were identified and included in this review. Publications were selected based on their relevance to the key animating questions of the study. Given the interdisciplinarity and timeliness of the topic, many of the sources were identified organically through internet searches and/or via cross-citations, rather than occurring in any single database. These publications consist of academic journal articles, reports, and news items from within the country and abroad. After passing the initial relevance screening, the publications were then reviewed and coded by a team consisting of academics, practitioners, and researchers.



This review draws extensively on a heterogeneous subset of key works, including

- The World Bank's 2021 report *Beyond Unicorns: Harnessing Digital Technologies for Inclusion in Indonesia*, which draws extensively on and synthesizes findings from (a) its 2020 Digital Economy Household Survey and (b) the 2019 Indonesian Labor Force Survey (SAKERNAS)¹²
- A 2019 report by Women's World Banking on social commerce entrepreneurship in India and Indonesia¹³
- A 2018 Facebook-sponsored Centre for Strategic and International Studies (CSIS) study on rural Indonesia¹⁴
- A 2021 International Finance Corporation report on women and e-commerce in Southeast Asia¹⁵
- UN Women and Pulse Lab Jakarta's 2020 report on women-owned micro-enterprises and COVID-19¹⁶
- A 2021 report by Alpha JWC Ventures and Kearney on digital growth beyond metropolitan Indonesia¹⁷
- A 2021 study of gig worker experiences by Rest of World¹⁸
- Fairwork's 2021 Indonesia gig work ratings, conducted in partnership with Universitas Gadjah Mada¹⁹

The authors of these studies, and others, represent a growing interdisciplinary community of practice concerned with how platforms and the shift to a digital economy can advance economic inclusion and prosperity in Indonesia. It is worth noting, however, that many of the studies referenced in this review were conducted in partnership with (or sponsorship from) platform companies themselves. Such partnerships offer access to data and to research participants but may impact the independence of framings and findings.

Interviews

Fifteen sources participated in the interviews, including academics, practitioners, public officials, non-governmental organizations (NGOs), associations, and executives. Public officials are represented by the offices of the Ministry of Cooperative and Small and Medium Enterprises, Ministry of Women Empowerment and Child Protection, and Coordinating Ministry of Economic Affairs.

The industry practitioners are represented by platform operators: ride-hailing ([Gojek](#)), DFS providers ([Dana](#)), and agriculture platforms (8villages, [TaniHub](#)). Not-for-profit institutions are represented by the World Bank and [Mercy Corps Indonesia](#). Associations interviewed include the Association of Fintech ([AFTECH](#)). Finally, the research team interviewed academics and researchers whose papers were included in the literature review. Overall, interviewees play a major role in platform programs or research at the above institutions. Appendix A presents the detailed list of interviewed stakeholders.

12. World Bank, [Beyond Unicorns: Harnessing Digital Technologies for Inclusion in Indonesia](#).

13. Theis and Rusconi, "[Social Commerce Entrepreneurship and New Opportunities for Women's Financial Inclusion in India and Indonesia](#)."

14. Rafitrandi et al., [Exploring the Potential of Digitalization for Inclusive Socio-Economic Development in Eastern Indonesia](#).

15. IFC, [Women and E-Commerce in Southeast Asia](#).

16. UN Women and Pulse Lab Jakarta, "[Leveraging Digitalization to Cope with COVID-19: An Indonesia Case Study on Women-Owned Micro and Small Businesses](#)."

17. Tjan et al., "[Unlocking the Next Wave of Digital Growth: Beyond Metropolitan Indonesia](#)."

18. Guest and Zhou, "[The Gig Workers Index: Mixed Emotions, Dim Prospects](#)."

19. Fairwork Foundation, [Fairwork Indonesia Ratings 2021: Labour Standards in the Gig Economy](#).

Context: What has been the impact of COVID-19 on platform livelihoods?

ECONOMIC CONSEQUENCES OF THE COVID-19 PANDEMIC

The COVID-19 pandemic forced governments around the globe to severely limit people's movements. Countries went into various lockdown modes and restricted international and domestic travel. Lockdowns forced some businesses to close, while others had to scale down and keep only core employees. Many people lost their jobs; others had to work from home to comply with movement restrictions. Brick-and-mortar entrepreneurs were negatively impacted because of their inability to physically engage in traditional modes of transaction. Both traditional and platform-based ride-hailing businesses were also negatively affected due to the lack of mobility and reduction in travel.



Several studies with different methodologies illustrate these effects in ride-hailing. Before the COVID-19 pandemic, Jiao and Sihombing estimate that motorcycle ride-hailing drivers did around twenty rides per day. During the COVID-19 pandemic, this number fell to only seven trips per day, meaning drivers were barely making enough for their daily needs.²⁰ Eloksari reports that ride-hailing in Jakarta fell by 14% to 16% during 2020.²¹ Budiman, Hernandez, and Roest estimate that driver-partners lost between one-half and two-thirds of their income.²² Many drivers were forced to shift from taxiing customers to food delivery within the platform ecosystem, to sell food or other things for income, or to exit the industry altogether.²³ The government acted to ease the burden of driver-partners by postponing motorcycle installment payments for a year.²⁴

A study by Flourish Ventures indicated that about 81% of 576 surveyed gig workers were adversely affected by the COVID-19 pandemic. The majority suffered from loss of income, leading to concerns about finding a new job or ways to earn money. Gig workers used multiple methods to cope with the pandemic, but not all (27%) could find additional work. Many of those affected reported drawing from their savings (68%), cutting down on expenses (55%), or borrowing money (46%). Some reported postponing loan repayments (39%) or pawning assets (29%).²⁵ Flourish noted that

“

industries requiring in-person interactions—home health services (such as mobile massage) and ridesharing—were hit the hardest, while lower-touch work such as online selling and other household services (such as house cleaning) were impacted less.”

Indeed, massage services (GoMassage), home cleaning services (GoClean), and salon services (GoGlam) were all part of GoLife, a GoJek initiative to help Indonesians with their daily life needs. Due to the pandemic, GoJek stopped GoLife services in July 2020, impacting 60,000 contractors.²⁷



20. Jiao and Sihombing, “[2 Million Jobless Motorbike Drivers Show Covid’s Toll on Indonesia’s Gig Economy](#).”

21. Eloksari, “[Ride-Hailing Apps Rely on Deliveries during Pandemic](#).”

22. Budiman, Hernandez, and Roest, “[Ride-Hailing Drivers in Indonesia Discuss Livelihoods, COVID-19](#).”

23. Jiao and Sihombing, “[2 Million Jobless Motorbike Drivers Show Covid’s Toll on Indonesia’s Gig Economy](#)”; Budiman, Hernandez, and Roest, “[Ride-Hailing Drivers in Indonesia Discuss Livelihoods, COVID-19](#).”

24. Budiman, Hernandez, and Roest, “[Ride-Hailing Drivers in Indonesia Discuss Livelihoods, COVID-19](#).”

25. Aggarwal, Ehrbeck, and Klemperer, “[The Digital Hustle: Gig Worker Financial Lives Under Pressure: Indonesia Spotlight](#).”

26. Aggarwal, Ehrbeck, and Klemperer, “[The Digital Hustle](#),” 4; Savirani and Mustika, “[My Kids Need Me, but We Need Money Too’: Female GOJEK Drivers in Indonesia](#).”

27. Potkin and Daga, “[Indonesian Ride-Hailing Firm Gojek Cuts 9% of Headcount](#).”



PLATFORM LIVELIHOODS AS A LIFEBOAT

While the pandemic forced many out of platform livelihoods, it pushed others into them.

Overall, the small enterprise sector saw an acceleration in the shift to digital. Siti Azizah (Indonesia Ministry of Cooperatives and SMEs) reported that adoption of digital technology by all types of MSEs has seen a 100% increase during the pandemic, from 7.0 million to 15.9 million, and a 50.4% increase in e-commerce transactions (more than 3 million transactions a day).²⁸ Similarly, Aristi and Pratama describe how some of the millions of Indonesians who lost their jobs during the pandemic switched to self-employment and freelancing.²⁹ Research by Universitas Indonesia, in partnership with GoJek, details how *"Gojek helps Surabaya MSMEs survive pandemic,"* describing how the diversified businesses offered through super-apps like GoJek were also advantageous for many negatively affected by the pandemic. Many driver-partners shifted from GoRide (ride-hailing) to GoFood (food delivery). Others joined platforms for the first time, with 69% of driver-partners on the platform joining after the start of the pandemic.³⁰ The study also notes that many of the MSEs in the GoTo ecosystem are engaged in multiple GoTo platforms. For example, 89% are in [GoFood](#), 97% in [GoSend](#), and 89% in [GoPay](#).³¹ A later (2021) study saw surveyed merchants in the GoTo ecosystem reporting mixed fortunes—41% hadn't yet recovered, and 24% had grown.³²

Lembaga Demografi FEB UI (LDUI) described "a spirit of collaboration (gotong royong)" among driver-partners and consumers, with some receiving social assistance (60%), tips (67%), and food (24%) from customers.³³ It further notes that the pandemic also led to sharp increases in the use of less-frequently used platforms, such as [GoGive](#) (donation platform) and [GoMed](#) (telemedicine).³⁴

28. Interview with Siti Azizah, Indonesia Ministry of Cooperatives and SMEs, 2021.

29. Aristi and Pratama, "[Peran Freelance Marketplace dan Media Sosial dalam Online Gig Economy Jasa Profesional](#)."

30. Fajria, "[Research by the Demographic Institute of FEB UI](#)."

31. Fajria, "[Research by the Demographic Institute of FEB UI](#)."

32. Walandouw, Primaldhi, and Wongkaren, "[GoTo Financial's Role in Indonesia's Financial Inclusion](#)," 14.

33. LDUI, "Indonesian Consumers Rely on Gojek to Adapt and Stay Productive During the Pandemic, Study Finds."

34. LDUI, "Indonesian Consumers Rely on Gojek to Adapt and Stay Productive During the Pandemic, Study Finds."

PLATFORM RESPONSES TO THE PANDEMIC

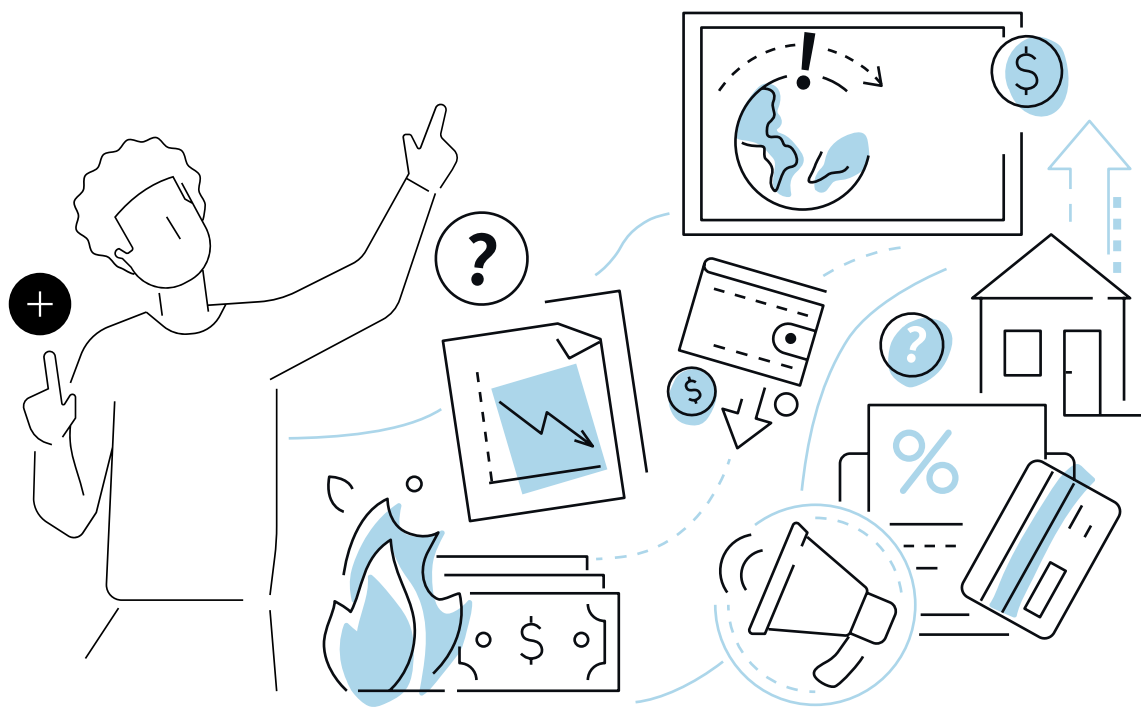
Platform owners continue to innovate in their efforts to be the choice for platform livelihoods. Writing for The Jakarta Post, Nugraha describes how, during the lockdown, platforms made significant strides towards integrating financial services into their ecosystem, including internet banking and financing. For example, [PayLater](#), [Grab](#)'s financing program, allows for a pre-approved spending amount to be paid one month later, helping those adversely affected by the COVID-19 lockdown.³⁵

Platforms also improved their digital presence through marketing efforts, service diversification, and transaction perks (i.e., free delivery) to make themselves more attractive to users. Platforms are expanding their ecosystem through partnerships with suppliers and improving their logistics through warehouse-to-customer delivery systems, thus increasing efficiency and profitability. Perhaps most notable are direct partnerships between platforms and the government, with targeted distribution of social benefits supported by platforms' identity verification capabilities.³⁶

REFLECTIONS

Thus, the COVID-19 pandemic had contradictory and unevenly distributed effects on platform livelihoods. Walandouw and Wisana state that "during the pandemic, GoRides were reduced by 90%, due to the many mobility restrictions. On the other hand, many MSEs have sprung up, and they can use the platform so they can sell online."³⁷

This rapid change is perhaps a general property of many platform livelihoods—they are relatively amenable to rapid entry, exit, and reconfiguration by individuals and small enterprises.



35. Nugraha, "[How E-Commerce Safeguards Ramadan Grocery Spending amid COVID-19 Pandemic.](#)"

36. Nugraha, "[How E-Commerce Safeguards Ramadan Grocery Spending amid COVID-19 Pandemic.](#)"

37. Interview with Walandouw and Wisana, LDUI Universitas Indonesia, 2021

2 | **Scale:** How many people have platform livelihoods in Indonesia?

As an umbrella term, “platform livelihoods” combines many ways of earning a living via digital platforms—(gig) working, trading via e-commerce and/or social commerce, renting assets, and creating content or online attention. While this breadth helps highlight how platform business models have become intertwined with many sectors of the economy, it makes specific quantifications of the scale and scope of individuals’ platform livelihoods difficult to determine—in Indonesia and, indeed, anywhere in the world.

But the question is important. Policymakers and the development community should try to ascertain just how far platforms have come in shaping livelihoods, and how many people and households rely on them.

There are several ways to count: “top-down” approaches based on nationally representative surveys, “bottom-up” approaches based on aggregated reports from individual platforms, and derived approaches where the numbers are estimated via proxies. Each has its definitional and enumerational challenges because of the many varied and combinatory platform behaviors:

- 1 **Multi-homing.**³⁸ A platform worker or seller might be active on more than one platform. For example, a worker may offer services on both Grab and Gojek, or sell on both Tokopedia and Bukalapak.
- 2 **Fractional work.**³⁹ A platform worker or seller often works only part time via any one platform, or via platform(s) at all. Platform livelihoods could be the primary and sole source of income, or a supplementary form of support. Fractional workers may have offline clients and augment with platform work, or they might view platform work as part time. For example, Aristi and Pratama found that 34 (55.9%) of their respondents in the transportation sector have other jobs.⁴⁰ Sellers, too, might mix channels. A restaurant might sell 50% of its food to walk-up customers and 25% each via two platforms. In Indonesia, the World Bank’s analysis of 2019 labor force survey data suggested only 11% of Indonesian internet gig workers had secondary jobs, but found plenty of fractional/secondary selling among social commerce sellers in its 2020 household survey.⁴¹ A full 41% of surveyed merchants in the GoTo ecosystem had another source of income beyond the business.⁴²
- 3 **Hidden work.**⁴³ Some profiles, notably freelancing, small enterprises, and home rental listings, can reflect “hidden MSEs,” where a given profile is shared by two or more workers, or by a manager and an employee.

38. Landsman and Stremersch, “[Multihoming in Two-Sided Markets](#).”

39. Caribou Digital and Qhala, “[Platform Livelihoods Knowledge Map: Fractional Work](#).”

40. Aristi and Pratama, “[Peran Freelance Marketplace dan Media Sosial dalam Online Gig Economy Jasa Profesional](#).”

41. World Bank, [Beyond Unicorns](#), 149, 140.

42. Walandouw, Primaldhi, and Wongkaren, “[GoTo Financial's Role in Indonesia's Financial Inclusion](#),” 5.

43. Melia, “[African Jobs in the Digital Era](#).”

Any method of estimation, then, requires deciding whether to count fractional workers, whether to include occasional social commerce and e-commerce sellers, and whether to count employees of small enterprises, and/or household members or dependents. If one's goal is to identify the subset of Indonesians who rely *exclusively* on marketplace or social platforms to make all their money, the resulting estimate will be smaller. If instead the goal is to enumerate all Indonesians whose economic fortunes had, in some way, been intertwined with marketplace and social platforms, the estimate would be far larger. It's the nature of digital work, outside of salaries and employment contracts, for these ranges to be broad.

HOUSEHOLD AND LABOR SURVEYS

The World Bank's 2021 Beyond Unicorns report directly addresses this approach. Drawing on a 2019 National Labor Survey, it suggests that *"in 2019, around 13.2 million out of a total of around 127 million employed workers (10.4 percent) in Indonesia were engaged in e-commerce activities as either their primary or secondary job."*⁴⁴ Seventy-one percent of those used social media channels only, 26% used a blend of social and formal marketplaces, and only 3% were selling exclusively via marketplace platforms.⁴⁵ The World Bank notes a lot of the social commerce is casual consumer-to-consumer rather than conducted by formal enterprises.⁴⁶ Put another way, while the Bank suggests that 85% of Indonesians who are online are also social media users, that does not mean everyone is buying and selling.⁴⁷ Rather, 20% of Indonesians overall report using Facebook, WhatsApp, or Instagram for buying or selling, and that only accounts for 3% of time spent online—for most, the imprecise and overlapping descriptions of "communications," "social media," "browsing," and leisure each dwarf "social commerce buying or selling."⁴⁸

The same report draws on the same 2019 labor study to identify 1.2 million "internet-using gig workers" in Indonesia:⁴⁹ 69% in transportation, storage, and logistics and another 16.7% in wholesale, retail, restaurants and hotels.⁵⁰ This breakdown isn't particularly granular, but it is nevertheless helpful for establishing orders of magnitude. Based on that survey, ride-hailing and delivery well outpace other forms of digitally enabled gig work in Indonesia, but the gig work sector as a whole may only be one-tenth the size of the e-commerce and social commerce sectors.

The 2021 Financial Inclusion National Survey (FII) by Sekretariat Dewan Nasional Keuangan Inklusif (SNKI) indicates that 15.6% of Indonesian adults have ever used a social media platform to promote/sell, and 12.1% have used marketplace platforms for those purposes.⁵¹

44. World Bank, [Beyond Unicorns](#), 139.

45. World Bank, [Beyond Unicorns](#), 37.

46. World Bank, [Beyond Unicorns](#), 37.

47. World Bank, [Beyond Unicorns](#), 19.

48. World Bank, [Beyond Unicorns](#), 28.

49. World Bank, [Beyond Unicorns](#), 149.

50. World Bank, [Beyond Unicorns](#), 148.

51. Sekretariat Dewan Nasional Keuangan Inklusif, "[National Survey of Financial Inclusion 2021](#)."

ESTIMATION METHODS

A second approach to enumeration is extrapolation. For example, using its own analysis and a survey of e-commerce sellers, in 2018 McKinsey estimated that, by 2022, online commerce would provide employment for 26 million Indonesians, representing 20% of the workforce: 17 million as owners and employees of MSMEs, 9 million in the rest of the value chain, 0.25 million in logistics, and 0.1 million in the platforms themselves.⁵² The same report estimated there were up to 1 million intermediaries active in Indonesia (small, independent, often part-time enterprises who help both offline consumers and offline retailers use the internet to shop and sell).⁵³

The Government of Indonesia offered a similar estimate in 2021, suggesting that 12 million of the 64 million MSEs in Indonesia were part of the digital ecosystem, a figure they predicted would rise to roughly 50% by 2024, as *“five hundred thousand artisan micro, small and medium enterprises (MSMEs) are expected to be onboard the digital ecosystem every month.”*⁵⁴ The pandemic was an accelerant here, noted Minister of Cooperatives and SMEs (UKM) Teten Masduki, doubling MSE participation in the digital ecosystem.⁵⁵ As part of the effort to reach this target, in 2021 all marketplaces were invited to set up MSE clinics that included merchants and prospective merchants.⁵⁶

Analytic exercises can also help identify top-end limits on the number of people who can engage in platform livelihoods. At the individual level, would-be workers and sellers need access to the apps (mostly via smartphones) that support the marketplaces. While it is possible, in some cases, to access some platforms to some extent on less-capable feature phones, or even to use SMS and USSD via basic phones, smartphone ownership can be a good proxy for the practical limits of the size of the addressable adult population that could participate. (Smartphone ownership might be a better indicator than internet access, since only 4% of the population has access to fixed line internet at home.⁵⁷) The 2020 FII study by the SNKI suggests 58.7% of adult Indonesians own a smartphone. While *“phone ownership is highest among men, urban, above-poverty, and relatively young adults ... between 2018-2020, growth was strongest among rural adults, the over 51 age group, and the 15-17 age group.”*⁵⁸

At the systemic level, platforms need to be present in the communities in which people live. WhatsApp and Facebook are available wherever there is a cell signal, and e-commerce can reach wherever deliveries can be made—albeit slowly in some cases. But the dynamic super-apps that are so central to Indonesia's digital economy are mostly based in the urban and urban-proximate areas of the country, where the density of vehicles, businesses, and would-be customers is higher. This issue is discussed further in section 6.

Finally, digital uptake remains concentrated among the more prosperous. The World Bank drew on 2019 labor data to estimate that e-commerce selling (not buying) involved 9% of the tenth (highest) decile households by income, 4% to 5% of fifth and sixth decile (median) households, and only 2% of first decile households.⁵⁹ Thus, digital readiness and smartphone ownership are concentrated in higher-income populations, which will limit the ability of lower-income populations to engage in platform working, trading, renting, and creating.

52. Das et al., [The Digital Archipelago: How Online Commerce Is Driving Indonesia's Economic Development](#).

53. Das et al., [The Digital Archipelago](#), 8.

54. Office of Assistant to Deputy Cabinet Secretary for State Documents & Translation, [“12 Million MSMEs Available in Digital Ecosystem, Minister Says.”](#)

55. Herman, [“Jumlah UMKM Go Digital Naik 99% Selama Pandemi.”](#)

56. Interview with Siti Azizah, Indonesia Ministry of Cooperatives and SMEs, 2021.

57. World Bank, [Beyond Unicorns](#), 19.

58. Sekretariat Dewan Nasional Keuangan Inklusif, [“Survei Nasional Keuangan Inklusif 2020.”](#)

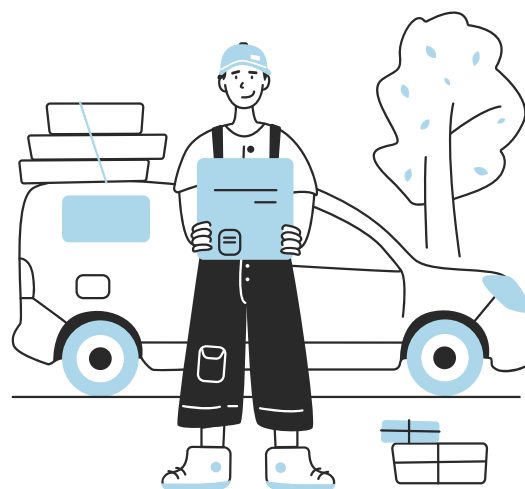
59. World Bank, [Beyond Unicorns](#), 88.

AGGREGATING REPORTS FROM INDIVIDUAL PLATFORMS

A third approach to “sizing” platform livelihoods is to aggregate reports from or about individual, prominent platforms. These should be interpreted with caution due to the behaviors mentioned above (multi-homing, fractional work, and hidden work). Nevertheless, when examined as a set, such reports can shed light on the relative sizes of different platform livelihood sectors and on the overall rough numbers of Indonesians involved. Appendix C of this report describes the results of this literature review’s aggregation exercise. Overall, our analysis suggests that in 2022, as many as 20 million people in Indonesia may rely on platforms for at least some share of their income. Of those, 4.5 million were likely full-time earners

Working

The largest share of gig work in Indonesia is in ride-hailing, delivery, and logistics. The Indonesian ride-hailing and delivery sector is led by two giant platforms: GoTo and Grab. In 2020, each claimed to have about two million drivers.⁶⁰ GoTo claimed 2.5 million drivers (all but a few hundred thousand in Indonesia) in 2022 by the time of its IPO.⁶¹ However, these are not mutually exclusive estimates, because some drivers partner with both platforms. Also, unlike in some other markets, in Indonesia both ride-hailing and delivery are largely offered by the same companies, with drivers offering both services. The World Bank estimates that 86% of gig workers were men, 87% were urban, and 69% concentrated in the transport, storage, and communications sector (ride-hailing and logistics).⁶²



In 2019 Sucahyo and colleagues looked at Indonesian gig-worker participation on nine major online freelancing sites—a mix of local and international sites. They found approximately 171,000 profiles in Indonesia across the 9 sites, but only 2,000 (1.2 %) had been active in the last 30 days.⁶³

Notably, we were unable to locate estimates for home care workers and vendors as gig workers in the Grab and GoTo ecosystems, or elsewhere in the Indonesia markets. As mentioned in section 1 of this report, GoJek stopped GoLife services in July 2020, which impacted 60,000 contractors.⁶⁴ Further, some people in the service industries, working as home care workers, massage agents, or house cleaners, might be considered MSE “vendors” rather than gig workers and thus be enumerated below.

We suggest that 2.25 million is a conservative figure for all gig workers in Indonesia—it assumes almost every driver is on both GoTo and Grab (rather than working exclusively with one or the other), counts only a few thousand freelancers, and does not include home care workers or other gig workers.

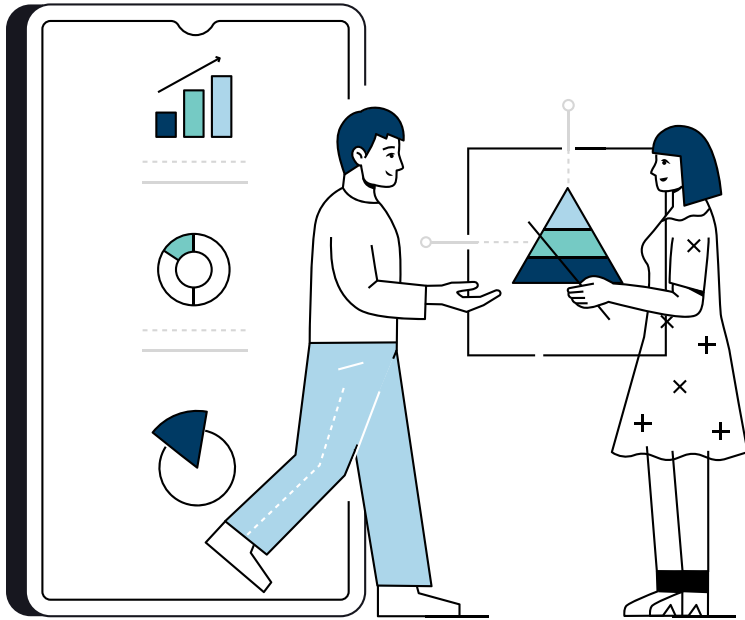
60. Budiman, Hernandez, and Roest, “[Ride-Hailing Drivers in Indonesia Discuss Livelihoods, COVID-19.](#)”

61. PT GoTo Gojek Tokopedia Tbk, “[Prospectus.](#)” Note that Gojek has drivers in Vietnam and Singapore, but no more than a few hundred thousand in each—most of its drivers are in Indonesia.

62. World Bank, [Beyond Unicorns](#), 36.

63. Fardany Faisal et al., “[Discovering Indonesian Digital Workers in Online Gig Economy Platforms.](#)” See also Glick et al., [Online Outsourcing: Prospects for Increasing Youth Employment and Reducing Poverty in Indonesia.](#)

64. Potkin and Daga, “[Indonesian Ride-Hailing Firm Gojek Cuts 9% of Headcount.](#)”



Trading

Trading (selling) via platform marketplaces involves several sectors and behaviors, and a range of businesses from informal sole proprietorships to larger, established small enterprises.

MSEs as sellers on e-commerce platforms

The first category to emerge is traditional e-commerce, in which MSEs serve broad markets geographically, relying on parcel, post, or electronic delivery. In their 2021 pre-IPO prospectus, GoTo reported 12 million merchants and sellers on the e-commerce platform Tokopedia.⁶⁵ In 2021, Bukalapak reported 6.9 million sellers in its online marketplace.⁶⁶ [Shopee](#) reported 5 million sellers in 2021,⁶⁷ while [Blibli](#) has approximately 16,000 online stores.⁶⁸ There is no number available for another regional player, [Lazada](#), that is specific to Indonesia. At this time, it is not possible to ascertain how many merchants maintain listings on more than one marketplace. A conservative estimate would assume a great deal of multi-homing and thus be reflected as at least 12 million Indonesian MSEs and individuals selling online via traditional e-commerce marketplaces.

65. PT GoTo Gojek Tokopedia Tbk, "[Prospectus](#)."

66. Jatmiko, "[Tokopedia, Shopee Dan Bukalapak Kolaborasi Bantu UMKM Tumbuh](#)." See also Safitri, "[Pendapatan Bukalapak Pada Kuartal II 2021 Tumbuh 37 Persen](#)."

67. Jatmiko, "[Tokopedia, Shopee Dan Bukalapak Kolaborasi Bantu UMKM Tumbuh](#)."

68. TechnoBusiness Media, "[Jumlah Mitra Blibli Mitra Saat Ini Mencapai 16.000 Toko](#)."





MSEs as sellers in super-app/local delivery ecosystems

MSEs, including retailers, service providers, and food prep, are part of the super-app ecosystems, where a myriad of items (and services) are just a few screen taps away and can be delivered locally via motorcycle or automobile. Pre-IPO, GoTo reported one million merchants active in their local ecosystem.⁶⁹ In 2020, Grab reported five million Indonesian microentrepreneurs in total, which, once drivers (above) and offline local GrabKios categories (below) are excluded, suggests at most one million food prep and MSEs in their local network.⁷⁰

A smaller platform, [Wahyoo](#), allows street food vendors to sell online. As of 2021, Wahyoo had partnered with 16,000 food vendors on its platform.⁷¹

As is the case with e-commerce networks, multi-homing (double registration) is highly likely, so a conservative estimate of the number of MSEs involved with local delivery ecosystems would hew closely to the number of firms registered on the single largest player—in this case, GoJek's one million local merchants.

Social commerce

Facebook and WhatsApp are relatively pervasive and cross-cutting. The growth of internet connectivity has allowed broader social connectivity through social media platforms. As of January 2022, there were 130 million monthly Facebook users (not MSEs⁷²) in Indonesia, making the country the third largest user of the giant social media platform.⁷³ A 2021 study commissioned by DAI and Ipsos in partnership with Facebook surveyed over 1,000 micro-, small, and medium-sized enterprises in 11 Indonesian regions. Their sample was 76% "online" businesses—business operating with storefronts and signage, easily approachable by in-person enumerators.

69. PT GoTo Gojek Tokopedia Tbk, "[Prospectus](#)."

70. Grab, "[Grab's Contribution to Support Food Supply Chain](#)."

71. Karunia, "[Wahyoo Siap Gandeng 20.000 Warteg Yang Terancam Gulung Ke Pasar Daring](#)."

72. We were unable to locate a report with the number of MSEs in Indonesia directly paying Meta for advertising on its properties. However, Facebook reports 3 million active businesses around the world as its customers, 70% (2.1 million from outside the US). If Indonesia represents roughly 15% of Facebook users outside the US, and if its MSEs account for a proportional share of paying small enterprises, that would be approximately 310,000 MSEs. That's a healthy business for Meta but is much smaller than the number of enterprises reported to be involved in e-commerce through other methods. World Population Review, "[Facebook Users by Country, 2022](#)"; Meta, "[Your Business Story](#)."

73. Dixon, "[Leading Countries Based on Facebook Audience Size as of January 2022](#)."

These “online” businesses reported using Facebook apps to market to (52%) or communicate with (58%) customers, to communicate with suppliers (56%), to find new employees (30%), and to do customer research (41%). These levels were well above the aggregate levels of reported use of any other digital tool or platform.⁷⁴

As of November 2021, one study suggests that there were 6 million “WhatsApp for Business” accounts in Indonesia, many of which represent micro-sellers making a living through social commerce.⁷⁵ Although this is a large number, it is unlikely that all or even most of these businesses are trading online exclusively via WhatsApp for Business.

Other models, like [Evermos](#), blend social commerce and drop shipping, where the social seller originates the client onto the platform and fixes the price, and the platform directly delivers. As of 2021, Evermos reported matching 500 brands to 100,000 active local resellers in smaller Tier 2 and Tier 3 cities in Java.⁷⁶

For a true bottom-up estimate to better populate the graphical estimation in Figure 1, what is also necessary (and unavailable) from Meta is the number of Indonesians who use personal WhatsApp, Facebook, and Instagram accounts for social selling/social commerce. Instead, Figure 1 draws on the 2019 National Labor Survey mentioned above, which suggests that 71% (9.37 million) of the 13.2 million Indonesians estimated to be engaged in e-commerce for employment were doing so exclusively via social commerce channels (e.g., WhatsApp, Facebook, Instagram, etc.), while 3.8 million were using a mix of social and e-commerce, or e-commerce marketplaces exclusively.⁷⁷ In this estimate, social commerce sellers are unique, but marketplace sellers would be accounted for in the e-commerce bottom-up reports, including the larger and more up-to-date 2020 and 2021 reports.

Agricultural platforms

People need food, businesses and retailers of fresh produce need supplies to meet demand, and farmers need to sell their produce—especially the 40 million smallholder farmers that lack market access. There are some efforts underway to bring platform business models to meet these needs. At the time of writing this report, [TaniHub](#) had grown to a network of more than 30,000 smallholder farmers since its inception in 2016.⁷⁸ However in early 2022 TaniHub closed its business-to-consumer (B2C) arm to focus on business-tobusiness (B2B) fulfillment.⁷⁹

[Sayurbox](#) is another platform that connects farmers with buyers via an app, a website, and WhatsApp. As of 2021, there were 8,000 farmers selling through the Sayurbox platform.⁸⁰ [Aruna](#) is a platform that connects fishermen with buyers. The platform currently has 21,000 fishermen.⁸¹

The farmers and fishermen on Aruna are likely non-overlapping, so a reasonable estimate of the number of agriculture platform participants is 59,000—still just a fraction of the e-commerce and social commerce markets.

74. DAI, [MSMEs and Digital Tool Use amidst the COVID-19 Pandemic](#).

75. Amalia, “[UMKM Indonesia Manfaatkan Trik WhatsApp Untuk Bertransformasi Ke Omnichannel](#).”

76. Shu, “[Indonesian Halal-Focused Social Commerce Startup Evermos Lands \\$30M Series B](#).”

77. World Bank, [Beyond Unicorns](#), 139.

78. Impact at IFC, “[Digital Marketplace Keeps Indonesian Farmers in Business](#).”

79. Prasiyda, “[Agritech Startup TaniHub Steers Away from the Crowd, Announces B2B Refocus](#).”

80. “[Sayurbox Uses AWS to Deliver Fresh Food Faster](#).”

81. Shu, “[Indonesia ‘Sea-to-Table’ Platform Aruna Hooks \\$35m Led by Prosus and East Ventures Growth Fund](#).”

Summary of trading

Overall, platform trading is large and growing. We estimate that roughly ten times the number of Indonesians are involved in e-commerce (particularly social commerce) than in gig work. Here, the World Bank's estimates of 13.2 million Indonesians at least partly involved in digital selling again seems like a reasonable floor, especially given that this was 2019 estimate, and e-commerce and social commerce have boomed during the pandemic. By the waning of the first waves of the pandemic and the beginning of 2022, the platform sales category had swelled. Estimates vary, but the bottom-up estimates gathered in this review, including 12 million e-commerce vendors, 1 million hyperlocal merchants in food prep and rapid fulfillment, and 9.3 million social commerce sellers, seem to reflect four reasonably distinct, non-overlapping categories of engagement. Add 60,000 farmers and fishermen, and the number of Indonesians trading online—making at least some of their livelihood via platform sales—may be as many as 20 million.

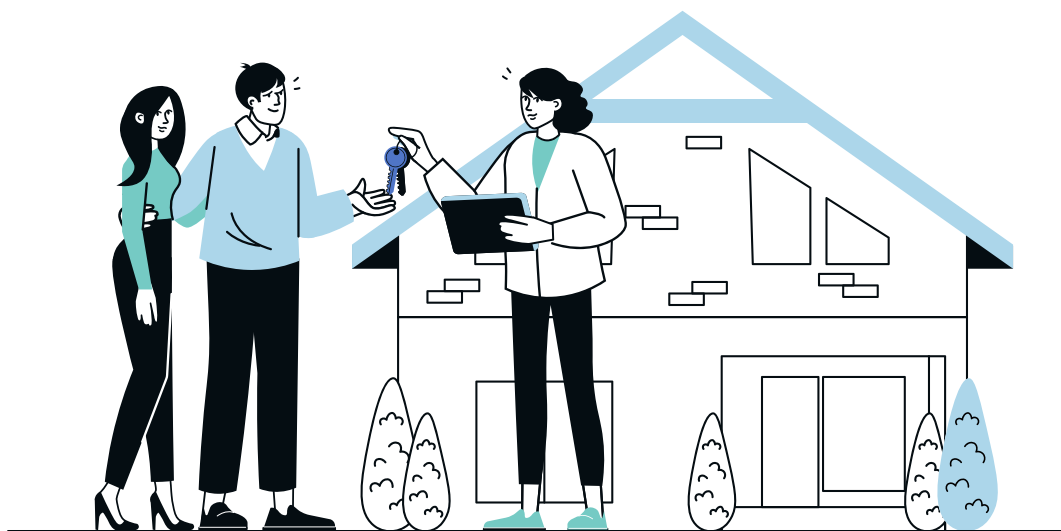
Renting and sharing

In 2019, there were 43,000 listings on Airbnb, which increased to 61,000 by May 2020.⁸² Understandably, more than 50% are in Bali and 10% in Jakarta. Like the tourism industry broadly, Airbnb was hit hard by the COVID-19 pandemic.

Other platform approaches to lodging include [Mamikos](#), which connects 150,000 boarding house owners to 6 million room seekers,⁸³ and property management platform [Travelio](#), which is “*trusted by more than 10,000 property owners both to market and manage the unit as a whole.*”⁸⁴

The number of rooms and properties available can be counted in the tens of thousands, not the millions, suggesting that the scale of renting, as a livelihood, remains relatively limited. That said, each of these properties may support several people, including cleaners, caterers, maintenance teams, etc.

We suggest using 221,000 (as the high watermark of property listings) as an estimate of the number of people earring at least a fraction of income renting assets via platforms.



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82. Kristianti, “[Asosiasi GM Hotel: Aturan Airbnb Di Indonesia Belum Jelas](#)”; Armela, “[A Snapshot of the Indonesia Airbnb Market in 2020 \(VS Hotel\)](#).”
83. Yulianson, “[Mamikos dan SiCepat Andalkan Analitik AWS untuk Dongkrak Bisnis.](#)”
84. Travelio, “[Digandeng Beberapa Property Developer Besar, Travelio Lebakkan Sayap Ke Penyewaan Apartemen Unfurnished Dan Rumah.](#)”

Creating

There are stories of how content creation on YouTube has alleviated, or at least helped, those negatively affected by the COVID-19 pandemic.⁸⁵ For example, an auto mechanic living in rural Indonesia dealt with the economic blow of COVID-19 by using YouTube to generate significant views and monthly earnings. He began training his fellow visitors to do the same, giving rise to the “YouTube Village.”⁸⁶ But the numbers of such successful creators are small.

The number of creators and influencers who make a living on the platforms is hard to ascertain. By 2020, Indonesia had 93 million YouTube users, but just 600 YouTube channels (content creators) with 1 million or more subscribers.⁸⁷ Meanwhile, on Instagram, Indonesia has at least 6,000 “Gold Creators”—those with 100,000 or more followers, which Rest of World suggests is enough to earn US\$50,000 a year in paid posts and placements.⁸⁸

By counting only Gold Creators on Instagram and the largest influencers (by subscription) on YouTube, we are unable to view the significant number of occasional or part-time creators who earn a bit on their views or on their placements. An estimate of 7,000 earners includes only the biggest fish.

Accounting for fractional work and sales

As mentioned above, many workers, sellers, renters, and creators may rely on platform livelihoods for only a fraction of their income. They can hold other jobs, or can sell via a mix of platform-based and non-platform-based channels. Calculating the exact distributions of fractional versus full-time platform work and sales remains difficult, pending more specific questions to this effect in nationally representative surveys. In the meantime, we can apply significant deflators to the counts portrayed in Figure 1 and the sections above based on other datapoints in the literature.

- **For e-commerce, it is likely that at most one-sixth of listed sellers are completely reliant on platforms.** One report on third-party sellers on Amazon in the US lists 6 million unique sellers in 2021 on the marketplace, across all countries, but suggests that “most of these sellers are no longer active. Among the six million, the number of sellers that had enough activity on the platform to get at least one feedback review in a year is only a million. Furthermore, because of the marketplaces power law, the top sellers generate more sales than the rest.”⁸⁹ Similarly, in Indonesia, a 2019 study conducted for Tokopedia estimates 857,000 jobs created (among its sellers).⁹⁰ That same year, 2019, a separate Tokopedia study reported 6.2 million sellers⁹¹; together these two estimates yield a ratio of roughly one-sixth of the number of total sellers being new “jobs created”.
- **For gig work (ride-hailing and delivery), the proportion of full-time workers may be higher than in e-commerce selling.** But, in the absence of specific data on this estimate, it is probably worth assuming that only one in three drivers registered on Grab and Gojek’s systems are driving “full-time”.

85. Wulandari, “[Content Creator Melonjak Selama Pandemi, Samsung Gelar ‘Galaxy Creator Workshop’](#)”; Budiyanto, “[‘Content Creator’ Sebagai Pilihan Karir Baru Bagi Milenial](#).”

86. Anugerah, “[Indonesia’s ‘Youtube Village’ Banks on Homegrown Video Stars](#).”

87. Tesalonica, “[Jumlah pengguna unik YouTube di Indonesia capai 93 juta](#).”

88. Harjanto, “[Indonesia’s Government-Funded Influencers Are a Bad Influence](#).”

89. Kaziukėnas, “[Amazon Tops Six Million Third-Party Sellers](#).”

90. LPEM Universitas Indonesia, “[Dampak Tokopedia Terhadap Perekonomian Indonesia](#).”

91. Adriennawati, “[The Story Behind Tokopedia’s 10 Year Journey](#).”

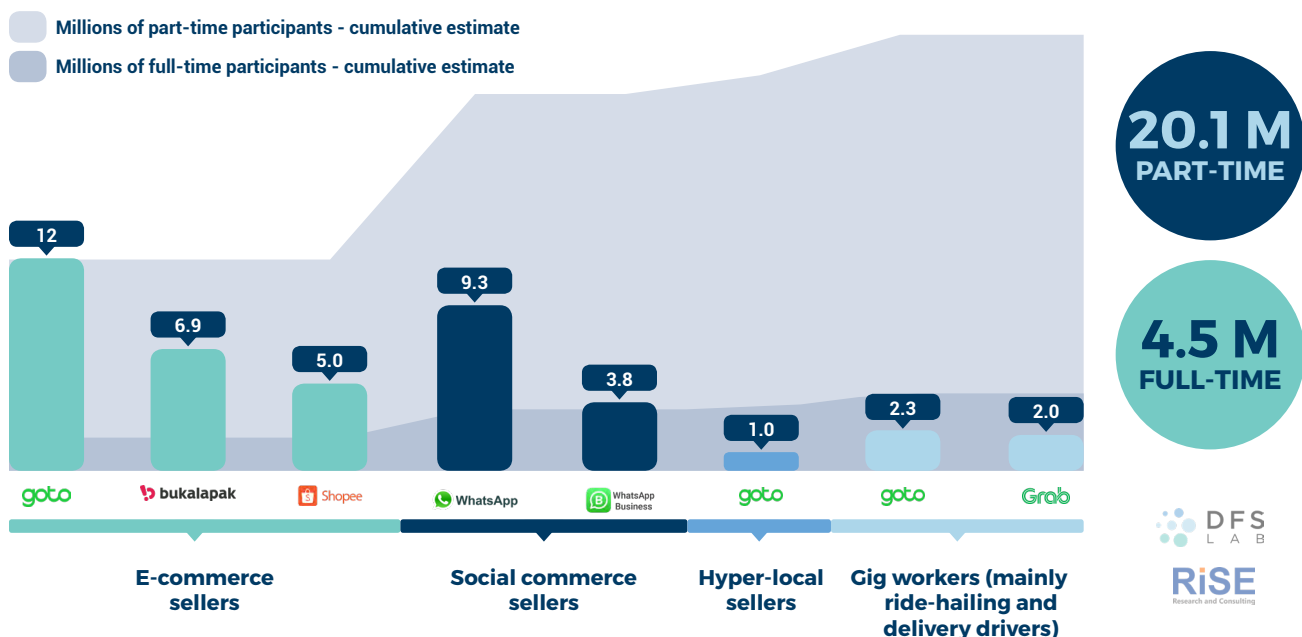
SUMMARY AND REFLECTIONS

In sum, this exercise combined disparate reports from several different sources and methods to estimate the number of people engaging in platform livelihoods. The key is not to focus on the unreliable, overlapping, and quickly changing reports from any one enterprise or sector, but rather to look at the orders of magnitude, to appreciate the rapid increases in e-commerce (accelerated by the pandemic), and to see how these bottom-up reports from platforms align with the survey estimates from the World Bank. By our estimates, in 2022, as many as 20 million people may rely on platforms for at least some of their income. Of those, 4.5 million were likely full-time earners—3.7 million sellers, and .75m gig workers, representing 1/6 and 1/3 of the reports, respectively. Renting and creating remain niche applications with relatively low overall contributions to employment and livelihoods.

The figure below represents this exercise graphically. The higher line reflects any involvement in the platform economy. The lower line reflects probable exclusive involvement in the platform economy—a far smaller estimate (based on one-sixth and one-third deflators for sales and work, respectively) than the number of Indonesians working or selling part-time. Figure 1 excludes renters and creators, as their overall numbers are quite small, whether full time or part-time or not.

Even if only a fraction of these workers and sellers are full time, more than 4 million Indonesians (out of a workforce of 130 million) are entirely reliant on platform livelihoods, with another 20 million partly reliant. Both of these estimates are admittedly imprecise and should be refined through further survey work, but they are large enough to command the attention of policymakers, researchers, and technologists alike. The platform economy is a key part of the livelihoods landscape in Indonesia.

Figure 1: We estimate that as of 2022, as many as 20 million Indonesians rely on digital platforms for at least some part of their livelihood, using unverified numbers reported by the platforms themselves and by other sources.



3 | **Earnings:** How much do people earn in platform livelihoods? And is it more or less than they were making before?

Earnings are a key element of work satisfaction and perhaps the most important determinant of whether individuals elect to pursue (and stay in) a platform livelihood.⁹² The amount and stability of platform workers and sellers' earnings vary depending on the sector. Closely related to the question of earnings is the matter of mobility and relative earnings. What were people doing before engaging in platform livelihoods? Are they earning more or less than they were before?

This section provides a glimpse into the earnings from various types of platform livelihoods. Though this picture is fragmented, and the conclusions of the cited studies are decidedly mixed, the information here contributes to an understanding of how platform livelihoods support Indonesians' well-being.

WORKING

The World Bank drew on 2019 labor force survey data to suggest that “digital gig jobs in Indonesia are, on average, relatively better paying than many informal jobs, though certainly not as well-paying as wage jobs.”⁹³ However, those workers work 49 hours a week. The average work week for informal workers in Indonesia is 39 hours, so the 6.2% pay rate premium comes at a cost.⁹⁴

Ride-hailing in particular may provide a relatively higher level of income and more access to financial services than some forms of traditional employment available to the drivers.⁹⁵ A 2018 study conducted by the Centre for Strategic and International Studies (CSIS) with Tenegara Strategics and in partnership with Grab, sampled bike divers, car drivers, food vendors, and kudo merchants (small shops) in the Grab ecosystem, between 800 and 900 in each category.

92. Caribou Digital and Ohala, “[Platform Livelihoods Knowledge Map: Earnings](#).”

93. World Bank, [Beyond Unicorns](#), 36.

94. World Bank, [Beyond Unicorns](#), 36, 149.

95. Asian Development Bank, “[ADB to Support Technological Transformation in Indonesia](#)”; Utami, “[How Does Go-Jek Claim to Contribute Towards Development and What Does Representation of Go-Jek Drivers Suggest about Participatory Development](#).”

Findings included:

GrabBike:

38% of drivers reported no recent income, due to unemployment, layoffs, or a failed business.⁹⁶

Among those moving from another livelihood, “after working with GrabBike, driver-partners in five cities saw their monthly incomes grow by **113 percent** on average, specifically from **Rp 1.9 million**—only **Rp 200,000** higher than the income of self-employed workers in the informal sector—to **Rp 4 million** or double the average national minimum wage.”⁹⁷

The most common reasons for joining Grab were “**flexible work hours (93%)**” and “**opportunity for higher income (83%)**.”⁹⁸

GrabCar:

33% of drivers reported no recent income, due to unemployment, layoffs, or a failed business.⁹⁹

Among those moving from another livelihood, “after working with GrabCar, driver-partners in five cities saw their monthly income grow by **114 percent** on average, specifically from **Rp 3.3 million**, nearly double the income of self-employed workers in the informal sector, to **Rp 7 million or 350 percent** higher than the national average of the minimum wage.”¹⁰⁰

The most common reasons for joining Grab were “**flexible work hours (91%)**” and “**opportunity for higher income (88%)**.”¹⁰¹



96. Kusumawardhani and Rizal, “[Benefits of Digital Economy: How Grab Contributes to Indonesian Economy](#),” 10.

97. Kusumawardhani and Rizal, “[Benefits of Digital Economy](#).”

98. Kusumawardhani and Rizal, “[Benefits of Digital Economy](#),” 12.

99. Kusumawardhani and Rizal, “[Benefits of Digital Economy](#),” 14.

100. Kusumawardhani and Rizal, “[Benefits of Digital Economy](#),” 13.

101. Kusumawardhani and Rizal, “[Benefits of Digital Economy](#),” 16.

These are encouraging transitions, but those earnings may be tenuous. The samples exhibit survivorship bias (people who had not driven in the prior three months were excluded from the sample), and averages may hide discrepancies in drivers' fortunes.

In a 14-country study of gig work income, satisfaction, and aspirations, Rest of World and Premise found that Indonesian drivers and delivery workers reported earning less than the national minimum wage on an hourly basis, while domestic workers and care workers reported earning more than minimum wage.¹⁰² These lower hourly rates are not aligned with the reports from Grab and GoTo studies and may reflect differences in sampling, or in the way expenses (such as fuel and leasing) and time spent idle/not driving are used in the calculations. Fairwork's 2021 Indonesia assessment might explain this discrepancy:

“

“... pay remains the highest-priority issue for workers. Grab has followed the regulations of the Ministry of Transportation for a per-kilometer payment for on-demand transportation-related services. However, given the total number of working hours—including wait time—that workers have to dedicate to the platform, plus their work-related costs, this is insufficient to guarantee that workers will earn a net hourly income above either living or minimum wage levels. Grab—like all the platforms we rated—therefore fails to deliver on the promise of fair pay.”¹⁰³ ”

Indeed, the pandemic cut demand for rides, and increased competition for rides among drivers who remained kept earnings low.¹⁰⁴ A study by Budiman, Hernandez, and Roest suggests that earnings for driver-partners in Jakarta have slowly increased from 2016 to 2020, from a median of IDR 50,000 (US\$3.76) per day to about IDR 237,500 (US\$ 16.29) per day, before falling during the pandemic back to IDR 107,500 (US\$7.51).¹⁰⁵

There is also high variability in the estimates of earnings for driver-partners outside Jakarta. For example, the 2017 earnings of driver-partners in Bandar Lampung were between IDR 33,333 (US\$2.49) (56% of driver-partners) and IDR 100,000 (US\$7.47) (41% of driver-partners), for a median of IDR 66,667.¹⁰⁶ During the 2020 phase of the pandemic, the estimated earnings of driver-partners dropped to between IDR 16,000 and 50,000 (US\$1.10–3.43) per day in Sumatra, for a median of IDR 33,000 (US\$2.26).¹⁰⁷

Note: there is limited information on the earnings of Indonesia's relatively small community of platform-based freelancers. Fardany Faisal et. al estimated that, in 2019, the average Indonesian freelancer earned IDR 3.4 million (US\$240.32).¹⁰⁸ Freelancers on international platforms earned more than those on local platforms or on social media.¹⁰⁹

102. Guest and Zhou, “[The Gig Workers Index: Mixed Emotions, Dim Prospects.](#)”

103. Fairwork Foundation, [Fairwork Indonesia Ratings 2021](#), 20.

104. Rochmyaningsih, “[On Gojek's Gamified Platform, the Rules Change, and the Drivers Lose.](#)”

105. Yuniastuti, Laksmo, and Sardjono, “[Initiating Social Protection Scheme in the Sharing Economy Industry \(Case of Indonesia Go-Jek Rider\)](#)”; Ford and Honan, “[The Go-Jek Effect](#)”; Budiman, Hernandez, and Roest, “[Ride-Hailing Drivers in Indonesia Discuss Livelihoods, COVID-19.](#)”

106. Yuniastuti, Laksmo, and Sardjono, “[Initiating Social Protection Scheme in the Sharing Economy Industry.](#)”

107. Rochmyaningsih, “[On Gojek's Gamified Platform, the Rules Change, and the Drivers Lose.](#)”

108. Fardany Faisal et al., “[Discovering Indonesian Digital Workers in Online Gig Economy Platforms.](#)”

109. Aristi and Pratama, “[Peran Freelance Marketplace dan Media Sosial dalam Online Gig Economy Jasa Profesional.](#)”

MSES AND SOCIAL COMMERCE

The picture of MSE earnings via platforms is fragmented. The scenarios are different for social sellers, service providers and retailers in super-app ecosystems, and firms fulfilling orders via long-distance e-commerce. Some of the more detailed insights come from reports conducted in partnership with Grab and GoTo about merchants in their ecosystems.

The 2018 CSIS study, conducted with Tenegara Strategics and in partnership with Grab, sampled food vendors and Kudo merchants (small shops) in the Grab ecosystem:

- **GrabFood:** Many (82%) of the sampled food merchants came from the micro and informal sector operating without business license.¹¹⁰ “GrabFood increased the partners’ sales by 23 percent on average per week.”¹¹¹
- **Kudo merchants:** “The average income of individual Kudo agents in 5 cities increased 83 percent to Rp 2.7 million per month from Rp 1.5 million per month before joining Kudo.”¹¹² And in sales, “for Kudo’s store agents in five cities, partnering with Kudo increased their sales by 51 percent to Rp 10.1 million per month from Rp 6.1 million per month.”¹¹³

LDUI conducted a similar study with 1,700 merchants in the GoTo ecosystem in 2021.¹¹⁴ Most (95%) are “micro” with turnover less than 300 million IDR (US\$20,967.09), and 60% of them relied on the business as their sole source of income. One in four had started the business during the pandemic, and six in ten were running business exclusively online.¹¹⁵

The literature review did not uncover any studies that assess the levels of income (absolute or relative to alternatives) of informal social commerce sellers in Indonesia, although this data would be very helpful to gather as a complement to the Grab and GoJek reports described above.

ASSET SHARING

[Airbnb](#) is the major platform for accommodation sharing in Indonesia. There were 43,000 Airbnb listings in 2019, growing to 61,000 in 2020, of which 34,000 are in Bali, 6,000 in Jakarta, 870 in Surabaya, and 250 in Jogjakarta.¹¹⁶ The average daily rate (ADR) of Airbnb is comparable to that of hotels in Bali (US\$100), Surabaya (US\$40), and Jogjakarta (US\$30), while Airbnb ADR in Jakarta (US\$40) is significantly lower than that of hotels.

But COVID-19 travel restrictions have severely affected Airbnb hosts. The occupancy rate in Jakarta is about 23%, Bali 27%, Surabaya 21%, and Jogjakarta 22%. Occupancy statistics, the number of available Airbnb properties, and ADR provides an estimate of the annual earnings of Airbnb listings. Jakarta Airbnb partners could earn about US\$3,358 annually; Surabaya Airbnb partners could earn US\$3,066 annually; Jogjakarta Airbnb partners could earn about US\$2,409; and Airbnb partners in Bali could earn US\$9,855. These estimates are comparable to the top 25% of Indonesian Airbnb performers.¹¹⁷

110. Kusumawardhani and Rizal, “[Benefits of Digital Economy](#),” 16.

111. Kusumawardhani and Rizal, “[Benefits of Digital Economy](#),” 17.

112. Increased from US\$106.02 to US\$190.84. Kusumawardhani and Rizal, “[Benefits of Digital Economy](#),” 20.

113. Increased from US\$413.17 to US\$713.90. Kusumawardhani and Rizal, “[Benefits of Digital Economy](#),” 21.

114. Walandouw, Primaldhi, and Wongkaren, “[GoTo Financial's Role in Indonesia's Financial Inclusion](#),”

115. Walandouw, Primaldhi, and Wongkaren, “[GoTo Financial's Role in Indonesia's Financial Inclusion](#),” 5.

116. Kristianti, “[Asosiasi GM Hotel: Aturan Airbnb Di Indonesia Belum Jelas](#)”; Armela, “[A Snapshot of the Indonesia Airbnb Market in 2020 \(VS Hotel\)](#).”

117. Armela, “[A Snapshot of the Indonesia Airbnb Market in 2020 \(VS Hotel\)](#).”

CREATING

Earnings data for the relatively small community of Indonesia content creators also remains scarce. A few anecdotes of large returns are circulating, such as the story of Siswanto, a mechanic from Kasegeran, a farming village in Banyuwangi, whose massively successful YouTube channel earns him about US\$10,000 a month.¹¹⁸ Indeed, a YouTube content creator with 1 million subscribers, known as a “Gold Creator,” could earn between IDR 20 million (US\$1,404.80) and 80 million (US\$5,619.19) a month from YouTube alone, excluding any potential brand deals.¹¹⁹ The key to a successful livelihood on YouTube is consistently creating and uploading engaging videos, because YouTube pays IDR 245,000 (US\$17.12) per thousand views.¹²⁰ This is a very difficult level to achieve.



REFLECTIONS

The studies on drivers, conducted in partnership with Grab and GoTo, each draw on large samples to suggest their driver-partners are doing better than Indonesian minimum wage, and that many have rotated into driving in search of better earnings and increased flexibility. The research from Rest of World is less detailed, but paints a less optimistic picture, as does Fairwork’s assessment of how drivers are compensated. More data is needed, as is more data on the earnings of MSEs and merchants, particularly social commerce merchants, for whom almost no earnings data exists.

An interview with a stakeholder from Gojek indicates that, for most of Gojek’s merchant-partners, income from a Gojek partnership is their primary income. In contrast, for Gojek driver-partners, a Gojek partnership income is supplementary.¹²¹ This underscores a primary theme that the determinants of income, the alternatives, the paths into earning, and the relative distribution of income vary significantly between the “gig work” lifestyles of driver-partners and the e-commerce approaches of merchants—even though Grab and GoTo host both kinds of livelihood within the same ecosystem.

At this stage, the most cautious assessment is still that “it depends”—on how time is calculated (including idle time), on vehicle costs, on whether drivers and merchants are full time or part time, and on whether one is considering averages or distributions of success. The variability of earnings—shift to shift, week to week, month to month—is also important, but not well documented. This measurement and assessment challenge is not limited to Indonesia, but is rather a part of the shift away from paystubs and employment that comes part-and-parcel with gig work and platform livelihoods.

118. Anugerah, “Indonesia’s ‘Youtube Village’ Banks on Homegrown Video Stars.”

119. Untari, “Indonesia Miliki 85 ‘Gold Creator’, YouTuber Dengan Subscriber Di Atas 1 Juta.”

120. Voi.id, “Indonesian YouTuber Salary Up to Tens of Million Rupiah, Here’s How to Get It!”

121. Interview with Hilman Palaon, Digital Transformation and Financial Inclusion at Gojek, 2021.

4 | **Quality:** Beyond earnings, how do people experience platform livelihoods?

Earnings are clearly an important aspect of platform livelihoods. But there are a variety of other factors that influence whether individuals are satisfied and fulfilled with platform livelihoods. In 2020, Caribou Digital and Qhala Limited drew on a review of 75 studies across emerging markets and developing economies to identify economic, subjective, and human development experience factors of platform livelihoods.¹²² This section highlights a few prominent studies that specifically explore the experiences of Indonesian platform workers and sellers. Most focus on trade-offs and challenging elements of the platform work experience, with less attention paid thus far to the experiences of merchants.



FLEXIBILITY

In several studies of driver-partners¹²³ and online gig-workers,¹²⁴ researchers have highlighted flexibility as a common and often appealing feature of platform-mediated work. This flexibility contributes to the reduction of unemployment, better income, achievement of personal goals, more time with family and friends, and improved quality of life through home improvement, health, and education.¹²⁵ But flexibility can be elusive because it is a trade-off for earnings and ratings. Long hours (and unpaid gaps between paid rides) can translate to lower and/or more volatile earnings.¹²⁶ For example, one driver-partner of a ride-hailing platform described working sixteen hours a day to earn extra money so that he could spend time with family during Ramadan and buy them presents.¹²⁷

For MSEs, at least one study suggests that the flexibility of platform channels allows entrepreneurs to increase their profits through more efficient value-chain processes and increase productivity when necessary.¹²⁸ Walandouw et al. focus on merchants in the GoTo ecosystem, reporting that “MSME merchants run their businesses from home (61%), social media (33%), cart/tent stall (26%), WhatsApp Group (25%), and shop house/restaurant/service-based business (23%).”¹²⁹

HEALTH ISSUES

Driver-partners of ride-hailing platforms report stress due to high demand during rush hour and the need to work long hours to earn sufficient income.¹³⁰ Stress is among contributing factors to the lack of a long-term plan on the platform. For example, Guest and Zhou indicate that “almost everywhere, delivery is the most stressful type of platform work. Domestic workers tend to report less stress and less worry than riders and drivers.” This is perhaps the reason why only one in seven Indonesian platform gig workers, including drivers and delivery workers, see themselves staying in the job beyond one year.¹³¹

Other health issues include a high risk of vehicle accidents, lung and respiratory diseases, back pain, and exhaustion-related illnesses.¹³² Some driver-partners feel that platform owners, such as Gojek and Grab, enjoy a financial windfall while passing risks on to driver-partners.¹³³

122. Caribou Digital and Qhala, [The Quality and Experience of Platform Livelihoods: A Literature Review for Digital Development](#)

123. Coupez, “[Sharing Economy: A Drive to Success—the Case of GO-JEK in Jakarta, Indonesia](#)”; Crosby and Cahaya, “[The Lure of the City, the Possibilities of the Village](#)”; Johnston and Land-Kazlauskas, [Organizing On-Demand: Representation, Voice, and Collective Bargaining in the Gig Economy](#).

124. Sucahyo, Gandhi, and Faisal, “[Numbers, Type and Income of Online Gig Workers in Indonesia](#).”

125. IFC, [Women and E-Commerce in Southeast Asia](#); Sevilla, “[The Voices of the Unheard: The Reality Behind the Working Life of Indonesian Gig Workers in the Transport Industry](#).”

126. Guest and Zhou, “[The Gig Workers Index: Mixed Emotions, Dim Prospects](#).”

127. Coupez, “[Sharing Economy: A Drive to Success—the Case of GO-JEK in Jakarta, Indonesia](#).”

128. Damuri, Fauri, and Rafitrandi, “[E-Commerce Development and Regulation in Indonesia](#)”; Johnston and Land-Kazlauskas, [Organizing On-Demand: Representation, Voice, and Collective Bargaining in the Gig Economy](#).

129. Walandouw, Primaldhi, and Wongkaren, “[GoTo Financial's Role in Indonesia's Financial Inclusion](#).”

130. Prabaswari, Hamid, and Purnomo, “[The Mental Workload Analysis of Gojek Drivers](#)”; Sandbukt, “[Top Up With Driver](#)”; Sevilla, “[The Voices of the Unheard: The Reality Behind the Working Life of Indonesian Gig Workers in the Transport Industry](#).”

131. Guest and Zhou, “[The Gig Workers Index: Mixed Emotions, Dim Prospects](#).”

132. Panimbang, “[Solidarity across Boundaries](#).”

133. Sandbukt, “[Top Up With Driver](#).”

ALGORITHMIC MANAGEMENT AND LACK OF PROTECTION

Because driver-partners are contractors, not employees, of platforms, there is a lack of regulation governing their relationship with platforms. They lack labor protections, job security, and income security.¹³⁴ Many driver-partners are not registered with the government social security system (BPJS).¹³⁵ The lack of labor protections allows ride-hailing platforms to suspend driver-partners, who then have little or no recourse. For example, driver-partners who reject ride requests as an act of protest risk suspension.¹³⁶ This arrangement enables ride-hailing platforms to avoid the impact of labor law.

Studies have documented how Indonesian driver-partners are vulnerable to changes in platform policies, particularly rates and the punishment-and-reward system.¹³⁷ The algorithm-based punishment-and-reward system penalizes driver-partners for poor performance as determined by customer reviews, which can be difficult to challenge or correct.¹³⁸ The consequences of a suspension compound into other negative effects for driver-partners. After a suspension, driver-partners receive fewer orders, thus their income is reduced. In addition, the punishment is exacerbated by the need to reach a target in order to earn a bonus.¹³⁹

Wulansari, Hernawan, and Novianto are quite critical of the hands-off, non-employment partnerships between platforms and drivers, which they suggest are exploitative in four ways: a) all important decisions in the work process are the authority of the platform company; b) the company controls the work process of drivers; c) the company has a monopoly on access to information and data; and d) the relationship between drivers and platforms is contrary to the rule of law in Indonesia.¹⁴⁰ In all, they suggest that the “partner” status allows companies to avoid giving online motorcycle taxi drivers a minimum wage guarantee, health insurance, severance pay, overtime pay, vacation rights, and decent working hours.¹⁴¹

Concerns about the quality of gig work, particularly in the ride-hailing and delivery sectors, are summed up in a 2021 Fairwork report published by the Centre for Digital Society of the Universitas Gadjah Mada. All gig-work platforms operating in Indonesia fail to score above 5 in Fairwork’s 10-point scoring system.¹⁴² The system is based on five dimensions, each with a 2-point potential: fair pay, fair condition, fair contracts, fair management, and fair representation. In terms of fair pay, it was reported that workers were not paid fair wages after considering hours worked and work-related expenses.

134. Aloisi, [“Commoditized Workers. Case Study Research on Labour Law Issues Arising from a Set of ‘On-Demand/Gig Economy’ Platforms”](#); Coupez, [“Sharing Economy: A Drive to Success—the Case of GO-JEK in Jakarta, Indonesia.”](#)

135. Alamsyah and Yasih, [“Can Grab and Gojek Drivers in Indonesia Build a Solid Union?”](#); Johnston and Land-Kazlauskas, [“Organizing On-Demand: Representation, Voice, and Collective Bargaining in the Gig Economy.”](#)

136. Ford and Honan, [“The Go-Jek Effect.”](#)

137. Ford and Honan, [“The Go-Jek Effect.”](#); Sevilla, [“The Voices of the Unheard: The Reality behind the Working Life of Indonesian Gig Workers in the Transport Industry.”](#); von Vacano, [“‘Sharing Economy’ versus ‘Informal Sector’”](#); Yuniastuti, Laksmono, and Sardjono, [“Initiating Social Protection Scheme in the Sharing Economy Industry.”](#)

138. Yuniastuti, Laksmono, and Sardjono, [“Initiating Social Protection Scheme in the Sharing Economy Industry.”](#)

139. Ford and Honan, [“The Go-Jek Effect.”](#); Panimbang, [“Solidarity across Boundaries.”](#); Rochmyaningsih, [“On Gojek’s Gamified Platform, the Rules Change, and the Drivers Lose.”](#)

140. Wulansari, Hernawan, and Novianto, [“Riset.”](#)

141. Wulansari, Hernawan, and Novianto, [“Riset.”](#)

142. Fairwork Foundation, [Fairwork Indonesia Ratings 2021.](#)

In the fair condition aspect, only Grab, Gojek, and [Paxel](#) provide risk protection for workers through accident and health insurance, an emergency call line, and other well-being programs. In terms of fair contracts, the report states that most platforms provide accessible and clear working terms and conditions. However, platforms could not provide evidence that these terms and conditions represent fairly shared risk between workers and platforms. In the fair management aspect, the report states that only Grab and Gojek have evidence of communication lines with workers and programs to solve discrimination and inequality. Finally, platforms could not provide evidence of fair representation because the existing workers' associations are not recognized by either the law or the platforms, leading to workers' fear of punishment for engaging in protests or strikes. Other reports depict how coverage for drivers may not yet be portable across platforms and livelihoods and may not cover all costs associated with injuries or accidents.¹⁴³

There is ongoing contestation between drivers and platforms. For example, there are reports of delivery drivers using apps to spoof locations or automatically bid for driving jobs.¹⁴⁴ As the Fairwork report mentions, Grab and GoTo drivers often strike and are working on strengthening their coordination and ability to engage in collective negotiation.¹⁴⁵ However, Alamsyah and Yasih detail how several factors may prevent drivers from organizing successfully, including: a) a majority of drivers not feeling exploited; b) the fact that many drivers are involved for secondary as opposed to primary income; c) a lack of alignment between traditional labor unions and the needs of gig workers; and d) limited engagement by civil society organizations.¹⁴⁶

REFLECTIONS

Studies that provide a glimpse into the qualitative, subjective experience of pursuing a platform livelihood are diverse and address different factors, making an overall assessment difficult. It is also unclear whether platforms are entirely resistant to engaging on these matters. Beyond any regulatory dictates, platforms have investor, employee, and market competition pressures not to be too exploitative. In the longer term, the quality of the work and sales experience that platforms can offer workers and MSEs will continue to change.

But it is clear that there are tensions and challenges associated with platform work—perhaps to a lesser degree than with platform sales—that require trade-offs as individuals weigh access to work, overall earnings against factors like protection, solidarity, flexibility, safety, dignity, and more. Whether these trade-offs are ones that individuals should have to make is an even broader question, still hotly debated as platform work spreads around the country and around the world. Each country has a unique context, but the ILO work on digital labor platforms does offer a broader treatment of the state of this discussion.¹⁴⁷

143. Indraini, "[Bertaruh Nyawa Setiap Hari Di Jalan, Driver Ojol Dapat Asuransi?](#)"

144. Qadri, "[Delivery Drivers Are Using Grey Market Apps to Make Their Jobs Suck Less.](#)"

145. Timmerman, "[Grab and GoTo IPOs Have One Little Problem: Angry Gig Workers.](#)"

146. Alamsyah and Yasih, "[Can Grab and Gojek Drivers in Indonesia Build a Solid Union?](#)"

147. ILO, [World Employment and Social Outlook 2021](#).

5 | **Gender:** What are the challenges and advantages for women in Indonesia's platform economy?

There is a cohesive body of evidence emerging around gender and three key areas of the platform economy: driving/delivery, in which women face barriers to entry based on discrimination; e-commerce, where women face barriers to entry based on complexity; and social commerce, where women face few barriers to entry, but possibly face challenges translating entry to advancement. Social commerce is emerging as the most common form of online activity for Indonesian MSEs, and the majority of those conducting social commerce are women. Social commerce is the open door through which many Indonesian women are walking to join the digital economy.



This section reports on literature on three sectors: ride-hailing and delivery, formal e-commerce, and informal social commerce. The barriers, opportunities, and current levels of participation by women vary considerably among them. All platform livelihoods hinge on access to the internet, and there is a disparity between men and women in terms of internet access. One estimate suggests women's access to the internet in Indonesia is lower (46.87%) than men's (53.13%).¹⁴⁸

Another report by the World Bank finds that men are eight percentage points more likely to be connected to the internet than women, which suggests inequalities in device ownership.¹⁴⁹

In the context of the general distribution of internet access and use, platform working seems to have more gendered barriers than platform trading. The World Bank's 2021 analysis of 2019 labor survey data suggests that 85% of gig workers (the majority of which are in transport, delivery, and communications) are male.¹⁵⁰

WOMEN IN RIDE-HAILING AND DELIVERY

Driving and delivery support the most platform livelihoods (outpacing freelancing, home care, etc.), and thus have attracted more research attention.¹⁵¹

For raw proportions of drivers, women started at a numerical disadvantage that has been slow to disappear. In 2018, there were 572,202 driver-partners nationwide, but only 5% of them were women.¹⁵² Data on recent numbers of women driver-partners is fragmented. For example, in Malang, East Java, there were 200 women driver-partners in 2017, rising to 350 in 2018 and 700 in 2019.¹⁵³

In a study of female GoJek drivers in Manado City, Tumimbang, Suwu, and Tumiwa found that most opted to deliver goods and food instead of ride-hailing. Sixty-five percent of women driver-partners worked full time. Reasons women joined ride-hailing platforms included the need to earn additional income for themselves and their families.¹⁵⁴ Kurniawan and Soenaryo suggest other reasons behind women's decisions to be driver-partners include riding as a hobby and the ability to make new acquaintances.¹⁵⁵

Regardless of women's motivations, and whether the work is pursued out of necessity or interest, there are several clear challenges for women in these sectors. These include fictitious orders, the difficulties of life on the road, poor ratings from customers, and even illegal fee collection by other driver-partners, with few options for recourse.¹⁵⁶ Several studies document physical and verbal sexual harassment from both customers and male driver-partners. Male customers sometimes feel awkward being taxied by female drivers and request to drive themselves.¹⁵⁷

148. Samodro, "[Menteri PPPA](#)."

149. World Bank, [Beyond Unicorns](#).

150. World Bank, [Beyond Unicorns](#), 148.

151. World Bank, [Beyond Unicorns](#), 148.

152. Zaini, "[Satudata—Details Infografik \[Database Ministry of Labor\]](#)."

153. Kurniawan and Soenaryo, "[Menaksir Kesetaraan Gender Dalam Profesi Ojek Online Wanita Di Kota Malang](#)."

154. Tumimbang, Suwu, and Tumiwa, "[Kajian Gender Tentang Pengemudi Go-Jek Wanita Di Kota Manado](#)."

155. Kurniawan and Soenaryo, "[Menaksir Kesetaraan Gender Dalam Profesi Ojek Online Wanita Di Kota Malang](#)."

156. Kurniawan, "[Lazada Tuai Berkah Ramadan, Jumlah Pembeli Melesat 100% Lebih](#)."

157. Badruddin and Barakat, "[Digital Construction Community of Gojek Women's Drivers in DKI Jakarta](#)"; Kurniawan, "[Lazada Tuai Berkah Ramadan, Jumlah Pembeli Melesat 100% Lebih](#)"; "[Bisa Gak Sih Pesan Atau Order Driver Gojek Wanita Cantik Di Aplikasi?](#)"; Tumimbang, Suwu, and Tumiwa, "[Kajian Gender Tentang Pengemudi Go-Jek Wanita Di Kota Manado](#)."

Participants in two studies reported that some customers canceled rides upon learning that the driver was a woman.¹⁵⁸ Some women driver-partners complete orders even under verbal and physical sexual harassment for fear of poor ratings and suspension, reporting misconduct only after an order has been completed.¹⁵⁹

Under the current algorithm arrangement, poor ratings and suspensions are effectively multiple punishments for driver-partners, who are revictimized by lost revenue due to suspension, lower orders upon return due to alleged poor performance, and the inability to reach targets due to lower orders, thus missing out on bonuses.

The physical security and safety of female drivers is a real concern in many parts of the world.¹⁶⁰ Grab and Gojek are addressing this issue by providing safety features, including location-sharing, an emergency button, assistance services, and a designated safety zone for women driver-partners to meet customers.¹⁶¹

Grab's Free Call feature ensures the confidentiality and privacy of phone numbers of driver-partners and customers.¹⁶² These security features are intended to help prevent sexual harassment, which some women driver-partners experience.¹⁶³ Grab has also reported in 2019 that it was working to offset gender bias by modifying their algorithms to allocate more orders to women driver-partners or assign women customers to women driver-partners.¹⁶⁴

Some smaller, regional ride-hailing platforms have been founded to exclusively serve women clients and partner with women-drivers. Ojek Syariah (Ojesy) was founded in 2015 in Surabaya. Four years later, it had expanded to 25 cities. However, in 2019 Ojesy shut down its ride-hailing platform and rebranded as [Syarihub](#), focusing on other Sharia-based businesses.¹⁶⁵ Ojesa Indonesia was created in Bandarlampung in 2015 and now includes some major cities. [Shejek](#), a relatively new ride-hailing platform founded in 2018, is specifically designed for women driver-partners and customers based on Sharia principles and provides taxi services (motorbike and car) and food delivery. As of December 2018, Shejek had partnered with 700 drivers.¹⁶⁶

"For women-drivers, one of the challenges that emerged is having male clients, both the women-driver and the passenger felt awkward and uncomfortable. Generally, the woman-driver asks the passenger if he is willing to be driven by the woman-driver or if he wants to drive and the woman-driver sits as passenger."¹⁶⁷

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158. Tumimbang, Suwu, and Tumiwa, "[Kajian Gender Tentang Pengemudi Go-Jek Wanita Di Kota Manado](#)"; Badruddin and Barakat, "[Digital Construction Community of Gojek Women's Drivers in DKI Jakarta](#)."
159. Kurniawan, "[Lazada Tuai Berkah Ramadan, Jumlah Pembeli Melesat 100% Lebih](#)"; Ainur, "[Suka Duka Menjadi Seorang Driver Ojek Online Wanita \(Ladyjek\)](#)"; "Driver Ojol Perempuan Ini Sering Digoda, Ditawari Jadi LC Sampai Diminta Jadi Pacar Penumpang."
160. Caribou Digital and Qhala, "[Platform Livelihoods Knowledge Map: Gender](#)."
161. Adytya, "[Kisah Driver Ojol Perempuan Digeniti Penumpang Sampai Diajak 'Ngamar'](#)"; Dewi, "[Gojek Tingkatkan Keamanan Pelanggan dan Mitra Driver Perempuan](#)."
162. Media Digital, "[Aman Jadi Alasan Perempuan Ini Berani Jadi Driver Ojol](#)."
163. Kurniawan, "[Lazada Tuai Berkah Ramadan, Jumlah Pembeli Melesat 100% Lebih](#)"; Adytya, "[Kisah Driver Ojol Perempuan Digeniti Penumpang Sampai Diajak 'Ngamar'](#)"; Utami, "[Komunitas Srikandi Gojek, Wadah Curhat dan Support Pengemudi Perempuan](#)."
164. Kurniawan and Soenaryo, "[Menaksir Kesetaraan Gender Dalam Profesi Ojek Online Wanita Di Kota Malang](#)"; nextren editors, "[Calon Penumpang Wanita Bakal Bisa Cari Driver Wanita Di Ojek Online Grab](#)."
165. Agustina, "[Storytelling Sebagai Strategi Bisnis Sosial Start-Up Ojek Syar'i Berbasis Aplikasi Di Surabaya](#)."
166. Kusumah, "[SHEJEK, Online Ojek Service for Women](#)"; "[Shejek](#)."
167. Kurniawan, "[Lazada Tuai Berkah Ramadan, Jumlah Pembeli Melesat 100% Lebih](#)," 118–19.

FEMALE-LED MSEs IN FORMAL E-COMMERCE MARKETPLACES

There is also a gender disparity in MSE participation in formal platform marketplaces. For example, in a recent study of the GoTo ecosystem, 57% of surveyed small enterprises/merchants were men, and 43% were women.¹⁶⁸

A 2020 IFC study of women entrepreneurs on [Lazada](#) indicates that joining platform ecosystems is beneficial for business growth and expansion because of the depth and breadth of platform market penetration. While the study found more male-run enterprises on Lazada than women-run enterprises, women entrepreneurs performed better than men in terms of overall gross merchandise value (GMV) both before (164% of men) and during (120% of men) the COVID-19 pandemic. This is due to a variety of factors, including different motivations for participating in online commerce and different levels of offline business activity.¹⁶⁹ The integration of DFS into platforms also contributes to a positive buying-and-selling experience and opens the door to various financial services. The platforms also helped with critical needs in logistics and delivery and with upskilling—training, a support center, and access to and interaction with Lazada account managers.¹⁷⁰



168. Walandouw, Primaldhi, and Wongkaren, “[GoTo Financial's Role in Indonesia's Financial Inclusion](#),” 5.

169. IFC, [Women and E-Commerce in Southeast Asia](#).

170. IFC, [Women and E-Commerce in Southeast Asia](#).

As mentioned in section 4, flexibility is a two-edged sword, perhaps especially for women. One argument is that the flexibility inherent in platform sales allows women to stay engaged during maternity leave and while homemaking, leading to equality in regard to income generation.¹⁷¹ But other studies have found that the long hours required to earn sufficient income, coupled with the ever-present responsibilities at home and raising children, mean that flexibility is more of a burden and a chance to work all the time, instead of choosing when to work.¹⁷²

There are clearly barriers to women's participation in formal e-commerce marketplaces. But they may be a tangle of intention, context, and incentives, rather than simply skills.¹⁷³ A JPAL analysis of the 2020 FII survey found that

“

[While] women run the majority (61 percent) of MSMEs in Indonesia ... many women-run MSMEs have not yet used e-commerce platforms, despite having the necessary basic competencies. Only 17 percent of women-run MSMEs have made a transaction (buying or selling) on an e-commerce platform. Considering that half of the women MSME owners are “digitally ready”—which means that they own a smartphone and can either download a mobile application or browse the internet—and just one-third of these have made a transaction on e-commerce sites, there is significant room to increase use.¹⁷⁴ ”

Other studies suggest that financial literacy, particularly understanding the available financing options, is another barrier for women.¹⁷⁵

In 2020, UN Women and Pulse Lab Jakarta reported that women took advantage of social media platforms, such as Facebook, blogs, and YouTube, to share knowledge and create communities of support for their businesses, especially during the COVID-19 pandemic lockdowns where mobility and physical socializing were restricted.¹⁷⁶

171. Das et al., [The Digital Archipelago](#); IFC, [Women and E-Commerce in Southeast Asia](#).

172. Savirani and Mustika, “[My Kids Need Me, but We Need Money Too’: Female GOJEK Drivers in Indonesia](#)”; Kurniawan and Soenaryo, “[Menaksir Kesetaraan Gender Dalam Profesi Ojek Online Wanita Di Kota Malang](#)”; Pulse Lab Jakarta, “[How Is Digitalization Helping Women-Owned Micro and Small Businesses Cope During the Pandemic?](#)”; Tumimbang, Suwu, and Tumiwa, “[Kajian Gender Tentang Pengemudi Go-Jek Wanita Di Kota Manado](#).”

173. Theis and Rusconi, “[Social Commerce Entrepreneurship and New Opportunities for Women’s Financial Inclusion in India and Indonesia](#)”; Pulse Lab Jakarta, “[How Is Digitalization Helping Women-Owned Micro and Small Businesses Cope During the Pandemic?](#)”

174. Taufik et al., “[E-Commerce Platforms as a Path to Women’s Financial Inclusion](#).”

175. IFC, [Women and E-Commerce in Southeast Asia](#).

176. UN Women and Pulse Lab Jakarta, “[Leveraging Digitalization to Cope with COVID-19: An Indonesia Case Study on Women-Owned Micro and Small Businesses](#).”

WOMEN AND SOCIAL COMMERCE

There is a quite different story unfolding outside of the formal e-marketplaces, in social commerce. Social commerce behaviors include informal, emergent, part-time selling by individuals to friends, family, and neighbors on WhatsApp, in Facebook groups, and on Instagram, as well as more extensive engagement by MSEs with their suppliers and customers via these same channels.

Degree of participation in social commerce

A JPAL analysis referenced the 2019 SAKERNAS labor study to suggest that “58 percent of women who run MSMEs as their main occupation use social media to sell their products or services,” while only 17% of female-run MSEs were participating in formal e-commerce marketplaces.¹⁷⁷ Similarly, as mentioned in section 2 of this report, a 2021 DAI and Ipsos study, conducted in partnership with Facebook, surveyed over 1,000 micro-, small, and medium-sized enterprises in 11 Indonesian regions and found that commerce conducted by social media and WhatsApp far exceeds participation in formal e-commerce marketplaces. Among these “online” businesses, 66% had at least one female owner.¹⁷⁸ The IFC study of sellers on Lazada found that the female-led businesses in the sample were 6 percentage points more likely to also report selling through social media platforms.¹⁷⁹ A 2021 Women’s World Banking study of over 1,400 micro-entrepreneurs across Indonesia found high levels of social media use among smartphone owners, suggesting that *“for women with mobile internet access social media, such as WhatsApp and Facebook, together with e-commerce platforms, offers a way for them to earn income despite the social restrictions imposed during the pandemic.”*¹⁸⁰

The World Bank’s Beyond Unicorns report also reflects this complexity. In their household survey, men were twice as likely to use the internet at work—but women were slightly more likely than men to report doing e-commerce.¹⁸¹ Of those women using the internet in their jobs, a full 37.8% of were active online social sellers.¹⁸²

By 2021, perhaps only one in five women-led enterprises were actively participating in formal e-commerce, but three times that proportion are engaged in social commerce. And at least half of the total population of MSEs engaged in social commerce are female-led.

“

Unlike in transportation-led gig work or “formal” e-commerce, there is not a clearly discernible gender barrier to onboarding into or participation in social commerce. It’s already a part of everyday business practice for the majority of online, female-led MSEs in Indonesia. ”

177. Taufik et al., [“E-Commerce Platforms as a Path to Women’s Financial Inclusion.”](#)

178. DAI, [MSMEs and Digital Tool Use amidst the COVID-19 Pandemic](#).

179. IFC, [Women and E-Commerce in Southeast Asia](#).

180. Salyanty and Askar, [“Economic Resilience and Digital Adoption among Ultra Micro Entrepreneurs in Indonesia,”](#) 32.

181. World Bank, [Beyond Unicorns](#), 37.

182. World Bank, [Beyond Unicorns](#), 140.

Entry paths to social commerce

One of the most detailed studies on women and social commerce was conducted by Theis and Rusconi at Women's World Banking. They found that 84% of women entrepreneurs with platform livelihoods (excluding ride-sharing) use social media platforms. Furthermore, 21% of this group use only their personal WhatsApp account, while 63% use WhatsApp in conjunction with other social media platforms, such as Facebook, YouTube, or Instagram.¹⁸³ These findings suggest that the majority of Indonesian social media entrepreneurs are multiple-platform users.

For example, Facebook, Instagram, and other social media platforms are used for promotion and advertisement, especially in the beauty, clothing, and food sectors. WhatsApp seems to be a key social media platform for commerce. Its status and group features are used to finalize deals, advertise, and establish a business presence, and the messaging feature is used to respond to customer inquiries regarding product details, prices, payments, and delivery. Theis and Rusconi suggest that WhatsApp is a crucial platform for relationship-building, developing supplier networks, customer retention, and market penetration. Joining groups of resellers is also an effective method of market penetration.¹⁸⁴

It might be the case that women-owned MSEs and young entrepreneurs have an easier time adopting social commerce because they are more versatile in shifting to the digital economy.¹⁸⁵ There is evidence that social commerce is easy for some women to adopt when circumstances require a job change. The World Bank study notes that, of the women in the survey who had to leave a job due to pregnancy or to return to a domestic work arrangement, 58% remained engaged in social commerce.¹⁸⁶

Quality of participation in social commerce

However, evidence about the quality of that participation remains scarce—less has been documented about whether women find this work to be sufficiently lucrative and/or rewarding, or even under what conditions they do it, by choice or by necessity.

Some have suggested that women social media entrepreneurs benefit from social networks with a high percentage of women users by leveraging those connections for product awareness, discovery efforts, communication, and support.¹⁸⁷ The growth in women's social media platform livelihoods has led to financial independence and increased financial support for families.¹⁸⁸

Others have begun to document challenges to advancement and productivity, which perhaps are inherent in social commerce. For example, the 2019 Women's World Banking study indicates that the combined use of personal and business accounts on social media, as on WhatsApp, leads to difficulty separating personal and business activities. Such practices lead to suboptimal customer interactions and long-term customer relationships, and difficulty tracking deliveries, payments, and business expenses.¹⁸⁹

183. Theis and Rusconi, "[Social Commerce Entrepreneurship and New Opportunities for Women's Financial Inclusion in India and Indonesia](#)."

184. Theis and Rusconi, "[Social Commerce Entrepreneurship and New Opportunities for Women's Financial Inclusion in India and Indonesia](#)."

185. UN Women and Pulse Lab Jakarta, "[Leveraging Digitalization to Cope with COVID-19: An Indonesia Case Study on Women-Owned Micro and Small Businesses](#)."

186. World Bank, [Beyond Unicorns](#), 140.

187. Datwani, Raman, and Roest, "[Will Facebook Soon Dominate Digital Payments in India, Indonesia?](#)"

188. IFC, [Women and E-Commerce in Southeast Asia](#); Badruddin and Barakat, "[Digital Construction Community of Gojek Women's Drivers in DKI Jakarta](#)."

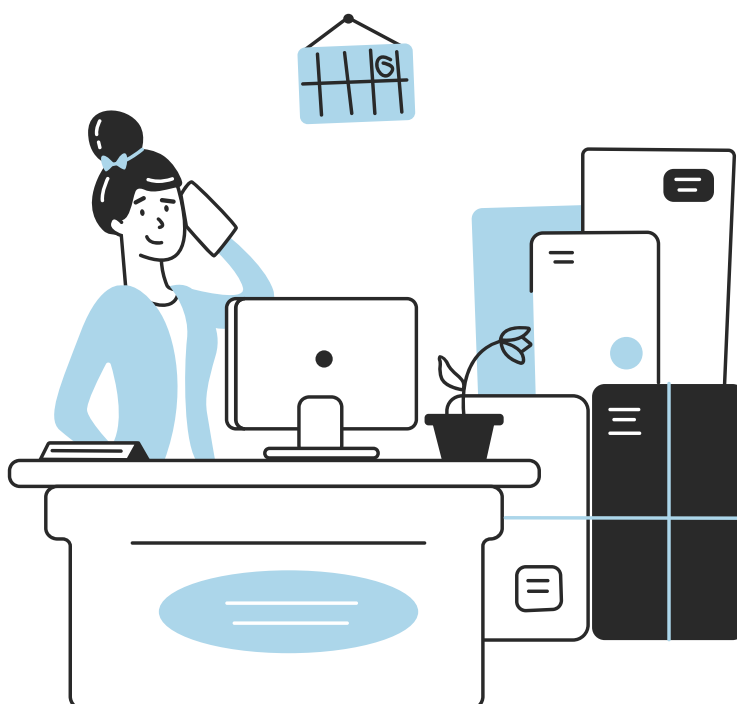
189. Theis and Rusconi, "[Social Commerce Entrepreneurship and New Opportunities for Women's Financial Inclusion in India and Indonesia](#)."

In a qualitative study of women running (or working in) home-based social commerce businesses, Izzati focused on the double-edged sword of flexibility. The place-independence and flexibility of social commerce allowed the women interviewed in the study easy access to informal online marketplaces and earning possibilities, and thus fit well with gendered structures of work and family obligations. But the long hours, lack of any reduction in domestic responsibilities, and pressure to keep up with others in the business made flexibility illusory or elusive and kept many interviewees' earnings relatively low.¹⁹⁰

Revisiting the distinctions between social commerce and e-commerce

There is a tangle of factors that make social commerce precarious for many women—less of a ladder step and more of a cul-de-sac, at least until other factors can be resolved. Limited operating capacity can be a barrier to upscaling from social media platforms to marketplace platforms.¹⁹¹ The Women's World Banking report highlights that women entrepreneurs often lack tax identification numbers, which prevents them from joining formal marketplace platforms; indeed, only 9% of women social entrepreneurs in the study reported having used formal bank loans for their business, and many had been victimized by predatory lenders.¹⁹²

The high fees (around 20%) charged to merchants by the super-app ecosystems may be a particular barrier to women's participation as they try to scale from a home-based informal business and are worthy of further study.¹⁹³



190. Izzati, "'Women's Work' in Indonesia's Social Media-Based Online Store Business."

191. Theis and Rusconi, "Social Commerce Entrepreneurship and New Opportunities for Women's Financial Inclusion in India and Indonesia."

192. Theis and Rusconi, "Social Commerce Entrepreneurship and New Opportunities for Women's Financial Inclusion in India and Indonesia."

193. Interview with Lia Purnamasari, Pulse Lab Jakarta, 2021.

REFLECTIONS

There is a cohesive body of evidence emerging around gender and three key areas of the platform economy: driving and delivery, in which women face barriers to entry based on discrimination; e-commerce, where women face barriers to entry based on complexity and formality; and social commerce, where women face few barriers to entry, but possibly face challenges in translating entry to advancement. As the World Bank explains, *“digital gig work is largely concentrated among urban men and e-commerce is growth is severely constrained by issues of trust, logistics, and internet connectivity.”*¹⁹⁴ But, on the other hand, social commerce is now emerging as the most common form of online activity for Indonesian MSEs, and of those conducting social commerce, the majority are women. Social commerce is the open door through which Indonesian women are walking to join the digital economy.

Not enough is known about the challenges and opportunities for women in other segments of the platform economy. For example, only one study addressed freelancing, concluding that registration fees may be a barrier to women's participation.¹⁹⁵ The literature review found only one study of gig workers as “local labor” in the GoJek ecosystem, bridging the idea of labor and service-based MSEs. Women in GoGlam, GoClean, and GoMassage described their experiences as the pandemic began and before the services were shut down; they worked long hours while balancing domestic responsibilities and gig-based earnings, and half of them also ran small businesses on the side.¹⁹⁶ Whether the flexibility of these arrangements is a blessing or a constraint remains an open question, one that perhaps can only be answered by each woman on her own.

Platform livelihoods and blurring the domestic and productive spheres

The role played by women in the livelihoods of Indonesian families may be undervalued or overlooked by the literature to date. A stakeholder from the Ministry of Women Empowerment described how the role of men as breadwinners is prioritized by Indonesian law, leading to the formation of inaccurate perceptions about women. In reality, women play an essential role in managing businesses, regardless of who owns the business. During the COVID-19 pandemic, when many men were laid off, the importance of women for the family became more prominent, as businesses that had previously been “side gigs” became essential forms of financial support.¹⁹⁷ A stakeholder from ride-hailing platform Gojek echoed this view, stating that “there is a balance between men and women merchants in the marketplace, though male still dominates driver-partners of ride-hailing.”¹⁹⁸

Women's online businesses often start as a supplement and later become the family's main income, leading to spouses leaving their employment to support the business. Spousal support is crucial in both technological and business aspects of platform livelihoods, as a support system is essential for women who need to balance business and family.¹⁹⁹

194. World Bank, [Beyond Unicorns](#), 35.

195. Crosby and Cahaya, [“The Lure of the City, the Possibilities of the Village.”](#)

196. Savirani and Mustika, [“My Kids Need Me, but We Need Money Too”: Female GOJEK Drivers in Indonesia.”](#)

197. Interview with Eni Widiyanti, Indonesia Ministry of Women Empowerment and Child Protection, 2021.

198. Interview with Hilman Palaon, Digital Transformation and Financial Inclusion, Gojek, 2021.

199. Interview with Melissa Ezmialda, Bina Nusantara University, 2021.

Reimagining training

There is so much potential to help women do more with social commerce, and to get into e-commerce more broadly, that targeted upskilling programs for women may be necessary. Yet an official from the Ministry of Women Empowerment argued that many such programs, including those in the digital platforms, are still “hit-and-run” programs that do not focus specifically on the needs of women entrepreneurs. Though women’s businesses offer good-quality products, they often lack the knowledge to create and post successful marketing promotions on platforms.²⁰⁰ Online business training for women in remote areas is still needed. Women also face challenges accessing adequate capital, especially with light collateral.²⁰¹

Marketplace platforms recognize the need to empower women entrepreneurs and work with NGOs in empowerment programs. For example, the Elevenia-Mercy Corps collaboration involves Bank BNI as financing partners in Camelia Programs.²⁰² Ikhwan from Mercy Corps highlights the need to support women entrepreneurs in leading or managing their businesses.²⁰³

Generating better data on gender and the platform economy

The map of the Indonesian digital economy lacks a gender perspective. As illustrated by the mosaic of sources used to juxtapose and create insights in this review, consistent gender-disaggregated data is still difficult to obtain, which highlights the need for data segregation. Platforms and financial institutions have not intentionally collected gender-related data.²⁰⁴ The IFC highlights this problem by calling for the collection of gender-disaggregated data to enable the gender-based analysis necessary to improve gender-targeted programs.²⁰⁵

Engaging with a diversity of women’s experiences in platform work

It is important to avoid oversimplification of the issues of gender in platform livelihoods. There are several indications in this review that women engage with platform livelihoods for different reasons, at different life stages, and with different degrees of success and satisfaction. Some are entrepreneurs who open a business for a living but have no plans to develop it further.²⁰⁶ In this case, a digital platform is considered if it makes their lives easier, and WhatsApp groups and social media are considered more appropriate to use. Others are growth-oriented women entrepreneurs who explore ways to develop their business, do a lot of networking, and update themselves with new information, including access to funding.²⁰⁷

The importance of recognizing such diversity in needs and goals is that it complicates any frame that characterizes participation in formal e-commerce platform marketplaces as a natural or desired progression from social commerce. An inclusive platform economy may need to support some MSEs who focus on social and informal commerce and others who engage on formal marketplaces, instead of forcing a one-size-fits-all paradigm.

200. Interview with Eni Widiyanti, Indonesia Ministry of Women Empowerment and Child Protection, 2021.

201. Interview with Melissa Azmieralda, Swiss German University, 2021.

202. Interview with Trianita Hesti, Chief Government Relation Officer, Elevenia, 2021.

203. Interview with Andi Ikhwan, Agri-Fin Mobile Consultant, Mercy Corps, 2021.

204. Interview with Eni Widiyanti, Indonesia Ministry of Women Empowerment and Child Protection, 2021.

205. IFC, [Women and E-Commerce in Southeast Asia](#).

206. Interview with Lia Purnamasari, Pulse Lab Jakarta, 2021.

207. Interview with Lia Purnamasari, Pulse Lab Jakarta, 2021.

6 | Geography: What are the prospects for platform livelihoods in rural areas?

It's no secret that rural Indonesia presents challenges for the platform economy. A few studies, notably by Alpha JWC Ventures and Kearney, and Facebook, deal specifically with the prospects for platforms to support rural livelihoods. There are significant infrastructure challenges, including electricity and internet access. There are challenges of inter- and intra-island transport that can also impact e-commerce. Lower density, purchasing power, and internet-readiness of customers also limit the attractiveness (and increase the cost-to-serve) for platforms of all kinds.

Despite these obstacles, there are some indications that platformization is growing; e-commerce is serving rural consumers, there is some spread in ride-hailing (both by the giants and by some smaller players), and there is experimentation in the platform agriculture space. However, the next few years will be critical in developing business models and product/service sets that can appeal to rural customers and involve more rural households in platform livelihoods.

Indonesia's archipelagic nature is an important factor in the spread of the platform economy across the nation, particularly in rural areas. Inter-island transportation and logistical challenges led to faster platformization in the main island relative to the remote islands.²⁰⁸ Only 45.1% of eastern Indonesian roads are viable, preventing expansion of both digital infrastructure and the physical transfer of goods.²⁰⁹ West Papua and Nusa Tenggara Timur have a 50% electrification rate, which seriously impacts levels of internet connectivity.²¹⁰ Only 48% of rural Indonesia (compared to 72% of urban areas) has internet connectivity.²¹¹

Many studies of Indonesia's platform economy don't engage extensively with rural areas, but there are exceptions. This section draws extensively on two reports specifically about developments in platforms beyond the metros: Tjan et al., "Unlocking the Next Wave of Digital Growth: Beyond Metropolitan Indonesia" and Rafitrandi et al., *Exploring the Potential of Digitalization for Inclusive Socio-Economic Development in Eastern Indonesia*.



208. IFC, [Women and E-Commerce in Southeast Asia](#).

209. Rafitrandi et al., [Exploring the Potential of Digitalization for Inclusive Socio-Economic Development in Eastern Indonesia](#).

210. Alikhan, Bentley, and Maharika, "What Role Can Digital Platforms Play in Scaling the Social and Solidarity Economy? Investigating the Role of Platforms in Indonesia's Tourism Sector"; World Bank, [Beyond Unicorns](#).

211. Paterson, "Indonesian Cyberspace Expansion"; World Bank, [Beyond Unicorns](#).

THE CHANGING RELATIONSHIP BETWEEN RURAL AND URBAN INDONESIA

Against the stark contrasts between rural and urban Indonesia, there is change. The tertiary education level of the rural population has been consistently increasing, from 9.31% in 2011, to 13.02% in 2015, to 19.77% in 2020.²¹² The Indonesian Central Agency on Statistics (BPS) reports consistent growth in information, computers, and technology (ICT) skills among rural 15- to 24-year-olds. This proportion grew from 16.95% in 2011, to 35.56% in 2015, to 79.36% in 2020. The skills gap between rural and urban populations is getting smaller, from -28.97% in 2011, to -30.77% in 2015, to -13.61% in 2020. Some studies suggest only 23% of the younger rural population prefers to seek urbanization.²¹³

However, paradoxically, while the gap in tertiary education between rural and urban Indonesia continues to narrow, the higher-order skill and digital literacy gap is widening.²¹⁴ But there is a high likelihood of movement to the cities by those with high skills living in rural areas.²¹⁵

A particular challenge for the spread of the platform economy (and livelihoods) to rural areas is a lower density of customers with a) the purchasing power to consume platformizable goods and services and b) the digital savviness and in-place habits to make purchases via platform channels.²¹⁶ There is also a lack of trust in goods' pricing, quality, and availability, whether goods will be delivered in good condition, and whether returns will be accepted.²¹⁷



212. Satudata Indonesia, "[Angka Partisipasi Kasar \(APK\) Perguruan Tinggi \(PT\) Menurut Daerah Tempat Tinggal—Angka Partisipasi Kasar \(APK\) Perguruan Tinggi \(PT\) Menurut Daerah Tempat Tinggal](#)."

213. Aprilia, Nugroho, and Mutisari, "[Preference of Rural Youth Livelihood in Indonesia Rural Areas and Its Factors](#)."

214. Agahari, "[Digital Innovation in Indonesia](#)"; Hadi, "[Bridging Indonesia's Digital Divide](#)," 218; Paterson, "[Indonesian Cyberspace Expansion](#)."

215. Satudata Indonesia, "[Angka Partisipasi Kasar \(APK\) Perguruan Tinggi \(PT\) Menurut Daerah Tempat Tinggal—Angka Partisipasi Kasar \(APK\) Perguruan Tinggi \(PT\) Menurut Daerah Tempat Tinggal](#)"; Aprilia, Nugroho, and Mutisari, "[Preference of Rural Youth Livelihood in Indonesia Rural Areas and Its Factors](#)."

216. Tjan et al., "[Unlocking the Next Wave of Digital Growth: Beyond Metropolitan Indonesia](#)."

217. Tjan et al., "[Unlocking the Next Wave of Digital Growth: Beyond Metropolitan Indonesia](#)"; World Bank, [Beyond Unicorns](#).

RURAL PARTICIPATION IN GIG WORK

Demand for ride-hailing and its associated services is concentrated in urban areas.²¹⁸ A 2021 report by Alpha JWC Ventures and Kearny indicated that only 47% of respondents (2,100 consumers and 1,100 retailers) in tier-2 and tier-3 cities—cities with growing middle-class populations and developing digital and logistical infrastructure—are aware of platform-based ride-hailing. The report also found that platform-based ride-hailing utilization for food delivery and ride-hailing in tier-2 and tier-3 cities only represented 7% and 5% of consumer respondents, respectively.²¹⁹ The low awareness and utilization of services offered by platform-based ride-hailing in these outlying cities are consistent with a lower likelihood of driver-partners operating in rural areas.

A few rural-specific ride-hailing platforms are emerging, though they remain orders of magnitude smaller than the urban giants. These include Online Tasik Selatan (OTS) and [Jekdes](#) (over 100 driver-partners in 2020).²²⁰ [Ngojol](#), a rural-based ride-hailing platform in central Java, had 200 driver-partners in 2020, which was expected to increase to 500 by the end of 2020.²²¹ In contrast to driving, freelancing easily breaks physical and space boundaries. In theory, freelancers could work from anywhere in Indonesia, as long as there is power and reliable internet. Indeed, Crosby and Cahaya discuss how some freelancers in the creative and multimedia industries are able to earn a living via crowdsourcing platforms such as [99designs.com](#).²²² But, as noted in the section on sizing, there are relatively few Indonesians active on the global freelance platforms, and relatively few of those are likely to be in rural areas.²²³



218. Budiman, Hernandez, and Roest, "[Ride-Hailing Drivers in Indonesia Discuss Livelihoods, COVID-19](#)."

219. Tjan et al., "[Unlocking the Next Wave of Digital Growth: Beyond Metropolitan Indonesia](#)," 32.

220. Setiadi, "[Alumni SMANKA Tasik Ciptakan Aplikasi Ojol Pedesaan OTS](#)"; Ramlie, "[Aplikasi Jekdes Karya Anak Desa Bangkitkan UMKM Sukabumi](#)."

221. Utaminings, "[Pertama Di Jateng, BUMDes Punya Usaha Ojek Online By Sumarni - 06 November 2020 2119](#)."

222. Crosby and Cahaya, "[The Lure of the City, the Possibilities of the Village](#)."

223. Sucahyo, Gandhi, and Faisal, "[Numbers, Type and Income of Online Gig Workers in Indonesia](#)."

RURAL PARTICIPATION IN MARKETPLACE PLATFORMS

The World Bank's Beyond Unicorns report suggests that “e commerce has touched all parts of Indonesia but is still largely Java-centric.”²²⁴ Whether one reads this as a “glass half full” or “glass half empty” may depend on one’s perspective. The study’s regression analysis, based on data provided by two large platforms, suggests that growth in e-commerce penetration (both buying and selling) has been concentrated in provinces where internet access was expanding and where cost of logistics had declined.²²⁵ In short, denser clusters of e-commerce activity tracked with urban growth. The intensity of e-commerce participation had its own observed dynamic, with smaller, more frequent orders in urban areas with good logistics, and larger, but less frequent, bundled activities in more rural areas.²²⁶

These patterns have implications for who can participate in e-commerce as a seller and what models will thrive. Critical barriers to deepening e-commerce include: a) the lack of standard addresses and postcodes; b) a lack of third-party logistics services providers (LSPs) outside the metros (though this may be slowing improving thanks to platform business models like [Paxel](#)²²⁷ and to development of B2B last-mile logistics by platforms like Bukalapak²²⁸; c) a lack of agent networks and mobile money uptake in rural areas; d) airlines prioritizing passengers over goods; e) inadequate transportation modes for perishable goods; and f) the lack of regulation to address these problems.²²⁹

A 2018 McKinsey & Company report analyzing Tokopedia and Google proprietary data, expert interviews, and surveys indicates different rates of change for rural spending and sales by rural sellers. Rural online spending quadrupled between 2014 and 2017. But rural sellers’ sales grew slower (a 2.5-time increase), and marketplace platform sales in rural areas remain two-thirds of those in Jakarta.²³⁰ Similarly, Tokopedia’s CEO stated in 2021 that 56% of new users joining the platform during the pandemic were from outside major metro areas.²³¹

Tjan et al. suggest that the adoption of the digital economy in rural areas is about four years behind that of urban areas. They note that, while 66% of the rural population is aware of digital marketplaces, as of 2020 only 38% of consumers in tier-2 and tier-3 cities engaged in digital marketplace transactions (compared to 55% for tier-1 cities).²³²

Rafitrandi et al. highlight some existing examples of platforms which specifically target users in smaller towns and rural areas, such as Makasar Berdagang (a marketplace) and Jekdes.²³³ Jekdes has diversified its services beyond ride-hailing to offer delivery (groceries, pharmacy, and perishable goods) and ambulance and home medical services. Jekdes also partnered with more than 200 MSEs and a financial institution to promote an e-wallet for payments on the platform.²³⁴ Rural entrepreneurs benefit from such integration because of its “localized” approach, which helps keep the size of the enterprises manageable, allows rural areas to remain safe entrepreneurship communities, and lowers the costs of delivery.

224. World Bank, [Beyond Unicorns](#), 141. See also Pulse Lab Jakarta, “[How Is Digitalization Helping Women-Owned Micro and Small Businesses Cope During the Pandemic?](#)”

225. World Bank, [Beyond Unicorns](#), 142.

226. World Bank, [Beyond Unicorns](#), 142.

227. World Bank, [Beyond Unicorns](#), 143.

228. World Bank, [Beyond Unicorns](#), 143.

229. World Bank, [Beyond Unicorns](#), 147.

230. Das et al., [The Digital Archipelago](#).

231. Jatmiko, “[Tokopedia, Shopee Dan Bukalapak Kolaborasi Bantu UMKM Tumbuh](#).”

232. Tjan et al., “[Unlocking the Next Wave of Digital Growth: Beyond Metropolitan Indonesia](#).”

233. Rafitrandi et al., [Exploring the Potential of Digitalization for Inclusive Socio-Economic Development in Eastern Indonesia](#).

234. Ramlie, “[Aplikasi Jekdes Karya Anak Desa Bangkitkan UMKM Sukabumi](#).”



RURAL PARTICIPATION IN AGRICULTURAL PLATFORMS

There are efforts in Indonesia to use platform models to engage farmers and fisherfolk, connecting them to larger markets and more lucrative livelihoods.²³⁵ These efforts are still relatively small and are evolving, but are worth highlighting.

Tanihub

TaniHub, an agricultural marketplace platform, reported in 2021 involving about 45,000 partner farmers, primarily smallholders, connecting with more than 350,000 buyers. The buyers ranged from retail to bulk buyers, such as hotels, restaurants, and supermarkets. TaniHub provides product packaging and delivery through its TaniSupply platform, access to financing through TaniFund, and access to the export market.²³⁶ TaniFund empowers farmers in ways that will lead to higher yields and products that meet customers' demands.²³⁷ But the World Bank notes that Tanihub too faces logistics challenges, as the lack of LSPs outside Java limits their ability to interface directly with small farmers, particularly where cold storage and transport are required.²³⁸ In 2022, TaniHub exited the B2C market and closed some of its warehouses outside of Java.²³⁹

235. O'Callaghan, "Pandemic Shows Potential for Young Indonesian Growers"; Wahid, "Implementation of Paid Instagram Ads for Fresh Produce Sellers Affected by Covid-19 Pandemic in a Traditional Market in Palembang."

236. Shu, "Indonesia 'Sea-to-Table' Platform Aruna Hooks \$35m Led by Prosus and East Ventures Growth Fund."

237. Impact at IFC, "Digital Marketplace Keeps Indonesian Farmers in Business."

238. World Bank, *Beyond Unicorns*, 143.

239. Prsidya, "Agritech Startup TaniHub Steers Away from the Crowd, Announces B2B Refocus."



Aruna

Founded in 2016, [Aruna](#) is a platform through which fishermen can connect with bulk or retail buyers. Reports by Assa and Adirenekso and by Shu detail Aruna's approach.²⁴⁰ Historically, there could be between six and seven layers between fishermen and buyers like restaurants, retail buyers, or exporters. Aruna shortened this distance by providing a platform through which buyers can order; the order is distributed according to type of product to fishery communities organized by Aruna account. Shu argues that this process helps predict demand, thus preventing over-fishing and providing greater returns for fishermen. Aruna provides logistics support by operating warehouses where fishermen bring their product for quality checks, processing, and packaging.²⁴¹ Deliveries are done through third-party contractors. Aruna helps fishermen focus on two or three specialized products, thus improving traceability of product to specific fishermen with the goal of improving quality and sustainability. This approach helps Aruna to have a targeted training program. Aruna also helps with fishermen's financing needs by linking them with financial institutions and fintechs. Aruna helps fulfill historical financial information requirements by keeping and providing transactions records. Aruna's financing dimension may help fishermen from becoming victim of predatory lending.²⁴²

In 2021, there were about 21,000 fishermen on the Aruna platform, which represents a mere 0.8% of fishermen in Indonesia. Although the platform is currently small, it presents a large opportunity for growth. Aruna has helped significantly improve the average income of fishermen; for example, in Balikpapan, the average income grew from IDR 1.5 million (US\$105.84) to IDR 3 million (US\$209.67).²⁴³

240. Assa and Adirenekso, "[Digital Platform Utilization for Indonesian Marine Products Marketing](#)"; Shu, "[Indonesia 'Sea-to-Table' Platform Aruna Hooks \\$35m Led by Prosus and East Ventures Growth Fund](#)."

241. Shu, "[Indonesia 'Sea-to-Table' Platform Aruna Hooks \\$35m Led by Prosus and East Ventures Growth Fund](#)."

242. Assa and Adirenekso, "[Digital Platform Utilization for Indonesian Marine Products Marketing](#)."

243. Assa and Adirenekso, "[Digital Platform Utilization for Indonesian Marine Products Marketing](#)."

REFLECTIONS

The usage of digital platforms to support agricultural livelihoods in rural areas is still very nascent. Interviews with scholars and NGO stakeholders reveal several challenges for such platforms.

First, most digital agriculture platforms do not directly connect farmers with consumers. Pamitra Wineka, the CEO of TaniHub, said that *"TaniHub does not work directly with farmers but with farmer groups (about 2,000 groups). The argument is that coordination becomes much easier when working with farmer groups, which could be collectors or a packing house."*²⁴⁴ However, in these types of aggregation models, a layer of intermediation is imposed, which reduces the value that farmers can derive from platform participation. Furthermore, according to a stakeholder from 8villages, *"platforms ... first and foremost need to focus on sales. The current digital agriculture platform setup is more business-to-business, wherein the middlemen can be seen as the ones that benefit, and the farmers remain to be the growers. In the current setup, the agriculture digital platform is focused on the marketing side, and not much supportive to farmers' production side."*²⁴⁵

A second challenge faced by businesses in rural areas relates to infrastructure and logistics. High transportation costs lead to unattractively high prices, which turn customers away. An interviewee expressed this sentiment: *"Logistics is an issue, especially for businesses outside Java. For example, those in Belitung find it easier to find fertilizer from Jakarta. Because it takes longer to order from Palembang (which is located much closer) compared to Jakarta. Free shipping provided by the marketplace helps SMEs sell their products. It isn't easy to sell herbal medicine, which costs only 40,000 rupiah but becomes significantly expensive due to the addition of 15,000 in the shipping cost. But if the marketplace covers the shipping costs, the chances of selling are higher."*²⁴⁶ Wineka from TaniHub said that *"the challenge for agriculture products in digital platforms is that we are dealing with perishable products—we need to align demand and quality, timing, pricing, and supply chain. Good product that is accompanied by poor logistics is bad business."*²⁴⁷ A stakeholder from Mercy Corps explained that *"competitive prices can be achieved by improving not only digitalization but also logistics issues."*²⁴⁸

Walandouw and Wisana suggest logistics platforms might receive incentives to serve rural areas: *"There is a need to provide incentives for logistics platforms to serve the rural areas, thus making it cheaper for MSE. Incentives that can be given are in the form of easy licensing, easy access to locations, tax facilities, and public-private partnerships."*²⁴⁹

A third challenge for farmers is the (lack of) digital readiness: *"There is homework to do to enable farmers to embrace platform livelihood,"* Ikhwan from Mercy Corps Indonesia said. *"Many farmers are yet to own cell phones. Those who do own one are yet to use the internet. Farmers still need a human interface, and because of this, the role of field assistants is required. Digitization is vital at the aggregator (collector) level, and it is essential to identify young people (30 years and under) to become leaders for digitization (among farmers)."*²⁵⁰

244. Interview with Pamitra Wineka, Chief Executive Officer, TaniHub, 2021.

245. Interview with 8villages, 2021.

246. Interview with Trianita Hesti, Chief Government Relation Officer, Elevania, 2021.

247. Interview with Pamitra Wineka, Chief Executive Officer, TaniHub, 2021.

248. Interview with Andi Ikhwan, Agri-Fin Mobile Consultant, Mercy Corps, 2021.

249. Interview with Walandouw and Wisana, LDUI, 2021.

250. Interview with Andi Ikhwan, Agri-Fin Mobile Consultant, Mercy Corps, 2021.

Ikhwan further explained that “a digital platform that provides information for farmers such as weather information, harvest prices, crop calendars, advisory services, report on irrigation condition/problem and others is important. It is better for the government agencies (Bappenas, Ministry of Public Works, Ministry of Agriculture, Ministry of Home Affairs, Bank Indonesia, and others) to facilitate API among government agencies and Ag-tech private providers to enable farmers and extension workers to access digital advisory services (DAS) that are currently available in government agencies and private providers that could increase farmers' yield and improve farmers' income.”²⁵¹ Farmers also have varied needs that digital platforms have not yet met.

“

There is no single application that can meet the needs of farmers; therefore, what is needed is a digital ecosystem. The farmers need an ecosystem of relevant applications that a facilitator can manage. The relevant applications should be interconnected, thus, allowing the farmers access to various relevant information, such as weather, prices, on-farming solutions, agri-tech for sales, input supply, capacity building, and others.²⁵² ”

There is currently limited information on the level of engagement in platform livelihoods among rural Indonesians and the suitability of platform business models for rural areas, which presents an opportunity for future investigation. The broader contextual factors—infrastructure, migration of skilled workers away from rural areas—are more extensive than what platformization might directly solve. But experiments in platformization will continue to adapt and work in the context of these constraints to deliver more value to Indonesians living in rural areas.



251. Interview with Andi Ikhwan, Agri-Fin Mobile Consultant, Mercy Corps, 2021.

252. Interview with 8villages, 2021.

7 | DFS: Does financial inclusion support platform livelihoods, and vice versa?

In a word, yes. There is clear interplay and interdependence between digital financial services (DFS) and platform livelihoods in Indonesia. This brief section details how the DFS that platforms provide—or partner to provide—help individuals with livelihoods and financial inclusion.

The synergies between digital wallets/financial services and physical locations have been core to Indonesia's platform economy since its beginnings. Grab and GoTo, in particular, have built a remarkable array of services around transportation and digital transactions. More recently, platforms' engagement with "last-mile" mitras and nanostores has increased the interrelationships between financial services and physical locations (see Appendix B of this report).

And yet, in terms of utilization of DFS, the World Bank's 2020 Digital Economy Household Survey shows that only 52% of surveyed households in Indonesia had access to a bank account. Among those households, 4 in 5 did not use digital financial services—in other words, only 9% of Indonesian households were DFS users.²⁵³



Merchants using platform DFS

One 2021 study by the LDUI illustrates how DFS and platform businesses are intertwined. 78% of merchants surveyed in the GoTo network reported using GoBiz (an app-based or physical point-of-sale device), and 49% reported using the payments service GoPay.²⁵⁴ Of those, 3 in 5 merchants were using GoPay as their first digital payment method.²⁵⁵ This suggests that, in many cases, the desire to do business within the GoTo ecosystem predated the use of business-specific DFS applications. The same study suggests that *“almost half (49%) of MSME merchants used GoTo Financial products to help them sell online for the first time”* and *“83% of MSME merchants used a digital cash register application for the first time with GoTo Financial products.”*²⁵⁶

In terms of the need for financial services among farmers, there are mixed notions. One stakeholder suggested that *“money is not the main problem for farmers because nowadays, there are many funding sources for farmers. And there is a lot of assistance provided in seeds and input, and even adequate irrigation. But the main problem is market access.”*²⁵⁷ TaniHub also provides funding for farmers through its fintech arm, TaniFund, which offers loans for on-farming activities and purchase orders through farmer groups.²⁵⁸ However, fintech as a financing source is still seen as not meeting needs specific to rural areas: *“As they continue to innovate (requiring large funding) the urban market is still the main target. (Fintech) is yet to play a role in rural areas.”*²⁵⁹

Drivers (gig workers) using platform DFS

In Indonesia, the ride-hailing sector is leading the way in terms of DFS integration and the use of e-money. Grab uses OVO as its digital payment service, and Gojek features GoPay. Customers may transfer funds into their digital wallet (GoPay or OVO) and choose to pay with e-money or cash.²⁶⁰ The presence of digital payment systems in the ride-hailing sector can increase both drivers and customers' access to and familiarity with DFS.²⁶¹ Familiarity with the process of digital payments may also open the door to more sophisticated DFS, such as insurance payments and lending.²⁶²

Coupez suggests that driver-partners in ride-hailing sectors could take advantage of financing services from their platforms to expand or upgrade capital assets and develop human assets through education.²⁶³ Indeed, Gojek is leading in financial and digital training, particularly in basic bank literacy, access to non-bank financial services, increasing household income and economic management, utilizing loan products, and using non-cash transactions.

Gojek trains and facilitates skills related to the use of various banking services. Gojek's Swadaya program educates its partners through three pillars. The “protect” pillar educates driver-partners about non-bank financial services, especially insurance.

253. World Bank, [Beyond Unicorns](#), 39.

254. Walandouw, Primaldhi, and Wongkaren, [“GoTo Financial's Role in Indonesia's Financial Inclusion,”](#) 16.

255. Walandouw, Primaldhi, and Wongkaren, [“GoTo Financial's Role in Indonesia's Financial Inclusion,”](#) 17.

256. Walandouw, Primaldhi, and Wongkaren, [“GoTo Financial's Role in Indonesia's Financial Inclusion,”](#) 26.

257. Interview with Pamitra Wineka, Chief Executive Officer, TaniHub, 2021.

258. Interview with Pamitra Wineka, Chief Executive Officer, TaniHub, 2021.

259. Interview with Praswistiadi Syarif Syamsuri, AFTECH, 2021.

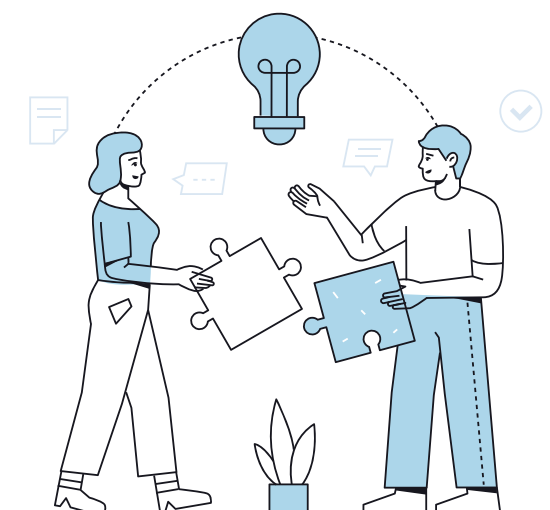
260. Budiman, Hernandez, and Roest, [“Ride-Hailing Drivers in Indonesia Discuss Livelihoods, COVID-19”](#); Ford and Honan, [“The Go-Jek Effect.”](#)

261. Budiman, Hernandez, and Roest, [“Ride-Hailing Drivers in Indonesia Discuss Livelihoods, COVID-19.”](#)

262. Tobin and Wardhani, [“The \\$18 Billion Gojek-Tokopedia Merger Sets the Stage for a Fintech Showdown.”](#)

263. Coupez, [“Sharing Economy: A Drive to Success—the Case of GO-JEK in Jakarta, Indonesia.”](#)

Awareness of health and accident insurance benefits and automatic enrollment in GoSure, Gojek's insurance arm, encourages partners to include their families in the insurance program. Through the "lighten" pillar, Gojek provides training on managing daily operational costs for income growth. Finally, through the "plan" pillar, Gojek develops long-term financial sustainability through financial planning.²⁶⁴



KEY ROLE OF PARTNERSHIPS

The other way in which platform companies can match DFS to workers and sellers is via partnerships. Collaboration among platforms and DFS providers allows for the convergence of the value chain into a more seamless process, leading to a positive and inclusive DFS experience.

DFS partnerships with social media platforms

In 2020, Facebook made in an investment in GoJek: "According to a regulatory filing, Facebook now owns a 2.4 percent stake in GoJek's GoPay fintech arm, while PayPal owns 0.6 percent of GoPay."²⁶⁵ This was expected to open new avenues of collaboration of financial services.²⁶⁶

Indeed, the biggest game-changer for the integration of DFS and social commerce would be the introduction of WhatsApp payments in Indonesia. But currently, WhatsApp Pay is only available in India and Brazil, as well as via the "Novi" wallet in the US.

264. Coupez, "Sharing Economy: A Drive to Success—the Case of GO-JEK in Jakarta, Indonesia."

265. Singh, "Facebook and PayPal Invest in Southeast Asian Ride-Hailing Giant GoJek."

266. Datwani, Raman, and Roest, "Will Facebook Soon Dominate Digital Payments in India, Indonesia?"





DFS partnerships with e-commerce platforms

The partnership of platforms with digital wallet operators and fintechs leads to the convergence of platforms and DFS. For instance, BukaReksa partnered with Indonesian fintech firm Dana to make mutual fund investments possible for ordinary Indonesians.²⁶⁷ The partnership of fintech with platforms such as Investree, Akseleran, Modalku, Koinworks, Kredivo, and Bank Mandiri with Bukalapak has helped expand access to credit for buyers and sellers and the underserved.²⁶⁸

Convergence among e-commerce platforms

The GoJek and Tokopedia merger enabled Tokopedia to offer its clients credit and peer-to-peer lending services through GoPay. Gojek's driver-partners can make purchases in Tokopedia using GoPay and insure the goods with GoSure, Gojek's insurance arm. Tokopedia customers can take advantage of Gojek's PayLater deferred payment program. Soon, Gojek and Tokopedia clients may have bank accounts and bank loans because Gojek has acquired Bank Jago, a local bank.²⁶⁹

The integration of Gojek and Bank Jago opens the possibility of opening a Jago bank account directly from the Gojek mobile application. There are hopes this service will open access to digital banking for millions of unbanked and underbanked consumers.²⁷⁰

The convergence towards a digital ecosystem that includes DFS provides rich potential for making DFS more inclusive. However, platforms that took the merger and acquisition route to create a digital ecosystem may face legal barriers, such as anti-trust laws.²⁷¹

267. Utami, "[E-Commerce Dan E-Wallet Dorong Pertumbuhan Ekosistem Reksa Dana.](#)"

268. Nuryakin, Aisha, and Massie, "[Financial Technology in Indonesia: A Fragmented Instrument for Financial Inclusion?](#)"; Sari, "[4 E-Commerce Besar Mengincar Penyaluran Pinjaman Ke Pedagang Online.](#)"

269. Tobin and Wardhani, "[The \\$18 Billion Gojek-Tokopedia Merger Sets the Stage for a Fintech Showdown.](#)"

270. Corneille, "[Gojek Invests in Bank Jago to Accelerate Financial Inclusion in Indonesia.](#)"

271. Tobin and Wardhani, "[The \\$18 Billion Gojek-Tokopedia Merger Sets the Stage for a Fintech Showdown.](#)"



REFLECTIONS

Discussions with stakeholders yielded three additional insights about the interplay between DFS and platforms.

- 1 Currently, many entrepreneurs still rely on cash for payments, even though transactions can be carried out on digital platforms. For example, the purchase of raw material supplies is often still carried out offline using cash. Because of this, attention should be given to the entire cycle of the value chain as part of the effort to encourage the use of DFS among business enterprises in digital platforms.
- 2 An interviewee from the World Bank indicates that the use of Quick Response Code Indonesian Standard (QRIS) is an important interoperability infrastructure that allows merchants to perform cash-in-cash-out and offline cash transfers.²⁷² QRIS is the unification of QR types from various Payment System Service Providers (PJSPs) using a QR code. QRIS was developed by the payment system industry with Bank Indonesia to make the transaction process easier, faster, and more secure. All PJSPs who will use QR code payments must implement QRIS.²⁷³
- 3 Finally, new regulations by Bank Indonesia states that all Layanan Keuangan Digital (LKD) village microfinance providers must have the ability to use legal entities and individuals as agents, which can be seen as a relaxation of regulation for non-bank LKD providers to use individuals as agents (which was previously restricted to only legal entities).²⁷⁴

272. Interview with a Senior Financial Sector Specialist, World Bank, 2021.

273. Bank Indonesia, "[Kanal Dan Layanan](#)."

274. Interview with a Senior Financial Sector Specialist, World Bank, 2021

8 Improving platform livelihoods in Indonesia?

This literature review and set of stakeholder interviews has largely been descriptive, conveying the state of digital inclusion, financial inclusion, and platform livelihoods in Indonesia through many lenses. In contrast, this final summary section takes a more forward-looking and integrative perspectives.

It has two parts. The first briefly summarizes calls to action as shared across several of the studies in the review. The second offers our own assessment of the review and how it might inform attention, action, and investment as Indonesia exits the pandemic and moves into 2023.

CALLS TO ACTION IN THE LITERATURE

It is important to underscore the heterogeneity of methodologies, disciplines, and themes represented in this review. This chapter is animated by a general question: “what should be done to ensure that Indonesia’s platform economy is as inclusive as possible?” However, many of the studies did not directly engage with that question—and if they did, they did so from different perspectives.

Despite the diversity of the studies included in this review, we identified four distinct clusters of calls-to-action.

- Deepening DFS interventions for inclusion in the platform economy
- Promoting education and transfer knowledge
- Protecting platform workers
- Improving the business environment

We make no assertions nor does the data support any relative weight between these approaches, which are as much “theories of action” for digital inclusion as they are specific to-dos. But it is worth reflecting on each of them in turn.



DEEPENING DFS INTERVENTIONS FOR INCLUSION IN THE PLATFORM ECONOMY

Several studies highlighted ways the DFS and platform ecosystems could be further connected to promote financial and digital inclusion, and better livelihoods.

There is a specific regulatory challenge around transferable KYC services. A representative at GoTo described how its customers must reenter data for financial service users, even if that data already exists on the platform.²⁷⁵ This is illustrative of a broader point about regulation broadly.

Regulation could be nimbler and more harmonized. Some argued that DFS providers could push to expand the network of non-bank agents to facilitate balance top-up of e-money or e-wallet. Syamsuri from AFTECH suggested that *"the potential for gig workers and merchants on digital platforms for financial inclusion is huge ... but so far, there are regulatory obstacles that disallow individuals to become digital financial service agents."*²⁷⁶ There are at least four regulators that touch the DFS and platform ecosystems: Bank Indonesia, Otoritas Jasa Keuangan/Financial Services Authority (OJK), the Ministry of Home Affairs, and Kominfo. Some argue that further synergy is desirable.²⁷⁷ Specifically, the BI payment system blueprint, the OJK financial services sector master plan, and the Communications and Information Technology digital roadmap need to be integrated into the digital ecosystem approach.²⁷⁸

Finally, there is likely an opportunity to help DFS support social commerce, particularly for women. The World Bank describes a myriad of actions, including using gender-disaggregated data to promote lending for women; differentiating personal transactions from business transactions for better tracing of business expenditures; increasing the diversity of and access to financial services in social media commerce, such as credit and insurance; and facilitating ease of loan repayment through platforms' payment features.²⁷⁹

PROMOTING EDUCATION AND KNOWLEDGE TRANSFER

A different change model common in the review focuses on improving the skills and capabilities of individual workers and small enterprises.

One approach is through upskilling. The 2021 World Bank report indicates that Indonesia faces a huge talent gap, particularly related to high-order digital skills.²⁸⁰ Several of the major studies covered in this review suggest that a well-planned, collaborative, coordinated, and inclusive upskilling effort will help reduce the digital gaps between urban and rural, between women and men, and between the poor and the rich.²⁸¹

275. Interview with Hilman Palaon, Digital Transformation and Financial Inclusion, GoJek, 2021.

276. Interview with Praswistiadi Syarief Syamsuri, AFTECH, 2021.

277. Interview with Dana Indonesia, 2021.

278. Interview with Praswistiadi Syarief Syamsuri, AFTECH, 2021.

279. Theis and Rusconi, ["Social Commerce Entrepreneurship and New Opportunities for Women's Financial Inclusion in India and Indonesia"](#); World Bank, [Beyond Unicorns](#).

280. World Bank, [Beyond Unicorns](#).

281. Tjan et al., ["Unlocking the Next Wave of Digital Growth: Beyond Metropolitan Indonesia"](#); Nuryakin, Aisha, and Massie, ["Financial Technology in Indonesia: A Fragmented Instrument for Financial Inclusion?"](#); Das et al., [The Digital Archipelago](#); Rusliati and Mulyaningrum, ["Micro and Small Business Development by Using Digital Economy"](#); UN Women and Pulse Lab Jakarta, ["Leveraging Digitalization to Cope with COVID-19: An Indonesia Case Study on Women-Owned Micro and Small Businesses"](#); Damuri, Fauri, and Rafitrandi, ["E-Commerce Development and Regulation in Indonesia."](#)

Such training could include combinations of platform proficiencies (how to use the service), financial and digital literacy, vocation-specific skills, and soft skills.²⁸² For growth-oriented entrepreneurs, mentorship, peer-to-peer learning,²⁸³ and in-person assisted approaches are important ways to build digital literacy and upskilling.²⁸⁴ The Ministry of Cooperatives and SMEs takes notice of the marketplace's interest in the upskilling and financing of MSEs; there are currently seven platforms engaged in upskilling programs, including Bukalapak, Blibli, Tokopedia, and TaniHub.²⁸⁵

Another common suggestion is to **promote user trust in DFS and platform economy systems**.²⁸⁶ A 2021 report by Alpha JWC Ventures indicates that more than 80% of consumers outside Indonesian metropolitan cities distrust online transactions and DFS.²⁸⁷ Customers and merchants alike need coaxing and clear examples to get comfortable with all-digital interactions rather than face-to-face transactions and to manage fraud.²⁸⁸

But knowledge alone might not be sufficient. The IFC, UN Women, and Pulse Lab Jakarta agree that educating marginalized and disadvantaged Indonesians toward embracing platform livelihoods and DFS will need to be **accompanied by empowering them for technology ownership and internet access** through financing and other approaches.²⁸⁹

PROTECTING PLATFORM WORKERS AND SELLERS

Several studies highlighted the role the state might play in further protecting or shaping the day-to-day livelihoods of platform workers and sellers. The shocks of COVID-19 revealed some vulnerabilities that individual workers and sellers face.²⁹⁰ For workers, a specific call was to explore **improving basic income guarantees for drivers**.²⁹¹ For sellers, stakeholder interviews revealed some concern that platforms may be involved to maximize profit without regard for the well-being of small enterprises. An interviewee from the Ministry of Rural, Underdeveloped Areas, and Transmigration expresses this concern by stating that, *"at present, the e-commerce platform is controlled by tech-giant investors ... with digitalization, we can develop digital cooperatives whose members are all cooperatives in Indonesia to ward off predators in Indonesia by tech giants."*²⁹²

282. Donner et al., "Platform-Led Upskilling."

283. Anugerah, "Indonesia's 'Youtube Village' Banks on Homegrown Video Stars"; Noerhartati et al., "Entrepreneurship Marketing Through the Marketplace for Sorghum Based Alternative Food"; Theis and Rusconi, "Social Commerce Entrepreneurship and New Opportunities for Women's Financial Inclusion in India and Indonesia."

284. Pulse Lab Jakarta, "How Is Digitalization Helping Women-Owned Micro and Small Businesses Cope During the Pandemic?"; Damuri, Fauri, and Rafitrandi, "E-Commerce Development and Regulation in Indonesia."

285. Interview with Siti Azizah, Indonesia Ministry of Cooperatives and SMEs, 2021.

286. Das et al., *The Digital Archipelago*.

287. Tjan et al., "Unlocking the Next Wave of Digital Growth: Beyond Metropolitan Indonesia."

288. Das et al., *The Digital Archipelago*.

289. IFC, *Women and E-Commerce in Southeast Asia*; UN Women and Pulse Lab Jakarta, "Leveraging Digitalization to Cope with COVID-19."

290. IFC, *Women and E-Commerce in Southeast Asia*; UN Women and Pulse Lab Jakarta, "Leveraging Digitalization to Cope with COVID-19"; Samir, "When the Pandemic Struck Indonesia, Urban Gig Workers Were Hit the Hardest."

291. Wulansari, Novianto, and Keban, "Riset: empat alasan kemitraan Gojek, Grab, hingga Maxim merugikan para Ojol."

292. Interview with Samsul Widodo, Indonesia Ministry of Rural, Underdeveloped Areas, and Transmigration, 2021.

PURSuing IMPROVEMENTS TO THE BUSINESS ENVIRONMENT



Perhaps the broadest array of actions identified in the review falls broadly under the umbrella of improving the business environment in ways that support platform livelihoods. The government, together with various stakeholders (including the platforms²⁹³), are actors here, and there here are several ways to proceed.²⁹⁴

A foundational action concerns internet access, because **without internet, there is no platform economy**. Several studies called for the closing of digital divides between rural and urban Indonesia as a precursor to further digital inclusion and participation in platform economies. Some improvements include maximizing mobile broadband spectrum management, investing in 5G capability in rural areas, and developing more competitive fixed and mobile broadband connectivity.²⁹⁵ The World Bank's report also suggests including infrastructure sharing among providers, allowing new providers into the market, and/or permitting fixed broadband operators to offer a broader portfolio of services, such as internet, phone, digital TV, etc.²⁹⁶

Some studies called for the **reduction of security risks in digital commerce**. The 2020 data breach of Tokopedia, the Bukalapak breach in 2019, and breach of user data in 32 other sites are examples of the level of risk faced by digital commerce. Other findings show that the likelihood of fraudulent online orders coming from Indonesia was twelve times greater than the global average.²⁹⁷

293. IFC, [Women and E-Commerce in Southeast Asia](#).

294. Mahesa, Yudoko, and Anggoro, "Platform Ecosystems for Indonesia Smart Cities."

295. World Bank, [Beyond Unicorns](#); Tjan et al., "[Unlocking the Next Wave of Digital Growth: Beyond Metropolitan Indonesia](#)"; IFC, [Women and E-Commerce in Southeast Asia](#); Raharja et al., "[Digital Payment as an Enabler for Business Opportunities: A Go-Pay Case Study](#)."

296. World Bank, [Beyond Unicorns](#).

297. Das et al., [The Digital Archipelago](#).

Others focused on the logistic challenge, suggesting that **improved logistics, particularly in rural areas**, would help accelerate e-commerce.²⁹⁸

The World Bank suggests that *“the use of digital ID as part of e-KYC will allow the unbanked and underserved to engage with fintech.”*²⁹⁹ Frederick Ho, the VP for Asia Pacific at Jumio, a Palo Alto-based identity verification company, argues that a strong digital ID system allows for ease of registration and verification of identity and leads to an efficient distribution of social benefits and assistance, as well as DFS adoption and use.³⁰⁰

Refining investment policy might support the health of the investment climate. Specific suggestions in this vein include providing tax incentives³⁰¹ and investment policies³⁰² to encourage MSE and entrepreneur participation in platform livelihoods and DFS.

Finally, a few studies highlight **the potential of the “Government to Persons” (G2P) channel** as a means to boost the platform ecosystem.³⁰³ However, the integration of G2P distributions into digital platforms is still in an early phase. One interviewee noted that the current distribution of G2P is still restricted by regulation to state-owned bank as payment providers, but beneficiaries have the options to use either branch, ATM or agents as payment channels.³⁰⁴ Another noted:

“

There is room for the development of the digital platform’s ecosystem for DFS and G2P. However, the infrastructure to allow integration of DFS and G2P in rural areas is currently insufficient. Digital platform players need to be encouraged or incentivized to serve in rural areas. For example, those who has been serving rural area can be allowed to be a channel of G2P distribution, and vice versa, those who want to provide G2P distribution should also commit to serve rural area. Agent networks have a crucial role to play for DFS (including those in digital platforms), not only to provide access but also to drive usage. But at this time, agents are playing a limited role, and the agent business model is still not that viable especially as compared to agent’s main business revenue. One of the limitations is the exclusivity of agents, where one agent can only be an extension of one financial service provider.³⁰⁵ ”

298. Das et al., [The Digital Archipelago](#); Tjan et al., [“Unlocking the Next Wave of Digital Growth: Beyond Metropolitan Indonesia”](#); IFC, [Women and E-Commerce in Southeast Asia](#); World Bank, [Beyond Unicorns](#).

299. World Bank, [Beyond Unicorns](#).

300. Ho, [“Where Public and Private Meet: How Can Indonesia’s e-KTP Help Citizens and Businesses?”](#)

301. Damuri, Fauri, and Rafitrandi, [“E-Commerce Development and Regulation in Indonesia”](#); Raharja et al., [“Digital Payment as an Enabler for Business Opportunities: A Go-Pay Case Study.”](#)

302. IFC, [Women and E-Commerce in Southeast Asia](#); Raharja et al., [“Digital Payment as an Enabler for Business Opportunities: A Go-Pay Case Study.”](#)

303. Morena et al., [“Towards Inclusive Digital Finance in Indonesia: A Literature Review and Landscape Analysis.”](#)

304. Interview with a Senior Financial Spector Specialist, World Bank, 2021.

305. Interview with Elwyn Sansius Panggabean, Financial Inclusion Expert, 2021.

DIGITAL AND FINANCIAL INCLUSION AND PLATFORM LIVELIHOODS

The preceding seven chapters, together with the first half of this chapter, provide an overview of what other researchers are saying about the Indonesian platform ecosystem. At this stage, we shift frames and offer the lessons we, as analysts, take from this exercise.

Some key “knowns”

In aggregate, **platform livelihoods are significant**. The estimation exercise in section 2 of this report suggests that as many as 20 million Indonesians gain at least some of their income via livelihoods mediated by social and/or marketplace platforms. While the number of full-timers may be considerably smaller, by our initial estimates perhaps 4.5 million, that's nevertheless a significant amount.

Many more Indonesians rely on platform sales than on platform work. When considering the platform economy, gig work may come to mind first. However, estimates show that trading has roughly ten times the footprint of working, which in turn dwarfs the niche roles of renting and creating. This ratio is probably even higher outside Indonesia, given the prevalence of ride-hailing in this ecosystem. But, importantly, this underscores how important the digitalization and platformization of small-scale, retail, and even informal/social trading can be to digital inclusion and broad-based digital livelihoods.

Platform sellers may experience a higher quality of life (and income) than platform workers. The studies detailed in section 3 and section 4 suggest that, in general, there is little concern or evidence in the literature about the quality of life or earning potential of sellers relative to gig workers. By contrast, drivers are particularly susceptible to algorithmic management, which controls the supply of drivers and sets prices. They have relatively little autonomy and many report long hours. Documentation of tensions and protests around platform work seems focused among drivers. Some of this may be a function of attention—the “future of work” as presented by ride-hailing and delivery is of particular interest to critical scholars and researchers around the world, and it is important to document these tensions and strains. But the studies to date also indicate a knowledge gap—most studies are of current and full-time drivers, and relatively little is known about how people got into driving or what they might do afterwards. The question “how is the quality of driving, as a livelihood?” is best modified to include “compared to what, and for whom?”

Social commerce and informal trading are critical for inclusion. Most trading activity takes place via informal platform selling (i.e., MSEs who use Meta platforms). There isn't much in the existing literature about this, but there is a whole world of tools and services starting to develop from startups to facilitate this digital informal commerce. In a few years, the lines between formal and informal commerce may be much blurrier.

Challenging dynamics of exclusion are replicating in the platform economy. **Women remain largely excluded from ride-hailing.** They do engage in lots of trading but often don't seem to advance to larger volumes and more formal businesses. And **the rural divide persists.** There is considerably less engagement in the platform economy by workers and sellers in rural areas. There are some promising ventures in platform agriculture, documented in section 2 of this report—[TaniHub](#) and [Sayurbox](#) in Agriculture, [Aruna](#) in fishing—but the numbers of individual livelihoods involved are still relatively small, measured in the tens of thousands, rather than in the millions.



Some key “unknowns” and the need for better data

It is important to **gather more nationally representative data about platform livelihoods**. This review indicates how the **footprint** of specific ecosystems, and the **earnings** of those working and selling within them, remain difficult to assess as individuals often work fractionally or for more than one platform at a time.³⁰⁶ Regular and extensive household surveys of the labor force could identify trends and further quantify who is earning (and how much) from the various kinds of platform livelihoods. Such an exercise could also clarify the extent of participation by the poor and women and how that compares to the general population. Importantly, several of the studies in this review were conducted in partnership with platforms themselves. In some cases, researchers have relied on platforms to provide lists of drivers, workers, and sellers to survey and interview. In other cases, statistics on the number of participants have come from the platforms themselves. It would be helpful to support research approaches that increase representativeness without relying on platform data in these ways.

Research also needs to **take a closer look at productivity**. The productivity returns to engagement with various kinds of social and e-commerce may be worth exploring in more detail. Do the increased sales and market access for service providers, retailers, and manufacturers outweigh the transaction fees? Do social commerce sellers see returns on their labor and investments, relative to alternative channels? There is no one-size-fits-all assessment that can be done, given the complexity and variety of business contexts. The World Bank has done good work here at national level.³⁰⁷ However, the research community should cultivate a broader stable of studies that provide evidence on how individuals and small-scale firms participate in value creation (and retain some of that created value) as they buy and sell through platform channels.

306. Murthy and Deshpande, “[How can Financial Services Support Platform Work? Insights from Five Emerging Markets](#)”; Caribou Digital and Qhala, “[Platform Livelihoods Knowledge Map: Fractional Work](#).”

307. World Bank, [Beyond Unicorns](#), 130.

There is a need to understand the drivers of and pathways to mobility. There is data that suggests that platform ecosystems are providing jobs for first-time workers, particularly in driving.³⁰⁸ But there is more to learn here about how people rotate into (and out of) platform work and platform sales, as well as how they progress within them. Not all workers and sellers are growth-minded or are investing returns back into the growth of their enterprises; some are simply working out of necessity.³⁰⁹ We do need to understand motivations, aspirations, and pathways to platform work and sales, for men and for women, with much more nuance than in the literature to date.

There's more to unpack about **the relationship between platform ecosystems and DFS use**. For example, there is limited evidence as to whether joining platforms can cause workers and sellers who don't have DFS to adopt, and if those who do have DFS use them more intensively and/or engage with more types of products. Direct, user-level survey data will be helpful here, beyond what has been reported by the platforms themselves.

Finally, there is a need **to study the changing ecosystem**, not just the fortunes of individual workers and enterprises in it. A number of marketplace platforms are selling to, delivering to, and financing MSEs. Often sales are on-platform, while delivery is third party, thus growing the third-party platform as well. Others help MSEs manage commerce by overlaying Instagram, Facebook, WhatsApp, and other social media with platforms for MSEs to manage sales, client relationships, inventory, and third-party delivery. Hence MSEs joining one platform may have a multiplier effect on others.

Yet **the changing ecosystem involves disruption**, too. Change can be difficult and is only partly complete. Ride-hailing platforms are hurting the traditional taxi business through a low-price strategy, leading opponents of platforms to protest.³¹⁰ At times, these protests have led to physical encounters that put the safety of all parties at risk. Due to the shift to online shopping, e-commerce platform livelihoods may also hurt brick-and-mortar shops.³¹¹ The World Bank's 2021 report identifies three great distribution challenges: a) offline versus online (raising questions of fair competition between platforms and existing players, and how much new online economic activity is growth substitution); b) merchant competition within platform ecosystems, where lots of information on ratings and low friction creates winner take all dynamics (a World Bank 2019 e-commerce survey estimated 47% volume to the top 1% and nearly 80% to the top 10%); and c) concerns in distributions between platforms and enterprise and individual workers who rely on them (the power of dominant actors may let platforms take a larger share of value created).³¹² For these reasons, "even if Indonesia is able to digitally on-board all of the lower segment of the workforce, it might not be enough to catapult 115 million aspirants into the middle class."³¹³ The 2019 e-commerce study indicated that "market competition" was the top concern of 70% of merchants surveyed.³¹⁴ One stakeholder at the Ministry of Cooperatives and SMEs also pointed to how competition can get sharp in efficient, platformed markets:

"The digital market is very competitive and MSE's main problem is not from the technology side but from the product side. MSEs must pay close attention to their marketing mix and must be competitive in terms of product quality and production capacity." Siti Azizah, Ministry of Cooperatives and SMEs

308. Walandouw, Primaldhi, and Wongkaren, "[GoTo Financial's Role in Indonesia's Financial Inclusion](#)."

309. Salyanty and Askar, "[Economic Resilience and Digital Adoption among Ultra Micro Entrepreneurs in Indonesia](#)"; interview with Lia Pumamasari, Pulse Lab Jakarta, 2021.

310. Bentley and Maharika, "[Making Travel Platforms Work for Indonesian Workers and Small Businesses](#)."

311. World Bank, [Beyond Unicorns](#); Novitasari, "[Analisis Pendapatan Pedagang Pakaian Sebelum Dan Sesudah Adanya Marketplace Pada Pasar Besar Kota Malang](#)."

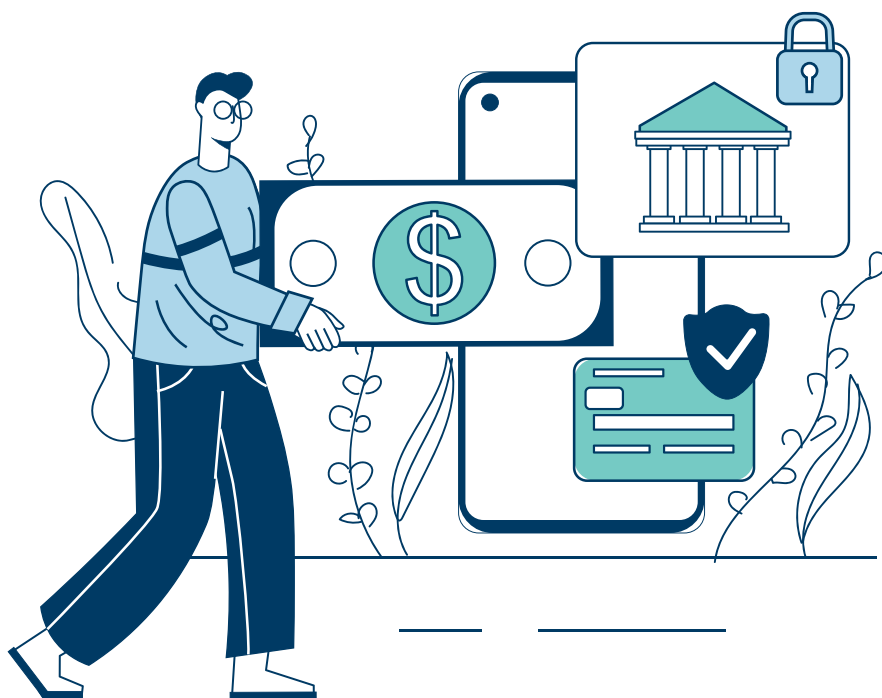
312. World Bank, [Beyond Unicorns](#), 150–51.

313. World Bank, [Beyond Unicorns](#), 153.

314. World Bank, [Beyond Unicorns](#), 153.

Conclusion

This review reflects a topic that is, in a way, too large and diffuse to have a single policy or research discussion coalesce around it. After all, the fates of drivers, and food stall merchants, and freelancers, and housekeepers, and farmers, and small retail shops, and drop shippers, and asset renters seem so disparate that they are difficult to house in one review. Yet the animating force for this review is that there are business models and platform logics which are binding these fates and livelihoods together in new ways. In Indonesia, perhaps more than anywhere else, superapps are beginning to serve and connect people in new markets with platform logics at their core. Taken together, these logics are at the heart of the livelihoods of as many as one in five members of the Indonesian workforce.



Researchers, technologists, and policymakers working on any one sector (the platformization of MSEs, the platformization of agriculture, the fairness of gig work, etc.) read reviews like this one to see how their work can inform other sectors. More broadly, they should also think about interventions, at scale, that can benefit multiple actors in these new ecosystems, to ensure the next wave of innovations in digital public infrastructures, platforms, business models, and DFS work for the platforms and for consumers, but also for the small-scale producers populating these new marketplaces—for the person ordering the parcel, the person filling it, and the person moving it from point a to point b. There is a considerable opportunity for Indonesia to be a world leader in and beacon of inclusive digital platform economies. But the policy, research, practice, and technology communities each have a role and must work together to bring this about.

For our part, this review has informed work we will do on the pathways to (and from) platform work and sales, and on mapping the contours and drivers of rural inclusion in the platform economy. For others, we hope it ties together threads, inspiring more research, innovation, and partnerships. This is a pivotal moment for the emergence of the digital economy in Indonesia and beyond. Despite choppy waters and profound disruptions, there is steady progress, and the digital future of Indonesia is still being forged.

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I Appendix A: Details of interviewees

We are grateful to the interviewees quoted in this report for their time and valuable insights. All interviews were conducted in late 2021

- Andi Ikhwan, Agri-Fin Mobile Consultant, Mercy Corps
- Elwyn Sansius Panggabean, Financial inclusion expert
- Eni Widiyanti, Indonesia Ministry of Women Empowerment and Child Protection
- Anonymous, Dana Indonesia
- Hilman Palaon, Digital Transformation and Financial Inclusion, GoJek
- Anonymous, World Bank
- Lia Punamasari, Pulse Lab Jakarta
- Melissa Ezmieralda, Bina Nusantara University
- Pamitra Wineka, Chief Executive Officer, TaniHub
- Praswistiadi Syarief Syamsuri, AFTECH
- Samsul Widodo, Indonesia Ministry of Rural, Underdeveloped Areas, and Transmigration
- Anonymous, 8villages
- Trianita Hesti, Chief Government Relation Officer, Elevania
- Walandouw and Wisana, LDUI
- Siti Azizah, Indonesia Ministry of Cooperatives and SMEs

I Appendix B

A NOTE ON LAST-MILE COMMERCE—PLATFORMS AS SUPPLIERS TO NANOSTORES

In this appendix we call attention to a recent development in the Indonesian retail marketplace – nanostores. Large platform companies in Indonesia are signing up small “offline” nanostores—warungs and retail shops— as partners (mitras), aggregating those shops’ purchases on their platforms, and allowing the merchants to provide several digital services in the platform ecosystems. Ula, BukuWarung, and GudangAda have joined Bukalapak and GoTo in enrolling warungs across Indonesia. Bukalapak calls its Mitra program “the main growth engine for the company.”³¹⁵ A 2021 report suggests that Bukalapak had as many offline stalls and stores in its network (7 million) than online retailers (6.9 million).³¹⁶ GrabKios reported 2.9 million registered traditional offline shops in January 2021.³¹⁷ In April 2022, Ula reported over 100,000 registered stores.³¹⁸ The growth has been rapid. In 2019, Warung Pintar had 5,000 merchants in its network. In 2022, the merchants in Warung Pintar grew to 500,000 and spread over 200 cities in Indonesia.³¹⁹ GudangAda, another business-to-business (B2B) platform for small retailers, reported over 750,000 sellers in 2022, up from 500,000 in 2021.³²⁰

These platform-to-retailer partnerships are not exclusive. As with e-commerce and hyperlocal commerce, a conservative estimate of the number of Indonesian MSEs involved with B2B local commerce would hew closely to the size of the biggest player in the space, in this case, Bukalapak’s seven million mitras.

While these offline nanostores may be able to purchase better goods, more reliably, and at lower prices, due the scale at which the platforms operate, we do not count these nanostores in the enumeration exercises in section 2 of this report. Instead, we limit the enumeration of those with platform livelihoods to those who are selling (working, trading, renting and creating) in/via marketplaces.

But this digital nanostore phenomenon is interesting, and important, and quite large. It is another way in which large digital firms (which in Indonesia in particular are marketplace platforms) are bringing more individuals and small firms into Indonesia’s digital economy.

Indeed, the move to serve nanostores this is an example of large digital firms offering a combination of services to buyers, some of which might be platforms, others might be more traditional electronic commerce, with warehouse and distribution costs covered by the wholesaler as opposed to third party sellers. In addition, these digital suppliers to nanostores can mix platform-based, aggregation-based, and traditional wholesale/warehouse-based transactions as part of a seamless and flexible offering to nanostores—this flexibility helps the large digital firms adapt to supply chain disruptions and offer more products, at lower costs.

315. Bukalapak, “[Bukalapak Announces Its Financial Results in Third Quarter of 2021.](#)”

316. Jatmiko, “[Tokopedia, Shopee Dan Bukalapak Kolaborasi Bantu UMKM Tumbuh.](#)”

317. Marchelin, “[GrabKios Aims to Add 1 Million MSME Partners.](#)”

318. Ula, “About Us.”

319. Burhan, “[Naik 50%, Warung Pintar Targetkan Satu Juta Mitra Warung Tahun Depan.](#)”

320. GudangAda, “[About Us.](#)”

Appendix C

An estimation exercise to discern the number of platform workers and sellers in Indonesia, from company and industry reports (2019-2022)

Numbers in thousands. Note that due to multi-homing (enrollment on more than one platform at a time), only the largest reported number within a category/column is used as the likely number of unique participants.

	TRADING				WORKING		RENTING	CREATING
	e-Commerce	Social commerce	Hyper-local sales	Ag Markets	Ride-Hailing & Delivery	Freelancing		
GoTo	12,000 ¹		1,000 ²		2,250 ³			
Grab			missing ⁴		2,000 ⁵			
Bukalapak	6,900 ⁶							
Shopee	5,000 ⁷							
Lazada	missing ⁸							
Blibli	16 ⁹							
Ula								
Wahyoo			16 ¹⁰					
GudangAda								
Warung Pintar								
Airbnb							61 ¹¹	
Mamikos							150 ¹²	
Travelio							10 ¹³	
TaniHub				30 ¹⁴				
Sayurbox				8 ¹⁵				
Aruna				21 ¹⁶				
Evermos		100 ¹⁷						
Freelancing						2 ¹⁸		
WhatsApp Business	6,000 ¹⁹							
WhatsApp (personal social commerce)		9,300 ²⁰						
YouTube								.6 ²¹
Instagram								1.4 ²²
Likely Number of Unique Participants	12,000 ²³	9,300 ²⁴	1,000 ²⁵	59 ²⁶	2,250 ²⁷	2 ²⁸	221 ²⁹	2 ³⁰

1. PT GoTo Gojek Tokopedia Tbk, "[Prospectus](#)."
2. Kaur, "[Gojek: How GoFood Is Leveraging Its Most Powerful Ingredient – Data](#)."
3. PT GoTo Gojek Tokopedia Tbk, "[Prospectus](#)." "As of September, 2021, we have 2.5 million registered driver-partners on the platform across Indonesia, Vietnam and Singapore." 150k in Vietnam "Gojek Vietnam | About," accessed July 19, 2022, <https://www.gojek.com/vn/about/>. Singapore number is unavailable but we assume 100k, thus GoGek Indonesia has 2.25m drivers in Indonesia
4. GrabFood may be as big as GoFood, but the breakout for number of registered businesses in Indonesia is elusive.
5. Budiman, Hernandez, and Roest, "[Ride-Hailing Drivers in Indonesia Discuss Livelihoods, COVID-19](#)."
6. Jatmiko. "A 2021 report suggested Bukalapak had as many offline stalls and stores in its network (7m) than online retailers (6.9m)" "Rachmat said that by the end of 2020, Bukalapak had 6.9 million MSME partners, and 7 million offline stalls."
7. Jatmiko. "Shopee Executive Director Christin Djuarto said that in mid-2021, there were more than 5 million active MSMEs who joined Shopee."
8. Unable to ascertain how many merchants Lazada has in Indonesia.
9. TechnoBusiness Media, "[Jumlah Mitra Blibli Mitra Saat Ini Mencapai 16.000 Toko](#)."
10. Karunia, "[Wahyoo Siap Gandeng 20.000 Warteg Yang Terancam Gulung Ke Pasar Daring](#)."
11. Kristianti, "[Asosiasi GM Hotel: Aturan Airbnb Di Indonesia Belum Jelas](#)." Note: it is difficult to ascertain how many of these listings are individual owners.
12. "Since its establishment in 2015, Mamikos has helped bring together around 6 million boarding house seekers every month with 150 thousand boarding house owners spread across 300 cities in Indonesia." Yuslianson, "[Mamikos dan SiCepat Andalkan Analitik AWS untuk Dongkrak Bisnis](#)."
13. "Travelio has also been trusted by more than 10,000 property owners both to market and manage the unit as a whole." Travelio, "[Digandeng Beberapa Property Developer Besar, Travelio Lebakarkan Sayap Ke Penyewaan Apartemen Unfurnished Dan Rumah](#)."
14. Impact at IFC, "[Digital Marketplace Keeps Indonesian Farmers in Business](#)."
15. "[Sayurbox Uses AWS to Deliver Fresh Food Faster](#)."
16. Shu, "[Indonesia 'Sea-to-Table' Platform Aruna Hooks \\$35m Led by Prosus and East Ventures Growth Fund](#)."
17. "The company says it currently has 100,000 active resellers in more than 500 Tier 2 and Tier 3 cities, mostly in Java." Shu, "[Indonesian Halal-Focused Social Commerce Startup Evermos Lands \\$30M Series B](#)."
18. Fardany Faisal et al., "[Discovering Indonesian Digital Workers in Online Gig Economy Platforms](#)."
19. Amalia, "[UMKM Indonesia Manfaatkan Trik WhatsApp Untuk Bertransformasi Ke Omnichannel](#)."
20. We could not locate, from Meta, a count of the number of Indonesians using personal WhatsApp, Facebook, and Instagram accounts for social selling/ social commerce. Instead, for this figure, we use the 2019 National Labor Survey, which suggests that 71% (9.37 million) of the 13.2 million Indonesians estimated to be engaged in e-commerce for employment were doing so exclusively via social commerce channels (e.g., WhatsApp, Facebook, Instagram, etc.), while 3.8 million were using a mix of social and e-commerce, or e-commerce marketplaces exclusively. On this figure, the 9.3 million exclusive social commerce sellers are unique to this column, but the marketplace sellers would be accounted for in other platforms, in the e-commerce columns, including the larger and more up-to-date 2020 and 2021 reports.
21. Tesalonica, "[Jumlah pengguna unik YouTube di Indonesia capai 93 juta](#)."
22. Hypetrace, "[Top 10 Instagram Macro Influencers in Indonesia in 2022](#)." Macro Influencers are those with more than 100,000 followers, which is enough for US\$50,000 a year according to Harjanto. Harjanto, "[Indonesia's Government-Funded Influencers Are a Bad Influence](#)."
23. Conservative—takes the largest number reported for e-commerce (Tokopedia, 12 million) and assumes 100% overlap with other ecosystems.
24. Conservative—this is an older number (2019) and is driven by a 2019 estimate of Indonesians doing social commerce on WhatsApp, Facebook, and Instagram, from the World Bank survey.
25. Conservative—missing a number for GrabFood, but likely overlaps with GoFood's 1 million reported merchants.
26. Aggressive—assumes no overlap between the two agriculture platform providers (TaniHub and Sayurbox), nor the fishermen.
27. Conservative—assumes that most drivers drive for both Grab and Gojek. There are bit players that might add a hundred thousand to this estimate.
28. Conservative±—this is an old number (2019) and only represents a subset of all freelancing platforms. But it does likely reflect how only a subset of those registered are making regular earnings via freelancing platforms.
29. Aggressive—this estimate assumes no overlap between the apartments, student hostels, and short-term Airbnb stays, and assumes a one-to-one correspondence between owners and listings (one listing per owner).
30. Conservative—by counting only Gold Creators on YouTube and the Largest Influencers on Instagram, we are unable to view the long tail of occasional/ part-time creators who earn a bit on their views or on their ad placements. The 7,500 number is only the big fish.

