ABAC
APEC Business Advisory Council

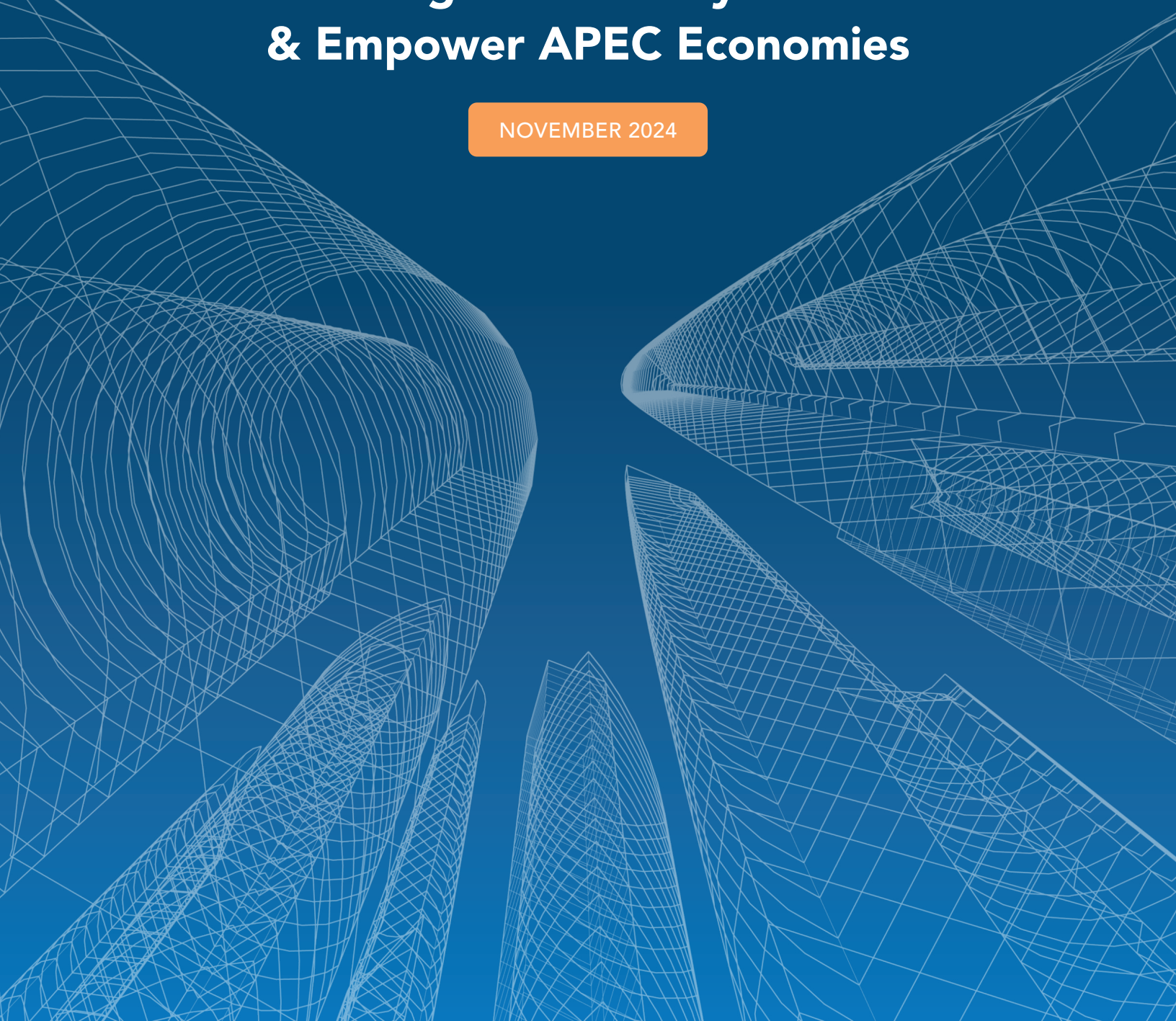
Digital Best Practices to Support the Transition
from the Informal to Formal Economy

AN ABAC CANADA PROJECT

E-FORMALIZATION:

How the Digital Economy Can Unlock & Empower APEC Economies

NOVEMBER 2024



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FOREWORD

Empowering the most vulnerable populations to transition to the formal economy is a 2024 APEC priority under Peru's Chairmanship.

In 2020, the informal economy accounted for an estimated 13.4 percent of APEC's combined GDP, varying significantly from 8.5 percent in the United States of America to 59 percent in Peru. While differing across economies, it is a fundamental factor in the social dimension of economic growth and development.

The COVID-19 pandemic highlighted the vulnerabilities of informal workers, who were among the most adversely impacted by economic shocks. However, the pandemic also accelerated digitalization. Data suggests that in its first eight weeks, consumer and business digital adoption advanced the equivalent of five years. It also encouraged the development of helpful e-government initiatives to reduce complexity and improve access to finance, education and health services.

Today, the digital economy is growing faster than the global GDP.

Over the next decade, it is estimated that 70 percent of new value created in the global economy will be based on digitally enabled platforms. As technological advances enhance internet and mobile phone connectivity, consumers and businesses are increasingly moving digital.

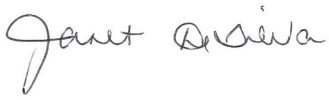
So, we decided to take stock of the digital economy's impact on formalization. Was this rapid acceleration of digitalization contributing to e-formalization?

Our conclusion? Digital solutions, while not yet a silver bullet, are showing promise facilitating a transition to formality.

Digital tools are simplifying bureaucratic processes, increasing access to financing to foster financial inclusion, and expanding MSMEs' market reach through e-government procurement, e-payments, e-commerce platforms, and platform economy applications.

This first-of-its-kind report highlights promising digital practices and policy actions to support micro, small, and medium enterprises (MSMEs) in this transition. It analyzes the state of informality and digitalization in APEC, presents best practices and case studies where digital tools can be used to bolster formalization, and provides profiles for each APEC economy that highlight their best practices and areas of opportunity.

By addressing the challenges of the informal economy with digital solutions, APEC can foster more inclusive economic growth. We are pleased to deliver this work as a guide.



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ABOUT ABAC

The APEC Business Advisory Council (ABAC) was created by the APEC Economic Leaders in November 1995 to provide the business perspective on specific areas of cooperation to APEC Leaders, Ministers and Senior Officials. It is the sole non-governmental entity that has an official role in the APEC Economic Leaders' Meeting through a formal dialogue.

ABAC comprises of up to three members of the private sector from each economy. ABAC members are appointed by their respective Leaders, and represent a range of business sectors, including small and medium enterprises. The economy determines the term of membership of each appointee as well as its own administrative arrangements and staff support. For more information, please visit:

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APF Canada is dedicated to strengthening ties between Canada and Asia through its research, education, and convening activities, such as the Canada-in-Asia Conferences series, our Women's Business Missions to Asia, and the APEC-Canada Growing Business Partnership project. APF Canada serves as Canada's Secretariat for several APEC networks, including the APEC Business Advisory Council, Pacific Economic Cooperation Council, and serves as one of Canada's designated APEC Study Centres. For more information, please visit:

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EXECUTIVE SUMMARY

The informal economy remains a barrier to economic growth for many APEC economies. For governments, informality represents an unreached, unrealized, and unregulated portion of the economy that could benefit significantly from formalization. Many informal workers and businesses face barriers to accessing conventional financial services, social security, and legal protections, potentially leaving them socially or economically vulnerable.

Empowering the most vulnerable populations to make the transition to the formal economy is a priority for APEC in 2024 under Peru's Chairmanship, with innovation and digitalization identified as important elements to facilitating this transition.

Over the next decade, an estimated 70 percent of the new value created in the global economy will be based on digitally-enabled platforms models — new opportunities for inclusive economic growth are arising. As technological innovation enhances internet and mobile phone connectivity, an increasing number of consumers and businesses are turning to digital platforms. This shift offers opportunities for e-formalization, which can grow the formal economy and improve working conditions and productivity.

This report identifies promising digital practices and policy actions to support micro-, small, and medium enterprises (MSMEs) in this transition. It analyzes the state of informality and digitalization in APEC, best practices and case studies where digital tools can be used to bolster formalization, and profiles for each economy that highlight best practices and areas of opportunity. Lessons learned from APEC's May 2024 Public Private Dialogue on the Transition from the Informal to the Formal Economy are also incorporated throughout.

KEY FINDINGS:

- The nature of informal workers and businesses varies greatly by economy and sector, but many live in rural areas and have less formal education than their counterparts in the formal economy. However, most informal workers use mobile phones, offering the potential to access digital platforms.
- The key barriers for informal workers and businesses to join the formal economy are the costs of regulatory compliance, complex bureaucratic processes, and a lack of institutional trust. The costs to formalize often outweigh the perceived benefits.
- Digital tools, while not a silver bullet, can enable MSMEs' transition to formality by creating incentives to formalize. These tools can simplify bureaucratic processes, increase access to financing to foster financial inclusion, and expand MSMEs' market reach through e-government procurement, e-payments, e-commerce platforms, and platform economy applications.
- For digital enablers to be effective, it is crucial to address the barriers informal workers and businesses face in accessing and using digital tools, while also enhancing their financial and business acumen.

KEY RECOMMENDATIONS:

While each APEC member economy may be at a different starting point in helping informal workers and businesses transition to the formal sector, ABAC recommends that APEC policymakers consider the following best practices to make digital tools effective enablers of formalization:

1. **Enhance digitally delivered public services (e-government)** to simplify business registration, record keeping, and taxation, making it easier to do business and join the formal economy. For example, policymakers could explore digital identification systems to enable informal workers to easily access public services, financial services, and social protection.

2. **Leverage digital tools as incentives to make formalization more attractive to MSMEs.** Depending on the economy, these could include e-commerce initiatives to expand market reach, incentivizing the use of digital payments for financial inclusion, and improving access to government supports and procurement.

> For many MSMEs, the current costs of formalizing outweigh the benefits.

3. **Bridge the digital divide** by making targeted investments in digital infrastructure that connect rural MSMEs to the digital economy, lower the cost of internet access, and support digital capacity-building programs. E-formalization requires informal workers and businesses to access the digital platforms and tools.

4. **Enhance transparent and secure data collection** to develop policies that adequately address the unique challenges faced by informal workers and businesses. By leveraging public and private digital platforms such as e-government websites, platform economy apps (such as Uber and Airbnb), and social media sites that generate data, policymakers can develop targeted social and economic interventions that better meet the needs of the informal economy.

5. **Build digital trust:**

    - Develop comprehensive national cybersecurity with both preventive and responsive measures, ensuring the protection of critical infrastructure and the capacity within government structures to maintain, evolve, and execute those strategies.

    - Implement public awareness and lifelong learning programs for individuals and MSMEs to understand how to safely and responsibly engage with digital technologies and increase their adoption of safe digital practices.

The digital economy is growing faster than the global GDP, offering significant opportunities to grow the formal economy.

By addressing the challenges of the informal economy with digital solutions, APEC can foster more inclusive economic growth.

The digital economy is projected to grow by 6.9 percent annually between 2023 and 2028—outpacing global GDP growth, offering significant opportunities to grow the formal economy. By addressing the challenges of the informal economy with digital solutions, APEC can foster more inclusive economic growth. Digital tools can help integrate MSMEs into the formal economy, enhancing working conditions and productivity, but the benefits of joining the formal economy need to outweigh the costs.

By enhancing e-government initiatives to make it easier to do business and leveraging digital tools like e-wallets, e-commerce, and other digital economy platforms, digitalization can incentivize MSMEs to join the formal economy to expand their market reach, access financing, and grow their businesses. To ensure effective e-formalization, support for MSMEs to embrace digitalization and targeted investments to bridge the digital divide are essential. Despite the wide range of digitalization and informality across the region, there is great potential for APEC economies to learn from one another and implement lessons learned to bring enhanced prosperity to the entire APEC region.

SECTION 1: INTRODUCTION

A: DEFINING INFORMALITY

Although the impact of informality on GDP differs across APEC economies, it is significant to the region overall as a fundamental factor in the social dimension of economic growth and development—a cornerstone of the 2024 APEC agenda.

In 2020, the informal economy accounted for 13.4 percent of APEC's combined GDP, ranging from 59 percent in Peru to 8.5 percent in the U.S.

In 2020, the informal economy accounted for an estimated 13.4 percent of APEC's combined GDP, varying significantly from 59.4 percent in Peru to 8.5 per cent in the United States of America (see Chart 1).

For many governments, the informal economy represents an unreached, unrealized, and unregulated portion of the economy that could, through formalization, provide substantial benefits. Many informal workers and businesses face barriers to accessing conventional financial services, social security, and legal protections, leaving them vulnerable.

The International Monetary Fund (IMF) defines the informal economy as activities that have market value but are not formally registered. This encompasses professions as diverse as minibus drivers and market stands to workers in construction, agriculture, forestry, fishing, and the gig economy. It can also include registered firms that engage in informal activities or the hire of informal workers. It does not, however, include illegal activities.

Informal activities, often called the 'shadow economy,' are difficult to measure. While not perfect, the most reliable estimates of informal economy activity as a percentage of GDP is the World Bank's dataset, which is referenced throughout the report.

The COVID-19 pandemic highlighted the vulnerabilities of Informal workers, who were among the most adversely impacted by economic shocks. Sudden unemployment and work stoppages pushed more businesses and workers into the informal economy. According to World Bank data, the informal sector grew in nearly every APEC economy in 2020, with notable increases in Malaysia (+1.6 percent), the Philippines (+1.9 percent), and Peru (+3.9 percent). In Peru, informal employment rose to over 75 percent of the workforce in 2020, a 2.6 percent increase from 2019, reversing a prior trend towards formalization since hitting 80 percent in 2007.

More positively, however, the pandemic accelerated digitalization as social distancing bolstered the need for digital forms of communication, payment, and commerce. It also encouraged the development of e-government initiatives with the most resilient economies using digital tools for public outreach and governance, taxation, access to finance, education, and health. The data suggests that in the first eight weeks of the COVID-19 pandemic, consumer and business digital adoption progressed the equivalent of five years, with many schools moving to virtual learning, grocery stores shifting to online ordering, healthcare workers delivering telemedicine, and street vendors turning to social media and food delivery platforms for economic survival.

Within APEC, concerted efforts to formalize MSMEs can support inclusive economic growth so that all sectors can benefit from greater trade to reduce inequality and promote shared prosperity.

B: E-FORMALIZATION: THE NEXUS BETWEEN DIGITAL AND FORMALIZATION

It is estimated that over the next decade, approximately 70 percent of new value created in the economy will be based on digitally enabled platforms, driving rapid digitalization across APEC. This will create an opportunity for digital tools to be used to accelerate the transition of workers and businesses to the formal sector—a process known as e-formalization. These digital tools can be used to simplify processes, lower the cost of compliance, and provide incentives to make formalization more attractive to MSMEs. They can also increase productivity, improve norms and regulations, and strengthen enforcement. Unsurprisingly, an increasing number of governments have already begun implementing new technologies to simplify and facilitate e-formalization. To better understand how digital tools can bolster e-formalization, it is critical to better understand the informal economy in context.

According to the OECD, "e-formalization refers to the application of digital technologies to support the design and implementation of policies that increase productivity, improve norms and regulations, create incentives, and strengthen enforcement systems as pathways towards formality."

C: APEC AND THE INFORMAL ECONOMY

A 2024 APEC study on informality estimates that within the APEC region, tax revenue equivalent to 5.4 percent of GDP is lost from informal practices. This limits governments' ability to provide public goods and services, further disincentivizing formalization as the **high costs of formalizing a business can be seen to outweigh the benefits of having access to public services.** The tax gap also places a higher tax burden on the formal economy. Aggregate productivity is also impacted in many economies due to the large informal sector, particularly in emerging and developing economies, where, on a global scale, informal firms are only one quarter as productive as the average firm operating in the formal sector. This is partly because the informal sector tends to employ fewer skilled workers, has limited access to capital and funding, and faces restricted access to services and markets. Consequently, in several APEC economies, informal workers earn approximately 40 to 67 percent less than workers in the formal sector.

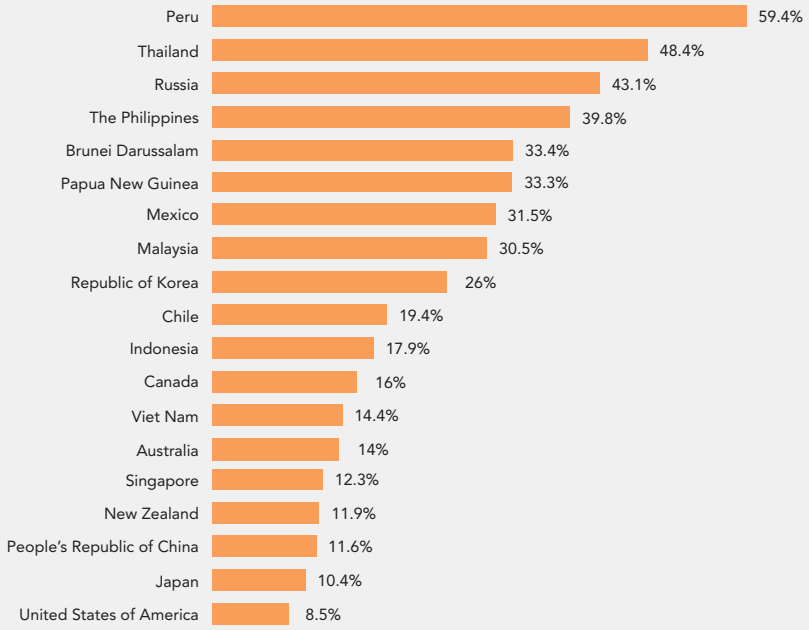
Meanwhile, many informal workers and businesses are disadvantaged and more vulnerable to economic shocks, as they are often poorly paid and lack access to social safety nets like healthcare, public housing, and social assistance.

A 2021 survey of 11 cities around the world revealed that during the COVID-19 pandemic, only 41 percent of informal workers received government cash transfers, and only 42 percent received food aid, despite being among the most vulnerable to the economic shocks. Informal MSMEs also struggle to access conventional financial services, particularly women and Indigenous peoples, who are disproportionately represented in the informal economy. Informal workers are also on average less productive, which limits their accumulation of experience and practical skills. Platform economy workers—that is, those who engage in economic activities facilitated by digital platforms like websites or mobile applications—are also vulnerable to economic shocks. These workers often lack formal employment contracts and are typically piece-rate, pay-as-you-go workers with unstable incomes and limited legal protections.

Many governments have implemented both incentives and enforcement measures to encourage informal MSMEs to transition from the informal to formal economy, including cutting costs and simplifying procedures, increasing benefits of formalization, and ramping up enforcement. Digital solutions have been particularly helpful in supporting these formalization measures.

CHART 1

Informal output as % of GDP in APEC economies

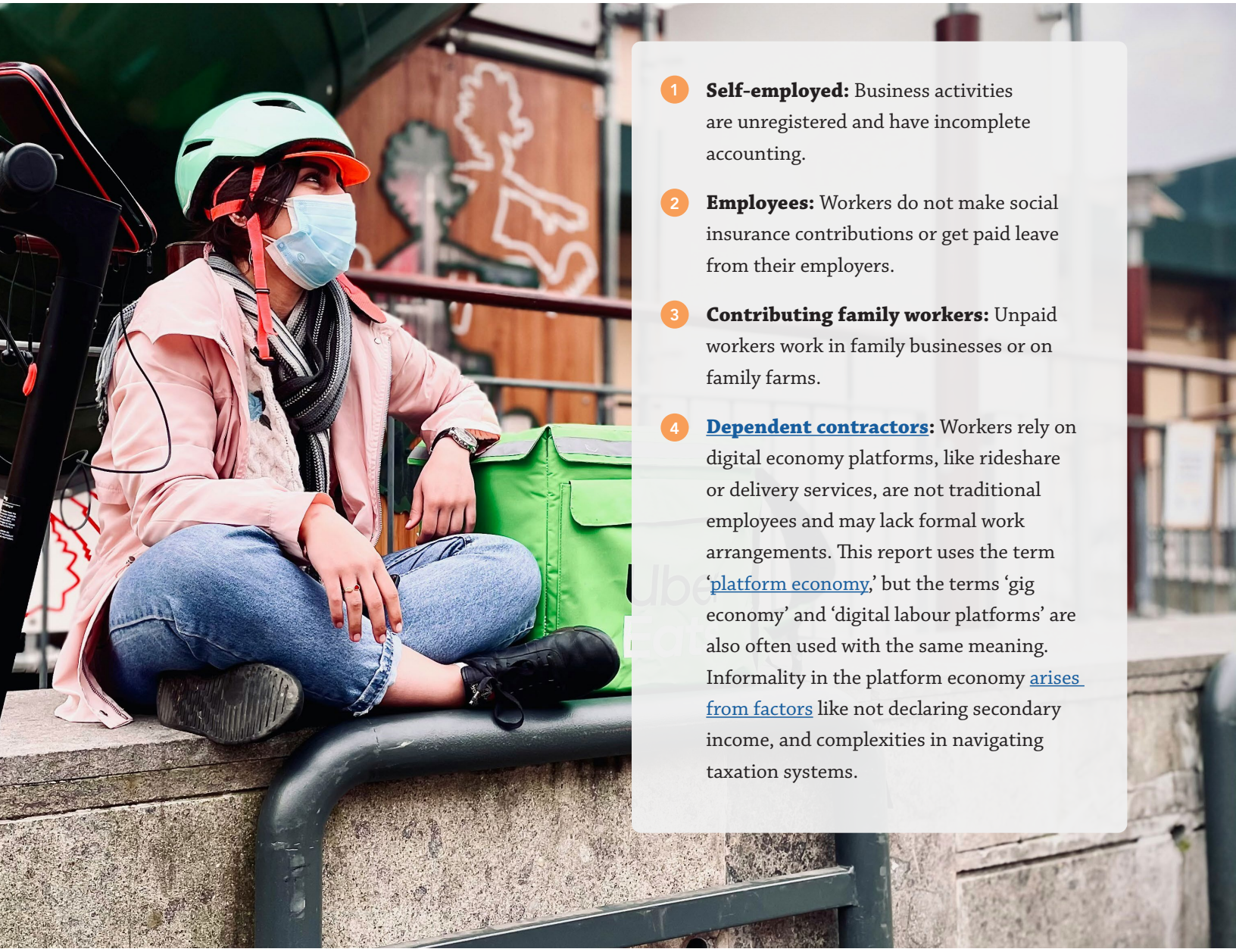


Note: Data for Hong Kong, China; and Chinese Taipei are not available.
Source: World Bank Informal Economy Database

D: THE FACE OF THE INFORMAL ECONOMY

For e-formalization to succeed, it is necessary for policymakers to appreciate the diversity of the informal economy and why workers and businesses choose to remain informal. Informal workers or entrepreneurs could be an unregistered street food vendor, an employee working on a farm with no formal contract, or an Uber driver. They could also be micro-enterprises that are unaware that they are operating in the informal sector. They could make all their earnings from the informal economy or use informal work to supplement formal income. Some businesses could also be registered formally but carry out informal practices by hiring informal labour.

According to the International Labour Organization (ILO), informal workers generally fall into one of the following categories:



1. **Self-employed:** Business activities are unregistered and have incomplete accounting.
2. **Employees:** Workers do not make social insurance contributions or get paid leave from their employers.
3. **Contributing family workers:** Unpaid workers work in family businesses or on family farms.
4. **Dependent contractors:** Workers rely on digital economy platforms, like rideshare or delivery services, are not traditional employees and may lack formal work arrangements. This report uses the term 'platform economy,' but the terms 'gig economy' and 'digital labour platforms' are also often used with the same meaning. Informality in the platform economy arises from factors like not declaring secondary income, and complexities in navigating taxation systems.

The variations in informality are significant, but the ILO also finds some similarities. For example, informal workers are twice as likely as workers in the formal sector to be living in rural areas and tend to have lower levels of formal education. Agriculture has a persistently high degree of informality – about 93.6 percent worldwide, while an estimated 47.2 percent of workers in the service sector are informal.

> **"Agriculture has a persistently high degree of informality – about 93.6 percent worldwide, while an estimated 47.2 percent of workers in the service sector are informal."**

Marginalized groups are often a disproportionate part of the informal economy as they face higher barriers to accessing formal employment. Women are more exposed to informal employment than men in Latin American countries and in most low- and lower-middle income countries. They are more often found in the most vulnerable situations as domestic workers, as they cannot work full-time jobs due to childcare responsibilities. Women are also less likely to have access to technology such as televisions, computers, and mobile devices. They tend to have limited opportunities in the formal labour market and can be restricted in ownership of assets due to social or cultural norms or discriminatory laws. On average, women in G20 economies earn less than two thirds of what their male counterparts earn.

Younger and older individuals are also more affected by informality compared to those aged 25 to 64. Indigenous peoples are also disproportionately impacted: over 85 percent of employed Indigenous peoples globally are working in the informal sector.

E: WHY DO MANY INFORMAL WORKERS CHOOSE TO REMAIN INFORMAL?

The perception that informal workers remain informal simply to avoid paying taxes is, in many cases, inaccurate. Many informal businesses and workers still pay Value Added Tax (VAT) and would be willing to pay more taxes if they expected to see benefits in return. The reasons for staying informal are much more diverse and depend on the type of informal worker and the wider economic environment.

Some reasons to remain informal include:

- **Subsistence-level earnings** - Workers and businesses may not have the resources to formalize. Many of these workers' incomes fall below the income tax threshold. This type of informality is particularly prevalent in the agricultural sector, where farmers produce a little more than they themselves consume. Many MSMEs such as bodegas or food vendors also fall within this category, where the costs of formalizing and complying with regulations are simply more than they earn.

- **Opportunity vs. Necessity:** It is important to consider the distinction between opportunity-driven and necessity-driven entrepreneurship, particularly in subsistence economies. For example, according to the OECD, between 2016 and 2020, Chile had the highest proportion of the female population engaged in new ventures among OECD members, with a rate of 16.8 percent. Many of these women started businesses out of necessity, often working under informal and precarious labour conditions to achieve subsistence. The necessity-driven nature of these ventures can contribute to informality, as the focus is often on immediate survival rather than growth or formalization.

- **Nature of the business-** Many entrepreneurs perceive their ventures as temporary or too small to warrant formalization, stemming from concerns that they may not qualify for social benefits or that the infrequent nature of their work doesn't justify formalization.

- **Complex bureaucratic processes** - Inflexible regulations can make the transition to formality more complex as they don't consider the unique circumstances and limitations of informal businesses. The cost and length of procedures, along with the difficulties of regulatory compliance, can motivate individuals and firms to remain in the informal economy. This tendency is more prevalent among MSMEs and less-educated workers, as their limited scale and human capital make navigating the requirements particularly time-consuming. For example, a female entrepreneur shared her reasons for not

formalizing: "I want to formalize my business because I think I'm missing opportunities such as selling my products at (state-run) art fairs. However, the process is very complicated. There should be a single website integrated with the tax system with a guide for beginners to formalize." Another entrepreneur shared that the main barrier to formalizing is the complexity of understanding "who I have to pay, how I have to do it here, how I have to do it there, the declarations, and all that."

- **Lack of institutional or interpersonal trust** - Informality is related to low trust in institutions, including the legal system, the police, public officials, and tax authorities. In fact, higher rates of perceived corruption are associated with a larger informal economy. Interviewees also stated that there is a fear that workers who formalize will lose access to social protection or benefits that they get from remaining informal. It is also possible that if businesses, employers, workers, and citizens believe that their peers are operating in the informal economy, they may be likely to do the same. In some cases, peer pressure may discourage informal workers from formalizing.

- **Insufficient incentives -** In many economies, there may not be enough incentives for businesses to formalize to justify the increased costs, such as regulatory compliance, administrative work, legal and professional fees, taxation, training, infrastructure, and employee benefits. Even if there are incentives such as government supports or procurement opportunities, the informal sector may not know about them or how to navigate them.

- **Labour market conditions and barriers to entry into formal work -** Without the required skills, informal workers may not be competitive for formal jobs or face discrimination. Worldwide, 85 percent of informal workers are in precarious employment in small production units, mostly due to a lack of opportunities in the formal sector. There may also be a lack of formal jobs or weak economic conditions in the formal labour market.

- **Preference for flexibility -** Many people work in the informal economy due to its flexibility in terms of timing, location, and the nature of their work. This is particularly relevant for women who largely remain responsible for childcare and elder-care. Many platform economy workers also cite flexibility as a key attractive feature.

- **Lack of Awareness of Support:** A representative from the bodega (a small corner store or market) sector in Peru shared that "many bodegas don't know about available digital tools that support formalization, or they don't exist." Many MSMEs may even be unaware that they are operating in the informal economy.

SECTION 2: LEADING PRACTICES FOR E-FORMALIZATION

Incentives vs. enforcement

Formalization is, for many, inextricably linked to trust in government institutions. Policies that are motivated by the belief that MSMEs operate illegally and require stringent enforcement mechanisms are likely to further alienate workers in this sector. The most effective policies take into account that informal workers are largely operating in the informal economy out of necessity and in response to poor economic conditions and barriers to formal employment. At APEC's Public Private Dialogue on the Transition from the Formal to the Informal Economy, Frederic Lapeyre, Director of the Priority Action Programme "Transition from the informal to the formal economy" at the ILO, highlighted that supply side incentives that can reduce the costs of formalization by simplifying processes and increasing the benefits of formalization are needed. While incentives are impactful, enforcement mechanisms are also necessary to incentivize MSMEs to remain in the formal economy.

"With technology improving internet and mobile phone connectivity, more and more consumers and businesses are relying on digital platforms."

A: E- FORMALIZATION IN APEC

With the growth of the digital economy projected to outpace global GDP growth by 2028, and with rapid technological innovation altering markets and the way people live and work, economies are responding to the opportunities and challenges associated with digital transformation by introducing new digital strategies, targets, and investments. With technology improving internet and mobile phone connectivity, more and more consumers and businesses are relying on digital platforms. This presents opportunities for e-formalization that can grow the formal economy and improve working conditions, productivity, and workers' rights.

Digital tools can:

- Make it easier to do business by simplifying processes and lowering the cost of compliance with regulations with enhanced e-government initiatives.
- Act as incentives to make formalization more attractive to MSMEs by expanding their market reach and customer base, and by increasing financial inclusion. This can be achieved through e-procurement, e-payments, e-commerce, and platform economy applications.
- Information and Communication technologies (ICTs) can become a fundamental tool for enterprises to enhance their skills and competitiveness. Lower formalization correlates with higher use of social networks, while higher formalization correlates with greater use of proprietary websites with online shopping carts.

B: MAKING IT EASIER TO DO BUSINESS THROUGH E-GOVERNMENT

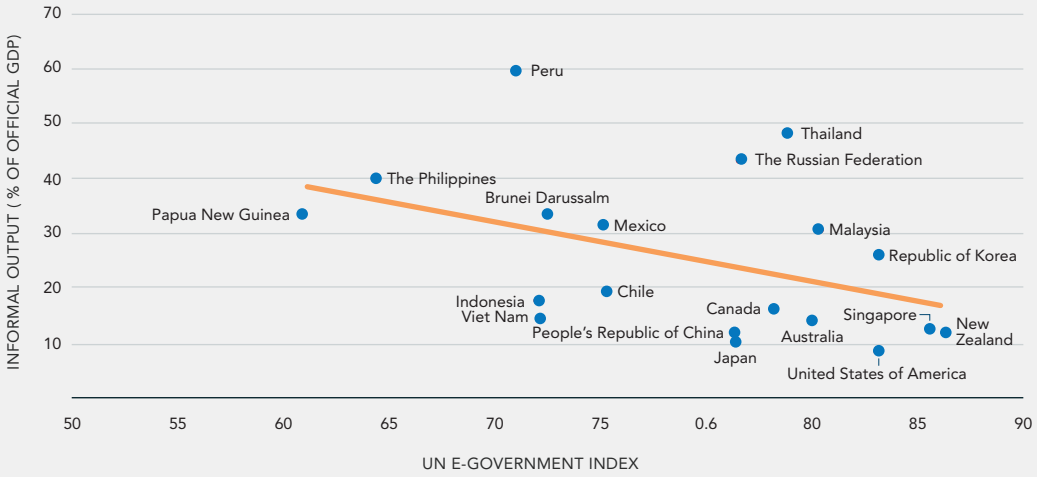
E-Government initiatives, including online business registration, permitting, electronic tax filing systems, and digital identification systems, increase the ease of doing business by simplifying and reducing the costs of complying with regulations. They can also increase transparency and traceability, reducing the opportunity for corruption, and can support marginalized groups in accessing vital services.

Informal businesses often remain informal due to excessive costly regulation and inefficiency within their economy. For example, the cost to start a business in an APEC economy with pervasive informality is, on average, seven percentage points higher than the rest of the APEC economies. Starting a business in Viet Nam can cost up to 5.6 percent of income per capita, while in the Philippines, it can be as high as 23.3 percent. In low— and medium-income countries, higher corporate income tax rates correlate with higher rates of informality. Bureaucratic corruption also plays a role, as it incentivizes businesses to conceal their output. As seen below in Graph 2, a higher ease of doing business score generally correlates with a smaller informal economy as a percentage of GDP.

APEC economies with pervasive informality have 2x the number of regulatory processes compared to those with fewer regulatory processes.

GRAPH 2

The World Bank's ease of doing business score plotted against informal output as percent of GDP in APEC economies



This figure shows association rather than a causal relationship. The World Bank's ease of doing business score helps assess the absolute level of regulatory performance over time. It includes indicators relevant to formalization such as how easy it is to start a business, get credit, and pay taxes. It has a scale from 0 to 100, with 0 representing the lowest, and 100 representing the highest performance.

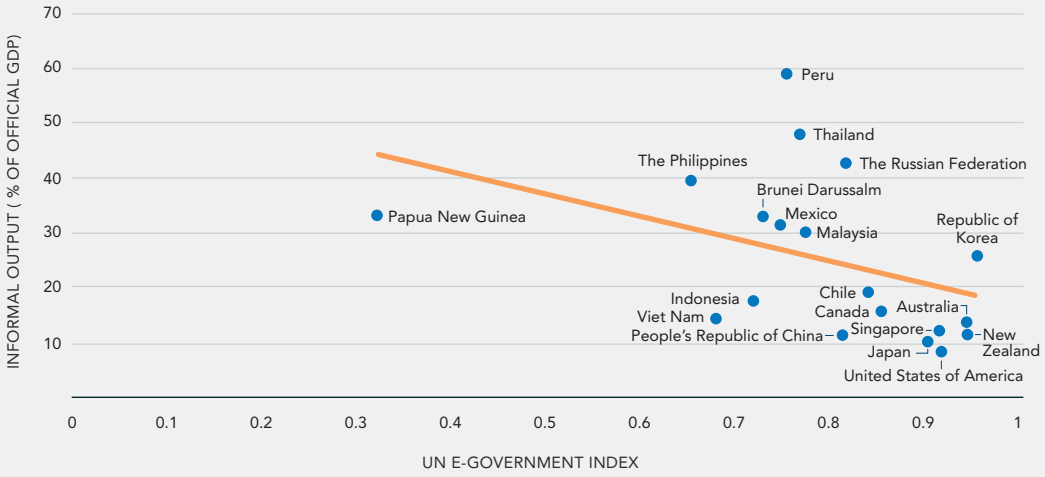
Note: Data for Hong Kong, China; and Chinese Taipei are not available.

Source: The World Bank Ease of Doing Business Score 2020 and World Bank Informal Economy Database

E-Government is when governments incorporate ICTs to offer businesses, employers, workers, and citizens the opportunity to engage with government using digital means. The adoption of e-government initiatives can have a significant impact on reducing informality as it can make public service delivery more effective, accessible, and responsive to business needs, while making government more transparent and accountable. Although formalization may not be main objective, e-government initiatives increase the ease of doing business by simplifying and reducing the cost of complying with regulations, and by giving marginalized groups access to vital services with tools like business e-registration, automatic taxation systems, and online permitting systems. As seen in Graph 3, in most APEC economies, a higher UN E-Government Index correlates with lower rates of informality.

GRAPH 3

The UN E-Government Development Index plotted against informal output as percent of GDP in APEC economies



This figure shows association rather than a causal relationship. The UN E-Government Development Index (EGDI) evaluates website development patterns, infrastructure, and educational levels to measure how countries use information technologies for access and inclusion. The EGDI is a composite measure of three dimensions: provision of online services, telecommunication connectivity, and human capacity. It has a scale from 0 to 1, with 0 representing the lowest and 1 representing the highest performance.

Note: Data for Hong Kong, China; and Chinese Taipei are not available.

Source: The UN E-Government Development Index and World Bank Informal Economy Database

Three e-Government initiatives in particular have shown promise in supporting formalization within APEC economies: streamlining online business registration and permitting, establishing electronic tax filing systems, and setting up digital identification systems.

Streamlining online business registration and permitting: Using digital applications to reduce regulatory and administrative barriers to business formalization can encourage firms to register their business activities. Digital 'one-stop shops' are particularly helpful as they can simplify otherwise tedious processes that are costly, lengthy, and require travel. These types of e-government platforms have also been shown to reduce bribery and petty corruption-characterized by the everyday abuse of entrusted power by low-and middle-level public officials, helping to build trust in institutions.

Leading practice: Starting a business in Brunei Darussalam takes 12.5 days, costs 1.1 percent of per capita income, and involves 5.5 procedures. This marks a significant improvement since 2015, when it took 104.5 days, cost 10.4 percent of per capita income, and required 18 procedures. This improvement can be largely attributed to a government effort to ease company registration processes. Policymakers created a statutory body responsible for enterprise development (DARe) which made many of the processes, such as company registration, fully digital.

Data collection: The lack of accessible data related to the informal economy can limit the development of interventions to effectively respond to the challenges associated with the informal economy. The data is often fragmented and limited, stunting the ability for policymakers to create targeted, effective policies to respond. Public-private collaborations can bolster governments' ability to automatically aggregate 'big data' across government bodies and levels, using proper safeguards and analysis. Public and private digital platforms, such as e-government websites, platform economy applications (such as Uber and Airbnb), and social media sites, generate data which could be used for targeted social and economic policies and interventions.

A **leading practice** can be found in the Republic of Korea (Korea), which has developed a world-class e-Government system over the past two decades. They are ranked third in the 2022 UN e-Government index, being the only country to stay in the top three seven consecutive times. This system has reduced red tape, and the time needed to engage with and visit government offices. One of the most successful aspects is its 'whole-of-government approach,' which coordinates information and data across institutions. The Digital Platform Government strategy, announced in 2022, aims to lower barriers between ministries to create an integrated one-stop e-government system. It also plans to strengthen digital capability education so that public officials can easily adapt to the AI/data-driven work process. It emphasizes public-private cooperation by acting as a testbed where the public and private sectors work together to experiment with innovation. This dedication to collaboration was built into the policy design, as the President's Committee consisted of 19 private sector experts and four relevant ministers. The platform provides access to government-owned data and supports private companies in delivering services through Open API.

Establishing electronic tax filing systems: Paying taxes can be a significant disincentive to join the formal economy. Digitalization of tax systems, while not a complete solution, can reduce compliance costs, prevent leakages and poor governance, and enhance transparency. It can also improve administrative efficiency, increase net revenues, and lower the costs of

tax collection. For workers and MSMEs, e-invoicing and automated tax filing systems can reduce transaction costs to encourage filing. These digital systems also increase transparency and reduce opportunities for corruption.

Leading Practice: A successful example where digital tax systems enhanced compliance can be found in Mexico, where in the past, taxpayers used only printed invoices which were prepared and printed without any tax administration controls. This led to several issues: false transactions using fake invoices to claim tax deductions, hiding a substantial amount of income from transactions without invoices, and the need for tax authorities to manually check for compliance. E-invoicing was made mandatory for all businesses in 2014, which brought an **estimated 4.2 million micro-enterprises into the formal economy** and has contributed to the increase in Mexico's tax-to-GDP ratio from 12.6 percent to 16.2 percent between 2012 and 2017.

> **"Mexico's e-invoicing brought an estimated 4.2 million micro-enterprises into the formal economy."**

Korea's HomeTax system has also been lauded by the OECD as one of the best models of integrated tax administrative systems. This system enables users to handle all tax-related matters without physical contact with the National Tax Service (NTS). Through multiple updates, the portal has adapted to new digital tax services, offering simplicity, its main appeal to users. In 2022, it was the second most widely used government digital service, with 83.2 percent usage. By leveraging data-driven approaches and integrating tax administration services, the HomeTax platform exemplifies how digitalization can streamline processes, improve transparency, and enhance user experience for enterprises of all sizes, including the self-employed.

Establishing digital identification (ID) systems: More than one billion people globally do not have an official identification, which restricts their access to essential citizenship rights and public services. Women in low-income economies disproportionately lack formal identification. Digital solutions present an opportunity to bypass traditional, paper-based methods of establishing identity. Given that legal identity is crucial for social and economic inclusion, digital IDs can play a vital role in incorporating the informal economy into the formal sector. When they are compatible with robust e-government services and a wide variety of private entities such as banks, digital IDs can support marginalized MSMEs to access public and private services like opening a bank account, paying taxes, or accessing government supports. Digital IDs can also be a precursor for MSMEs to set up e-commerce websites and trade across borders. Many economies are working towards decentralized or self-sovereign identity systems. These systems place control of identity data entirely with the user and can facilitate high interoperability with private sector entities.

Leading Government-led Practice: According to the 2017 ID4D-Findex Survey, one-fifth of the poorest Filipinos have been denied government services, and one-seventh have been denied government financial support due to lack of an ID. PhilSys, a national

ID system for all citizens and resident aliens, was established with a digital version of the national ID officially launched in June 2024. This serves as a valid digital piece of ID for government and private transactions which could streamline e-government services and make them easier to use. There is an opportunity for this to empower marginalized people to gain access to financial services and social protection, contributing to their formalization.

Leading PPP Example: Indonesia has also launched the Digital Population Identity (IKD) to make public services more accessible. A critical piece of the government's digital transformation plan, 8.2 million IKDs have already been activated as of February 2024, a process that can be done through a smartphone. The government is also targeting 30 million MSMEs to go digital by 2024. In May 2024, the government also launched a new technology platform, INA Digital, in an effort to accelerate digital transformation. The platform was developed by 400 local digital talents with the aim of improving interoperability, as it will accommodate applications for digital IDs, as well as health services, education, social assistance, driver's licenses and employment services in one single portal. All ministries have been ordered to integrate their apps with INA Digital.

Digital Government Procurement Platforms

Accessing government contracts can be a powerful incentive for informal businesses to register and formalize. In many economies, the government is the largest buyer of goods and services, and so being successful in applying to win these contracts can be crucial for a business to grow. However, at present, the playing field in most economies is not level, with MSMEs struggling to access information about potential contracts and finding the application process too cumbersome and resource intensive. A digital government procurement platform can improve transparency of the process and make it easier for MSMEs to apply for contracts. With registration required to submit a bid, these opportunities can incentivize MSMEs to formalize.

Leading Government-led Practice: A best practice comes from Singapore. GeBIZ is a one-stop e-procurement portal, connecting registered companies with government buyers, promoting transparency and efficiency in procurement processes. SMEs are one type of firm that has benefited the most from GeBIZ, as they represent around 80 percent of all government contracts.

Through GeBIZ, SMEs represent around 80 percent of all government contracts.

Another example is from Chile, where there is a decentralized public service for public procurement, Chile Compra, that has been levelling the playing field so that SMEs and MSMEs can compete. The platform is built on principles of transparency, cost-effectiveness, and involving small businesses, making the public market more accessible and more inclusive, particularly for women-owned enterprises. In 2017, public procurement totalling US $12,200 million was made by 850 institutions, and **59 percent of the purchases were from MSMEs** and 43 percent from MSEs. This can serve as a significant incentive for MSMEs to formalize.

C: DIGITAL PLATFORMS TO INCENTIVIZE FORMALIZATION

Apart from e-government initiatives, the opportunities provided by digital platforms can be particularly helpful incentives for e-formalization. Digital platforms are a form of online infrastructure to facilitate interactions between groups and can include e-payment platforms, e-commerce platforms, social media platforms and more.

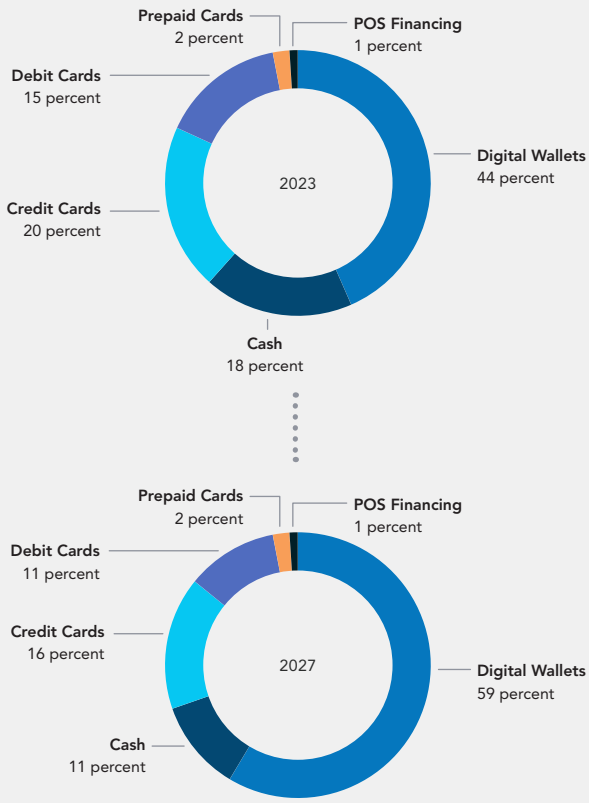
> **"Since the COVID-19 pandemic, cash usage declined nearly four percent globally in 2022."**

E-payments to Foster Financial Inclusion and Transparency

The informal economy is dominated by cash, which can be convenient and accessible, and reduce the risk of detection from the authorities. It can also be a major barrier to accessing credit – a precursor to MSMEs' ability to formalize. Since the COVID-19 pandemic, cash usage declined nearly four percent globally in 2022, indicating a shift in consumer preference and government policies. A higher level of e-payments have been associated with lower rates of informality as e-payments can increase transparency of transactions, create credit history needed to access loans, and lower informality. E-payments are seeing increased adoption in economies where a high percentage of their populations are unbanked. For example, in Papua New Guinea where 75 percent of the population remained unbanked as of 2019, digital payments are projected to reach US $610M in 2024 and grow to approximately US$850M by 2028, driven mainly by e-commerce.

FIGURE 4

Worldpay's 2024 Global Payments Report 9th Edition highlights how consumer choice is changing commerce



The above visual shows the forms of payments used across APEC economies in 2023 vs. the 2027 forecast.
Source: Worldpay. (2024). Global Payments Report 9th Edition.

A 10 percent annual increase in electronic payments for four consecutive years would decrease the size of the informal economy by approximately 5 percent.

Leading Example of Public-Private Partnership (PPP) to Increase Digital Payments: In Hong Kong, China, the government worked with private sector partners to digitalize transactions in the informal sector through the Faster Payment System, which optimizes digital transactions for local SMEs, a contactless payment method that was embraced by neighbourhood stores and street vendors that once relied on cash. Another successful PPP was with Alipay and PayMe, where a US $130 million population-wide e-consumption voucher program was rolled out. More wet market vendors, neighbourhood retail stores, and fast-food joints capitalized on the e-voucher system and began to accept digital payments.

Although not an APEC economy, India's Unified Payments Interface (UPI) has recently set a new record by processing more than 15 billion transactions in September 2024. It had nearly 300 million users and 50 million merchants as of March 2023 and accounts for 46 percent of global digital transactions. It has significantly advanced financial inclusion, boosting bank accounts from 400 million in 2014 to over 1.4 billion by 2023. UPI's success can be attributed to its interoperability, government support, zero transaction fees, user-friendly interface, strong security measures, and scalability for peer-to-peer payments. UPI has transformed consumer behaviour in India and this shift has increased tax revenues, curtailed the circulation of black money, halted illicit fund transfers, and has enhanced governance and resource utilization.

Leading Examples of Government Initiatives to Increase Digital Payments: In Chinese Taipei, the penetration rate of mobile payments has risen from a mere 4.8 percent in 2014 to a sizable 72.2 percent in 2021, driven by popular apps such as LINE Pay, JKOPay, and Taiwan Pay. The government is offering tax incentives until 2025 to encourage small businesses to adopt digital payments, with the expectation of reaching a 90 percent mobile payment adoption by the same year.

> **"In Chinese Taipei, mobile payments have risen from 4.8 percent in 2014 to 72.2 percent in 2021."**

Much can be learned from outside of APEC from Brazil's PIX, a central bank backed instant-payments network. Since launched in 2020, 140 million people use the app, accounting for 29 percent of cash transfers in 2022. Cash transactions fell by seven to 10 percentage points.

Leading Examples of Private Sector Digital Financial Inclusion Initiatives: More and more, technology companies are playing a role in financial inclusion for MSMEs. A best-in-class private sector example is from the People's Republic of China, where Ant Group's Alipay has been at the forefront of fostering financial inclusion through digital means. In 2015, Ant Group launched MYBank as a privately-owned B2B lending service that caters specifically to meeting the financial needs of SMEs, self-employed business owners, and commercial farmers.

In South Korea, private sector tech companies like KakaoPay are offering digital financial services like microloans to foster financial inclusion, and FinTech companies like PreAuth from Peru are providing creative financing options for MSMEs who are often overlooked by traditional creditors, increasing credit placement by 15 percent to those previously rejected. More economies are establishing regulatory sandboxes to bolster and nurture more homegrown FinTech companies to play a bigger role in financial inclusion and digital payments. Fintech-related sandboxes have been growing rapidly around the world. Since 2016, the highest number of fintech-related sandboxes have been created in the East Asia and Pacific region which is a positive signal given the role they can play in financial inclusion as an incentive to formalize.

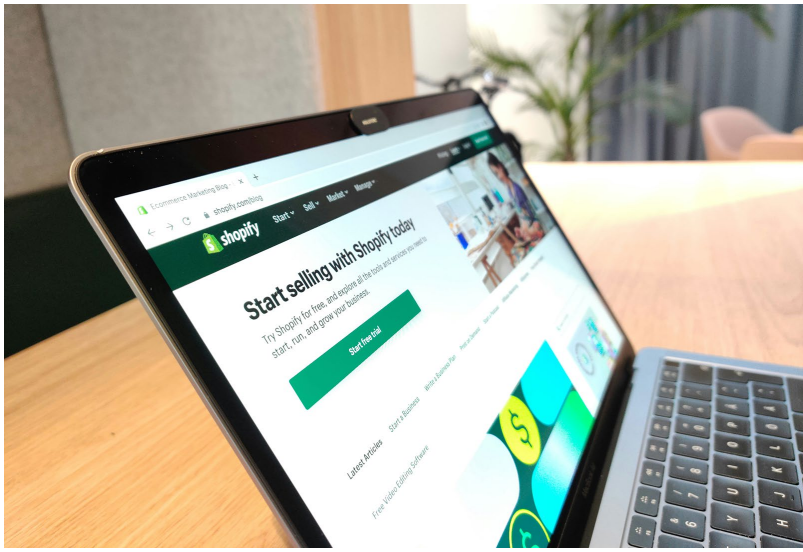
E-commerce to Expand Market Reach

Digitally connecting buyers and sellers through e-commerce platforms, digital government procurement platforms, and the digital platform economy can encourage business owners to formally register as a requirement to access these services. These platforms usually require the setup of e-payment systems, which means that transactions are documented electronically, supporting financial inclusion and improving transparency. With more and more consumers shopping online, these platforms can also enable MSMEs to expand market reach and their customer base, which can be a key incentive for MSMEs to formalize.

> **"In Viet Nam, two million farmer households received digital skills training, resulting in 50,000 agricultural products being listed for sale on e-commerce platforms."**

A leading government-led example is from Viet Nam, where, in 2018, around 20 million people working in the agricultural sector were estimated to be informal workers. In 2021, the government announced plans to integrate millions of farmers and small businesses into nationwide e-commerce platforms, aiming to address the limited role of e-commerce in agriculture and other largely industrial industries. Through the government program, farmers can obtain and share information as well as receive IT training to navigate the sites effectively. As of April 2024, two million farmer households throughout Viet Nam received digital skills training, resulting in around 50,000 farm products being listed for sale on various e-commerce platforms.

Leading Practice for Cooperatives: A best-in-class example comes from Peru, with the Allima cocoa cooperative. During the COVID-19 pandemic, the cooperative, comprised of 400 small-scale farming families in Chazuta, Peru, faced challenges due to restricted movement that hindered market access and technical assistance. An initiative titled AGRIdigitalización, funded by the U.S., linked them with a local e-commerce platform, enabling online sales of beans and cocoa pulp and providing insights into internet sales trends. Digital tools and online services enabled the cooperative to innovate and develop new high-value products, such as macho chocolate and macambo-based items, expanding their market reach and revenue sources. The project aimed to support 86 producer organizations to market their products online and 132 rural savings cooperatives to offer their financial services through digital platforms. Additionally, 3,000 farmers were set to receive virtual technical assistance and trainings, and digital communication tools.



A leading private sector-led example is from Canada, the home of e-commerce giant Shopify. Shopify is renowned for its platform, which caters to online stores and retail point-of-sale systems. This platform provides services such as payments, marketing, shipping, and customer engagement tools which allow anyone to set up and manage their business online. As of December 2023, Shopify hosted 4.8 million stores across 175 countries. The platform has made e-commerce more accessible for

small businesses, particularly businesses in rural areas that may have been largely informal but now have an incentive to formalize to expand their market reach. The company has been particularly successful in enabling Indigenous-owned small businesses to share their culture widely through selling traditional products and crafts online, such as Manitobah Mukluks. During the pandemic, a public-private partnership called Go Digital Canada provided support to SMEs to grow their business online through educational tools provided by Shopify and its partners.

A recent APEC study found that e-commerce has led to increased revenue for SMEs, but more needs to be done to increase internet access, promote e-commerce adoption and improve digital maturity levels in order for MSMEs to fully leverage its potential.

Accessing New Markets through the Platform Economy

The number of workers on digital economy platforms is increasing in most economies due to low barriers of entry, ease of use, and flexible working arrangements. At the same time, the demand for these services from users is increasing because they are convenient and cost-effective. The digital platform economy has a role to play in reducing informality as these platforms allow traceability of information and sales, and can incentivize workers to join the formal economy to expand their markets with platforms like Uber, Grab, and Airbnb.

Leading Private Sector-led Initiative: During the COVID-19 pandemic, Grab played a significant role in Malaysia's digital economy. They launched initiatives to provide remote GrabPay links for merchants to sell through social platforms, signed up 11 local wet markets to sell digitally, and digitalized Ramadan bazaars through partnerships with local councils. As a result, 8,000 new merchants joined the Grab platform and merchants' sales grew by 15 percent. Grab and Mastercard have also partnered to launch 'Small Business, Big Dreams', a free program to digitally upskill Grab drivers to boost entrepreneurship in Indonesia, the Philippines, and Viet Nam. The most sought-after training programs from Grab driver-partners include strategies for growing their business and increasing profits, starting a new business, and marketing their business online.

With Airbnb, many economies have now created regulations requiring hosts to secure business registration from varying levels of government, with income from short-term rentals as taxable income. Although the Asia-Pacific region still only accounts for around 10 percent of the company's gross booking value, the CEO of Airbnb has recently signalled this region as a target market for the company's growth. Specifically in Japan, Airbnb saw a total number of nights booked by international visitors to Japan triple between 2022 and 2023. There is also opportunity in Chile where there are approximately 8,000 Airbnb listings in Santiago alone, with very few listings having the required short-term rental licenses. Enforcement of such regulations will be important to ensure it has a positive impact on formalization.

In some cases, joining these digital economy platforms can provide informal workers with benefits compared to the traditional industries in which they may have worked before. For example, taxi drivers in some economies are not formalized and lack few protections. By joining ride-hailing apps such as Uber or Grab, many of them can now access a larger market and greater revenues. In other cases, digital economy platform workers are new entrants and were never employed in informal sectors – joining these platforms is done out of necessity to earn income in the face of poor labour market conditions or to supplement formal income sources.

As platform economy workers' transactions are recorded digitally, if the government works with the digital economy platform companies to have access to this transaction data, workers activities' can be registered and taxed. However, the approach should take into account concerns about privacy and data, and over-taxation that can discourage individuals from participating in the platform economy, potentially reducing flexibility and job opportunities.

Leading Government-led Practice: In Mexico, policymakers worked with platform economy companies such as Uber to deduct taxes from workers' pay checks and send them directly and automatically to the tax authorities, ensuring that these workers' activities are formalized to an extent.

While technology can enhance productivity, it can also have an adverse effect, as many platform economy workers may not have clarity on their employment status, how to deliver services legally, or how to navigate complex taxation systems. Although digital economy platform workers are usually classed as informal workers, as they do not have a formal employment contract (and would prefer to remain as such), there is still an opportunity for policymakers to support workers on these platforms to gain access to greater labour protections while ensuring they are registered and pay taxes.

Leading PPP Practice: A public-private partnership in the People's Republic of China led to the creation of Haohuo, an online platform that offers flexible employment options such as delivery drivers and online shopping live streamers. Haohuo collaborated with the government to create a database and an integrated, big data-powered portal that offers invoice management, legal assistance, skills training, and rights protection services to gig workers and their employers.

Legislation can also be put in place to provide appropriate protections, rights, and benefits for workers participating in platform economy work. For example, in Australia, the government passed the Fair Work Legislation Amendment to provide new minimum rights and protections for gig workers while preserving the flexibility and advantages of digital platform work for both businesses and workers. The government also launched the Sharing Economy Reporting Regime in 2023 to integrate platform economy workers into the formal economy. This requires operators of platforms such as Uber and Airbnb to report transactions. In addition to informing users' awareness about potential tax obligations in detail online, these platforms are helping ensure that platform economy workers' activities are formally documented.

SECTION 3: CONDITIONS FOR SUCCESS

Our review of best practices demonstrated that the following conditions for success contribute to e-formalization.

A: ACCESS TO DIGITAL INFRASTRUCTURE, SKILLS AND TOOLS

Government initiatives that provide access to digital infrastructure, build capacity for digital skills, and build trust in digital tools are creating positive momentum towards e-formalization. This is proving particularly important for marginalized groups, including women, seniors, and Indigenous populations, who are often the most affected by informality and digital isolation in terms of internet access and the level of their digital skills.

Digital infrastructure

Digital tools such as e-government, e-payments, and e-commerce initiatives rely on near-universal internet and mobile phone access to be effective. As such, ensuring that internet and mobile phone infrastructure is accessible to underrepresented communities is crucial. More than a quarter of APEC's population (approximately 770 million people) lacked internet access in 2020.

Leading PPP Practice: Public private partnerships can bridge the digital divide with programs such as the Rural Broadband Initiative (RBI) in New Zealand, which aims to provide faster broadband to priority users and communities outside of Ultra-Fast Broadband (UFB) areas. During the first phase, around 300,000 New Zealand households and businesses benefitted from improved broadband. In the second phase , the program is bringing enhanced broadband to over 84,000 under-served rural homes and businesses by the end of 2024.

> **"More than a quarter of APEC's population (approximately 770 million people) lacked internet access in 2020."**

Digital skills

Closing the overall skills gap in the informal economy is critical for enabling individuals and businesses to enter the formal economy, but skills development must continue to evolve to provide the relevant quality skills needed in the modern workforce. In many APEC economies, even with robust digital infrastructure,

many informal businesses and workers do not have the necessary skills to use digital tools effectively, yet recognize that digital tools such as social media and e-commerce are essential to success in an era of rapid digitalization. Digital skills training programs can mitigate this digital divide, educating workers and MSMEs on the types of digital tools available and how to use them are pre-requisites to promote e-formalization.

A leading example to support women entrepreneurs is a program in Chile, Kodea's **Emprendedoras Conectadas (Connected Female Entrepreneurs)**, which provides digital skills. Many women participate in new informal ventures in Chile, with a significant portion starting businesses out of necessity, often working on their own and under precarious labour conditions. The main barriers to formalization are the family's economic situation, the cost and time needed to complete procedures, and a lack of connectivity and digital skills. Although 62 percent of female micro-entrepreneurs in Chile use ICT, only 23.3 percent use these tools to promote and disseminate their business, as they either do not believe it is necessary to boost their business or do not know how to use these tools (26.2 percent). Kodea's **Emprendedoras Conectadas** aims to bridge the digital divide. The program provides training in digital tools, business skills, and online presence. As a result, these women entrepreneurs can market their products and services more effectively, increasing visibility and reaching new audiences. Six months after completing the program, 75 percent of participants report increased sales and successfully make online sales through their stores. In fact, 39 percent of them generated income above the minimum wage (USD), and twelve months after graduation, this percentage increased to 46 percent.

A leading government example for street vendors is from Singapore, where a program is bringing digital skills and e-formalization to street vendors. The Singapore Together Alliance for Action – Online Ordering for Hawkers aims to support hawkers by helping them transition to digital platforms, develop sustainable business models, and raise consumer awareness about online ordering. This collaborative effort involved delivery platforms, hawkers' associations, community partners, and government agencies working together to empower hawkers to embrace technology—specifically, to help stallholders adopt e-payment options. Between June and September 2021, the program interacted with 5,500 hawkers to promote the initiative. Some food delivery platforms such as "FoodPanda" even launched their hawker digitalization campaigns, during which volunteers would answer any concerns hawkers had regarding the use of digital platforms. As additional incentives during the pandemic, a US$ 3 cash bonus for every 10 digital transactions was put in place, and currently, all transaction fees are covered until December 2024.

> **"Six-months after completing the program, 75 percent of the female entrepreneurs successfully make online sales, with nearly 40 percent generating income above the minimum wage."**

To ensure digital skills training is accessible and effective, skills development strategies and programs should include a focus on informal workers as these initiatives can be effective incentives to enter the formal economy. To reduce barriers to skills development, financial incentives can be made available to enable workers and MSMEs to access skills training. This is particularly important to support the participation of women and vulnerable groups. Skills training should be well-aligned to labour market demand and should include financial and business acumen.

Digital Trust

Apprehensions about the risks of digital tools and the absence of digital literacy may deter informal MSMEs from embracing digitalization. If entrepreneurs lack confidence in the security and privacy of their data, they may hesitate to use e-government services or e-payments. This also impacts consumer confidence in e-payments to move away from cash-based transactions. Strong foundations for digital trust are enabled through robust cybersecurity and privacy strategies. ABAC's 2022 report, Towards a Cybersecure APEC, called for APEC to build a shared regional platform for cybersecurity, which remains more critical than ever.

Leading Government-led Practice: The United States is at the forefront of investment in cybersecurity, with over $71 billion in 2023 as part of the government's launch of the National Cybersecurity Strategy. Singapore also passed the Online Criminal Harms Act in 2023 allowing the government to proactively disrupt malicious online cyber. The Singapore government also launched an array of community programs and campaigns to educate digital users including a package of cybersecurity best practices and toolkits for SMEs to train their staff.

Leading Practice in Support for MSMEs: The Australian Indonesian Centre's Skills Futures Program offers cybersecurity courses to MSMEs to build their cyber resilience. It provides small business owners webinars and offline exercises on cybersecurity and global trade to help reduce the range of cyber threats and risks to growing a digital business.

Leading Private Sector-Led Practice: The private sector also plays a significant role in technology innovation. A Canadian company, Blackberry, established a world-class Cybersecurity Centre of Excellence (CCoE) in Malaysia to deliver cybersecurity training and cyber threat intelligence to support governments and businesses in the region to better respond to cyberthreats. This centre will also help Malaysia with capacity building to address its shortfall of 12,000 cybersecurity professionals.

B: CONSIDERATIONS FOR DESIGNING & IMPLEMENTING SUCCESSFUL E-FORMALIZATION POLICIES

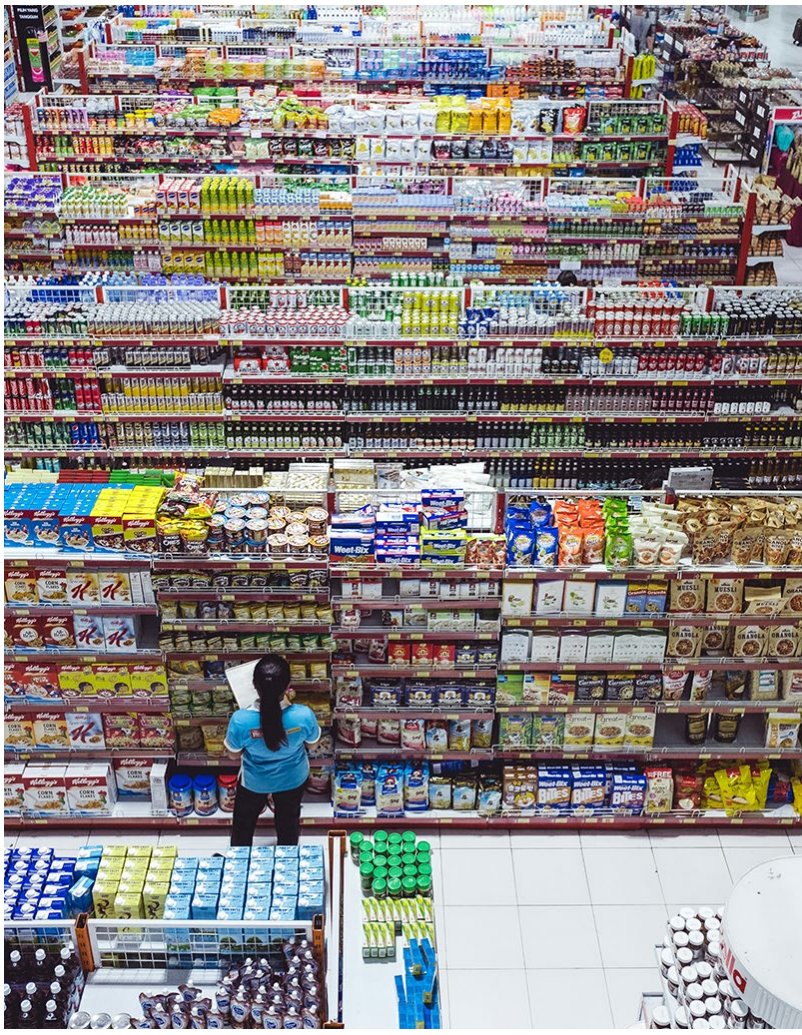
The state of informality and digitalization vary greatly by economy, and the underlying structural challenges associated with it are complex, including high unemployment, underemployment, poverty, gender inequality, and the prevalence of precarious work. Based on experiences from other economies, policymakers can consider the lessons learned–summarized below–when designing and implementing e-formalization policies:

- **Find the balance between incentives and enforcement.** Although some enforcement is needed to ensure that businesses can rely on the judicial system and are incentivized to remain in the formal economy, digital policies, tools, and initiatives that have made it easier and less costly to do business in the formal economy have shown to be more successful in changing perceptions of the formal economy than approaches strictly focused on enforcement. There is value to regulators playing an educational role as opposed to a punitive one to help incorporate more MSMEs into formality.
- **Build awareness of programs and their impact.** Many workers are worried about losing social protection benefits if they formalize and many MSMEs are unaware of existing supports for formalizing.
- **Harness the innovation of the private sector.** Economies that have had successful e-government initiatives have made public-private collaboration a key element of their program or policy design. Supportive policies like regulatory sandboxes and partnering with private entities on initiatives related to e-government, financial inclusion, platforms, big data and e-commerce, can foster innovation that is accessible and can be scaled up to support MSMEs to join the formal economy.
- **Make incremental change.** Transitioning workers and businesses from the informal to the formal economy can be a long process, and success has been seen when incremental steps have been taken to ensure that MSMEs can adapt to new policies and programs.
- **Collaboration across APEC:** APEC economies should not reinvent the wheel. While levels of digitalization and informality vary by economy, APEC economies can work together to learn from existing best practices outlined in this report, and how to best apply them to achieve greater prosperity in their prospective economies and across the region.

SECTION 4: THE E-FORMALIZATION OPPORTUNITY FOR APEC

Today, the digital economy contributes to more than 15 percent of the global GDP, and over the past decade, has been growing 2.5 times faster than non-digital GDP.

Rapid technological advancements are transforming all APEC economies as mobile connectivity and digital platforms continue to evolve and change business and consumer behaviours. E-commerce now makes up 20 percent of worldwide retail sales, and 5G subscriptions are expected to triple by 2028. Digital tools can be important enablers to support MSMEs in APEC to join the formal economy.



KEY RECOMMENDATIONS:

While each APEC member economy may be at a different starting point, ABAC recommends that APEC policymakers consider the following best practices to make digital tools effective enablers of formalization:

1. **Enhance digitally delivered public services (e-government)** to simplify business registration, record keeping, and taxation, making it easier to do business and join the formal economy. For example, policymakers could explore digital identification systems to enable informal workers to easily access public services, financial services, and social protection.

2. **Leverage digital tools as incentives to make formalization more attractive to MSMEs.** Depending on the economy, these could include e-commerce initiatives to expand market reach, incentivizing the use of digital payments for financial inclusion, and access to government supports and procurement.

> For many MSMEs, the current costs of formalizing outweigh the benefits

3. **Bridge the digital divide** by focusing targeted investments in digital infrastructure that connect rural MSMEs to the digital economy, lower the cost of internet access, and support digital capacity building programs. E-formalization requires informal workers and businesses to access the digital platforms and tools.

4. **Enhance transparent and secure data collection** to develop policies that adequately address the unique challenges faced by informal workers and businesses. By leveraging public and private digital platforms such as e-government websites, platform economy apps (such as Uber and Airbnb), and social media sites that generate data, policymakers can develop targeted social and economic interventions that better meet the needs of the informal economy.

5. **Build digital trust:**

    - Develop comprehensive national cybersecurity for both preventive and responsive measures, ensuring the protection of critical infrastructure and the capacity within government structures to maintain, evolve, and execute these strategies.

    - Implement public awareness and lifelong learning programs for individuals and MSMEs to understand how to safely and responsibly engage with digital technologies and increase adoption of safe digital practices.

CONCLUSION: OPPORTUNITY FOR APEC

The digital economy is expanding at a faster rate than global GDP, presenting significant opportunities for economic growth in APEC.

Yet the informal economy still accounts for a significant portion of GDP in many APEC economies. By addressing the challenges faced by the informal economy through digital solutions, APEC can promote more inclusive economic development. Digital tools can help integrate MSMEs into the formal economy, improving working conditions, productivity, and workers' rights. However, the advantages of formalization must outweigh the associated costs for MSMEs.

Strengthening e-government initiatives to simplify business processes and leveraging digital tools such as e-wallets, e-commerce, and other digital platforms can incentivize MSMEs to formalize, enabling them to expand market access, secure financing, and grow. For effective e-formalization, support for MSMEs to adopt digital technologies and targeted investments to close the digital divide are crucial. While levels of digitalization and informality vary across the region, APEC offers a unique opportunity for economies to share best practices and apply them to achieve greater prosperity across the region.

ANNEX

A: APEC ECONOMY PROFILES

APEC ECONOMIES

Click on each economy to go to their profile

An "economy profile" was created for each APEC economy to explore the nexus between digitalization and formalization using open-source data, and some with additional data from informal interviews. Each profile summarizes the state of the informal economy and the state of digitalization in each economy, including best practices and potential areas of opportunity for e-formalization.

AUSTRALIA

OVERVIEW

Australia is progressing well in digitalization, with a 35 percent increase in digital payments in the last year alone, overtaking cash withdrawals for the first time. This trend is likely to support the government's efforts to "stop the cash economy". Although Australia has embraced technological change, gaps remain in internet connectivity and inclusion. The government has responded to the informal economy with targeted digital initiatives, including simplifying e-government services for SMEs and providing them with digital skills supports. The government has also promptly addressed challenges related to the platform economy, ensuring that workers receive minimum rights and protections and requiring platform economy operators such as Uber to report transactions. The government could explore further digital inclusion projects to address the digital divide and partner with the private sector to deliver them.

Key Statistics

- GDP $1.84 trn USD (2023)
- Population: 26.6 m (2023)
- Informal economy (percent of GDP): 14.0 percent (2020)
- Internet penetration (percent of population): 96.2 percent (2023)
- E-Government Development Index: 7th globally (2022)

INTRODUCTION

According to the World Bank, 14 percent of Australia's GDP was from the informal economy in 2020. The Australian government estimated the 2018-19 tax gap to be around $22.3 billion (AUD $33.5 billion) or 7.3 percent. At the start of 2023, the internet penetration rate stood at 96.2 percent of the total population. However, the digital divide persists with 2.8 million people still "highly excluded" from internet access in 2022. The gaps in internet connectivity in regional areas and among low-income earners came to light during the COVID pandemic when many Australians moved online. Indigenous Australians are 7.5 percent below the national score for digital inclusion. Nevertheless, e-payments are well-established in Australia. The Reserve Bank of Australia's Consumer Payments Survey 2022 indicated that only 13 percent of transactions were conducted using cash. With the accelerated growth of e-commerce through the pandemic, Australian consumers are now making around 15 percent of their card payments online.

The Informal Economy in Context

- 13.9 percent of employment in 2019 was gig work.
- Indigenous Australians are heavily represented in informal sectors like domestic work, street vending, agriculture, and construction, leading to increased vulnerability to exploitation and a lack of social protection.
- Indigenous women often find themselves in low-productivity roles that fail to provide adequate income to escape poverty and food insecurity.

GOVERNMENT

The Australian government established the Black Economy Taskforce in 2016 to respond to the shadow economy (the government now uses the term "shadow economy" which reflects the OECD definition of unreported or dishonest economic activity) and to increase tax compliance. This taskforce recommended several digital initiatives to encourage formalization.

Digital Identity and Tax Compliance

One recommendation was that the government establish a single business register underpinned by a digital identity. This investment allocates $282 million to modernize business registers and $172 million to expand the Digital Identity program. In addition, the government worked to improve tax performance through a digital-first approach, encouraging system integration, and developing a roadmap and prototypes to streamline the tax experience. MSMEs can now register for a business and pay taxes online in one place. The digital initiatives streamline registration and compliance, making it easier and more cost-effective for businesses to operate legally, thereby encouraging informal businesses to formalize. The government also has a number of "stick" approaches to combat the informal economy, including data matching investigation, using small business benchmarks to identify potential tax evaders, and conducting a minimum of 120 days of audits to detect businesses that are not properly registered.

Supporting SMEs' Digital Skills

In addition to improving the ease of doing business, the Australian government is supporting SMEs in developing their digital skills. The Digital Solutions program offers small businesses low-cost, high-quality advice on a range of digital solutions to help them meet their business needs, including e-commerce, marketing on social media and ensuring online security and privacy. In April

2020, the program was broadened to include general business support for small businesses impacted by the COVID-19 pandemic. In August 2022, the Minister for Small Business, Julie Collins, announced $12.5 million in further funding through grants. Further support for small businesses is available through Navii, a platform which allows businesses to share best practices and low cost training on digital tools. As SMEs increase their awareness and adoption of digital technology, they may be encouraged to formalise their activities to take full advantage of digital tools such as e-commerce that can significantly increase their market reach.

Digital Skills Inclusion

The Australian government has adopted a number of initiatives aimed at improving digital skills and inclusion for marginalized communities. Many of these initiatives target Indigenous populations as The National Agreement on Closing the Gap Access to Information Target (Target 17) that by 2026, Aboriginal and Torres Strait Islander people have equal levels of digital inclusion. For example, The Deadly Digital Communities Program is an initiative of the State Library of Queensland and Telstra in partnership with local government through their Indigenous Knowledge Centres (IKCs) and public library services. It is a community-based digital technology skills training program for Aboriginal and Torres Strait Islander peoples and communities across Queensland with the aim to unlock new possibilities and opportunities through digital literacy.

PRIVATE SECTOR

Financial Inclusion

Access to finance and resources are often barriers for MSMEs and improving these access points can serve as an incentive to formalize, complementing traditional government enforcement measures. In Australia the FinTech sector has been offering innovative financing solutions to MSMEs that are less complex through digital platforms such as peer-to-peer lending, invoice financing, and crowdfunding. FinTech platforms like Judo Bank, Lumi, Moula, Prospa and Shift are using digital platforms to support MSMEs to get financing where challenges may exist with traditional lenders. This can help informal businesses with limited credit history or assets gain access to needed capital, paving the way for formalization.

Mentorship & Digital Skills Training

Mentorship is another area where private sector can play a role in supporting MSMEs to join the formal economy. The Indigenous Women in Business Network, a social initiative of the Aboriginal-owned company Dimeo Indigenous, recently launched a community and platform for Indigenous women entrepreneurs. Civil society also has an important role in supporting and educating informal MSMEs that may want to formalize, particularly with vulnerable groups that may lack trust in institutions and are overrepresented in the informal sector. For example, Indigenous led not-for-profit First Innovators is working to grow First Nations businesses in Australia and has recently received funding from the government to train First Nations business owners and innovators in digital skills, coding and programming, graphic design and digital marketing.

PUBLIC-PRIVATE PARTNERSHIPS

Platform Economy

A survey from 2019 found 7.1 percent of the population had offered to work on a digital platform in the past 12 months, although at the time of the survey only about 0.2 per cent were doing full-time gig work and entirely reliant on that source of income. Gig work was concentrated in transport and food delivery (18.6 percent), professional services (16.9 percent) and odd jobs (11.6 percent). The government is working to strike a balance that maintains the flexibility and benefits of gig work enabled by digital platforms for businesses and workers, while also ensuring that workers receive adequate protections, rights, and benefits. The Fair Work Legislation Amendment (Closing Loopholes No. 2) Act 2024 was passed in February 2024 and will provide new minimum rights and protections for gig workers, enabling eligible workers to pursue a minimum standards order (MSO) with binding minimum standards including minimum rates of pay. To support the integration of platform economy workers into the formal economy, the government launched the Sharing Economy Reporting Regime in July 2023, which requires operators of platforms such as Uber and Airbnb to report transactions. In addition to informing users about potential tax obligations in detail online, these resources are helping ensure that platform economy workers' activities are formally documented.

BRUNEI DARUSSALAM

OVERVIEW

Brunei Darussalam has progressed significantly when it comes to digitalization. Its internet penetration is high, and e-commerce is well established. E-government initiatives have been helpful to improve business registration, and the government is supporting MSMEs to acquire digital skills. However, a digital divide remains, and the informal economy is significant. To support formalization through digital means, e-payments could be further promoted, potentially by collaborating with the private sector.

Key Statistics

- GDP: $15.1 bn USD (2023)
- Population: 452,524 (2023)
- Informal economy (percent of GDP): 33.4 percent (2020)
- Internet penetration (percent of population): 98.1 percent (2023)
- E-Government Development Index: 68th globally (2022)

INTRODUCTION

The World Bank estimates that Brunei Darussalam's informal economy made up 33.4 percent of GDP output in 2020. The country's internet penetration rate stood at 98.1 percent of the total population at the start of 2023. However, the pandemic exposed the digital divide with an online survey of students indicating that 69 percent of respondents had internet speed and performance issues, while 52 percent said cost of internet subscription was a challenge while learning or working from home. Despite this, Brunei has embraced e-commerce enthusiastically, with 76 percent of Bruneians using it for shopping, banking, and paying bills. While dedicated shopping websites are popular (57 percent), a significant 24 percent of Bruneians prefer to shop via social media platforms such as Facebook and Instagram.

The Informal Economy in Context

- According to the labour force survey, 41.7 percent of the total employed population in 2019 was informal.
- About 3/4 of local informal employment was concentrated in the services sector, mainly in wholesale and retail trade activities.

GOVERNMENT

E-Government

The Brunei government has digital initiatives to support formalization. Regarding e-government, e-Darussalam Account serves as a nationwide digital authentication key in Brunei, allowing citizens, permanent residents and expatriates with work permits to access various government services. These services include paying taxes, transferring land titles, applying for licences (such as for electricity, construction, exports, and international trade fairs), registering with the job centre, and renewing driving licenses. The e-Darussalam Account, among other digitalization initiatives, has improved the ease of doing business. Starting a business in Brunei Darussalam now takes 12.5 days, costs 1.1 percent of per capita income, and involves 5.5 procedures. This marks significant improvement since 2015, when it took 104.5 days, cost 10.4 percent of per capita income, and required 18 procedures. Currently, company registration can be completed online in just one day.

E-payments

The government is currently in the process of developing a centralised payment hub which will facilitate instant digital payments within Brunei and for merchants internationally. This will support Brunei's move towards cashless transactions. The new hub will allow digital transactions without the need for a bank account, enhancing financial accessibility for both customers and businesses and supporting improved transparency of transactions, both of which can support formalization.

PRIVATE SECTOR

Brunei's FinTech sector has made remarkable progress over the past few years. This can be attributed to the government's support and regulatory sandboxes for the FinTech sector. For example, most financial innovations were started by big banks, but the regulatory sandboxes were critical for the growth of four FinTech companies that are supporting MSMEs with digital solutions: BruPay, Beep, which allows local merchants to accept

AliPay, MoneyMatch (a digital remittance service) and Jana Kapital, an Islamic crowdfunding platform. By creating regulatory environments that foster innovation, private sector companies like Jana Kapital can drive financial inclusion for MSMEs in niche markets looking to formalize. Jana Kapital is one of the first Syariah-compliant peer-to-peer financing and investment platforms in Brunei that is premised on Islamic funding structures. Their first successful campaign crowdfunded enough investment for a food vendor to acquire a modified shipping container to expand its operations. Beep Digital Solutions empowers MSMEs to expand their market reach and formalize their operations through innovative digital services. For example, small businesses can easily set up online stores with just one click using Beep Digital's tech support. Additionally, businesses can integrate their e-commerce platforms with Beep Digital's payment gateway to accept online payments, including Alipay and card payments. This capability not only helps small businesses, including those in the informal sector, expand their market reach and manage transactions more professionally but also assists in maintaining accurate records and streamlining financial processes, contributing to a more formalized business structure. Jana Kapital, an Islamic crowdfunding platform, can drive financial inclusion for MSMEs in niche markets looking to formalize.

PUBLIC-PRIVATE PARTNERSHIPS

MSME Digital Skills Support

The government has collaborated with the private sector to support MSMEs in acquiring digital skills. Darussalam Enterprise, Brunei's economic development board, collaborated with e-commerce platform DHgate.com and Universiti Brunei Darussalam to launch the APEC Cross-Border E-Commerce Training, under the APEC Business Advisory Council. This e-commerce bootcamp aimed to enhance SMEs' e-commerce skills and encourage them to sell products internationally via DHgate.com's digital marketplace. The training shifted business owners' mindsets from traditional to digital and helped decision makers and employees acquire digital business skills. This will enhance their ability to keep accurate and up-to-date records which is essential for formalization, as this supports transparency and accountability.

Go Digital ASEAN

The government also is supporting more marginalized members of the community in acquiring the digital literacy necessary for formalization. In July 2020, the Go Digital ASEAN initiative was launched in Brunei as a national event. Brunei's Go Digital ASEAN was steered by the Big BWN Project, a collaboration between the government, a non-profit and Google. The project focused on helping 2,000 underemployed/unemployed youths, 450 youths from marginalized communities and Indigenous groups and 50 people with disabilities with digital literacy and online safety awareness. 82 percent of SMEs taking part in the program felt that their digital skills had improved and 23 percent of them started to sell their products/services online. This progress addresses a crucial barrier faced by many informal businesses: the lack of digital skills. Online registration, digital record-keeping, and online marketing are essential for formalizing their operations.

CANADA

OVERVIEW

Canada has demonstrated consistent progress in digitalization, marked by high internet penetration and a thriving e-commerce sector. It is particularly strong in the e-commerce sector, with many digital supports for MSMEs. Despite this, its E-Government Development Index has declined globally , from 3rd place to 28th place over the past decade, and a digital divide exists, particularly for rural communities and Indigenous peoples. Its informal economy is also relatively large compared to its neighbour, the United States. To address these issues, Canada could enhance its e-government services, including implementing widespread automated tax filing services. The government could also continue to tackle the digital divide through public-private partnerships, improving infrastructure and access for underserved communities to create a more conducive environment for economic formalization.

Key Statistics

- GDP $2.14 trn USD (2023)
- Population: 40.1 m (2023)
- Informal economy (percent of GDP): 16.0 percent (2020)
- Internet penetration (percent of population): 92 percent (2023)
- E-Government Development Index: 32nd globally (2022)

INTRODUCTION

Canada's informal economy comprised 16 percent of its GDP in 2020 and has been fairly stable for decades. However, Statistics Canada calculates the size of the "underground economy" '— a term that encompasses the informal economy (but also the hidden and illegal economy) — at around 2.7 percent of GDP using different modelling than that of the World Bank.

Internet penetration in Canada is very high at 92 percent of the population. Canadians have embraced e-commerce. Over 75 percent of the population was shopping online in 2022, with sales projected to increase. Canada has also reduced cash-usage in favour of e-payments with only 1 in 10 transactions paid in cash in 2022. Mobile wallets in particular are increasing in use, with 51 percent having made transactions via this method in 2022. However, a digital divide still exists. Many rural and Indigenous populations face barriers to accessing digital literacy and skills training opportunities. Although most people have access to the internet, the quality of the bandwidth is poor in many areas, particularly in Indigenous communities. For example, the First Nations Technology Council in British Columbia reports that 75 percent of First Nations communities in British Columbia do not have adequate internet (e.g., they are unable to download a pdf attachment in an email due to slow connectivity). In many remote rural communities, some businesses still have to rely on cash or cheques because they can't rely on Interac machines. Improving digital infrastructure and accessibility could support formalization by making it easier for businesses in these regions to engage in the digital economy.

GOVERNMENT

The Canadian government sees the underground economy as undermining economic growth in Canada by placing compliant businesses at a disadvantage against those that evade full compliance. It also contributes to the federal tax gap, which was between 7- 9 percent, according to the latest tax gap report in 2018.

The Informal Economy in Context

- The main industry in the informal economy is the residential construction sector, accounting for 35 percent of all underground economic activity.
- One study found that approximately 17 percent of workers were employed in the gig economy in 2019.
- Indigenous populations were systematically barred from partaking in the formal economy for decades; for example, they were unable to access credit through the banking system.

Automatic Tax Filing System

The Canadian government has a 2022+ Underground Economy Strategy to combat the underground economy. Although this strategy doesn't identify digital solutions for formalization, it highlights how digitalisation can facilitate the underground economy. However, the strategy emphasizes that encouraging tax compliance through education and ease of use could encourage formalization. According to the strategy, half of SMEs that were randomly audited made at least one reporting error on their tax return for the 2011 tax year. Digitalization can make it easier for informal businesses to file and pay taxes through simplifying the process and providing tools to help fill out tax forms automatically. The Canadian government plans to pilot a new automatic tax filing service as well as expand an existing initiative, SimpleFile, by phone. This will help hundreds of thousands of low-and fixed-income Canadians access benefits they are entitled to but currently do not receive as they have never filed a tax return (an estimated 10-12 percent of the population). It could also pave the way for a widespread roll-out of automatic filing services, supporting accurate and timely tax returns for all Canadians, which may encourage formalization by reducing barriers to compliance.

Canada Digital Adoption Program (CDAP)

With only one in 20 Canadian businesses using digital technologies effectively, the Canada Digital Adoption Program (CDAP) was launched in 2022 by the government to support businesses in adopting technology. It allocated $4 billion in funding, intending to cover the majority of costs to business to help them plan ways to update their technologies as well as a 0 percent loan of up to $100,000 to implement these ideas. It also supported businesses with adopting e-commerce through $2,400 grants. Unfortunately, the government ended most of the CDAP in February, two years earlier than planned, after spending less than one-fifth of its budget. Observers suggest that this initiative was not a complete success because the application process was complex; businesses could only choose from a list of government-approved consultants who may not have matched their needs, and there was a shortage of consultants. Therefore, initiatives such as these should consider implementing a phased approach with pilot projects that allow for design flaws to be found early in the process. Flexibility can also be useful in ensuring that projects are accessible to a wide variety of SMEs as shown in the example of Digital Main Street.

Digital Main Street

The Digital Main Street (DMS) Ontario Grants Program, is an example of a successful initiative to support SMEs in accessing digital tools that support formalization. DMS, a non-profit organisation, aims to help small brick-and-mortar businesses adopt digital tools and technologies, enhancing their integration of in-store and online operations in a secure environment. They partner with both government and private organisations to offer a number of resources for SMEs such as grants, online learning programs, webinars, and in-person workshops. However, their most successful initiative has arguably been the Digital Service Squad (DSS) program which offered personalised one-to-one assistance to small business through "hyper-local" hubs throughout the province with over 82,000 businesses getting personal support for their specific needs. Although DMS provides most services to all SMEs regardless of whether they are formalized or not (only publicly funded projects or grants require businesses to be formally registered), activities such as setting up an online store, installing point of sale systems or getting cybersecurity training can support businesses to formalize by making the process less daunting.

Regulating platform economies

Canada's gig economy is growing and the government has responded by implementing legislation which requires operators of platforms to report transactions to the tax authorities from January 2024. Canada's legislation is modelled on the rules developed by the Organisation for Economic Co-operation and Development (OECD) for digital platform operators. These rules require digital platform operators to collect information on revenues earned by sellers offering accommodation, transport and personal services through platforms and to report the information to tax authorities. These rules were implemented as it was noted in Budget 2022 that not all platform sellers were aware of the tax implications of their online activities, and ensuring compliance was an issue as digital transactions occurring on online platforms were not always visible to the tax authorities. This regulatory approach could potentially support formalization by increasing transparency and ensuring that digital platform operators and their users comply with tax obligations.

PRIVATE SECTOR

Shopify

Shopify is a Canadian e-commerce giant based in Ottawa, Ontario. It's renowned for its proprietary platform, catering to online stores and retail point-of-sale systems. This platform provides a comprehensive array of services such as payments, marketing, shipping, and customer engagement tools which allows anyone to set up and manage their business online. As of December 2023, Shopify hosts 4.8 million online stores across 175 countries. Shopify has made e-commerce more accessible for Canadians with small businesses, particularly in rural areas which may have been largely informal before but have incentives to formalize to expand their market reach. It has been particularly successful in enabling Indigenous-owned small businesses to share their culture widely through selling traditional products and crafts online such as Manitoba Mukluks, an Indigenous-led footwear company. During the pandemic, Go Digital Canada allowed SMEs to receive support for growing their business online through educational tools provided by Shopify and its partners. By offering accessible digital tools and a platform for online sales, Shopify helps creates conditions that may encourage informal businesses to formalize and integrate into the broader economy.

PUBLIC-PRIVATE PARTNERSHIPS

Digital Main Street (DMS)

DMS also provides best practices for partnering with the private sector. DMS has a partnership with Google to provide the ShopHERE program, where SMEs can quickly launch an e-commerce store at no cost. The initiative has been successful as Google has been a longstanding partner to DMS, enabling a trusting long-term relationship. While the federal and provincial government were key funders, DMS led the program and acted as a bridge between the government and private sector, ensuring transparency and efficiency.

Canada's Connectivity Strategy

The Canadian government has some policies in collaboration with the private sector to reduce the digital divide. One of these initiatives, in line with Canada's Connectivity Strategy to ensure that 100 percent of Canadians are connected to highspeed internet by 2030, is the Connecting Families initiative launched in 2022. The government partnered with 14 Internet service providers to offer $20 a month high-speed Internet services to low-income families and seniors.

These public-private partnerships illustrate how collaborative efforts can enhance digital access and tools, potentially fostering a more inclusive digital economy and supporting the formalization of businesses across diverse communities.

CHILE

OVERVIEW

Chile has one of the smallest informal economies in Latin America, ranking 10th in APEC. It is rapidly digitalizing, with high internet penetration and robust technological infrastructure. Despite these advancements, a significant number of entrepreneurs in the informal sector do not utilize digital tools, highlighting a gap in digital literacy. Government initiatives such as "Digitalize your SME" and its e-government service ChileAtiende are crucial in supporting MSMEs and promoting formalization. Enhancing e-government services and making them interoperable with the ClaveÚnica digital identification system could support e-formalization efforts. Projects like "Emprendedoras Conectadas" (Connected Female Entrepreneurs), could be expanded and considered as a model for other Latin American economies in bridging the digital divide for women-led MSMEs.

Key Statistics

- GDP: $335.53 bn USD (2023)
- Population: 19.6 m (2023)
- Informal economy (percent of GDP): 19.4 percent (2020)
- Internet penetration (percent of population): 91.0 percent (2023)
- E-Government Development Index: 36th globally (2022)

INTRODUCTION

The informal economy in Chile comprises 19.4 percent of GDP. In 2021, approximately 27.4 percent of the workforce were considered informally employed, a drop from 40 percent in 2010. This makes it one of the smallest in Latin America.

In terms of digitalization, Chile has the highest internet penetration in Latin America, with 91 percent of its population using the internet. It also has one of the highest fixed broadband and mobile broadband speeds in APEC. Despite the high levels of connectivity in the country, 70 percent of entrepreneurs in the informal sector report not using the internet, in contrast to 36 percent of entrepreneurs in the formal sector. This may be due to low levels of digital literacy, reducing the effectiveness of digital tools that may facilitate formalization. Meanwhile, e-commerce in Chile has experienced substantial growth over the past decade, fueled by the continuing development of the nation's technological infrastructure, the introduction of 5G service in December 2021, and the increased popularity of online shopping since the COVID-19 pandemic. This increase in e-commerce corresponds with a reduction in the use of cash, although it is still considered the most reliable form of payment by most Chileans.

The Informal Economy in Context

- Adults aged 65 and older, as well as those aged 15-24, exhibit the highest informality rates, at approximately 54.8 percent and 36.7 percent, respectively.
- Agriculture, transport, trade, accommodation and catering are the most significant industries for informal employment.
- 36 percent of informal workers are employed in micro-enterprises with fewer than five workers.
- While 66.9 percent of men are employed, only 47.8 percent of women manage to access formal employment.
- The informal employment rate among male micro-entrepreneurs has increased from 60.3 percent to 62.3 percent, and among women, from 65.1 percent to 69.5 percent.

GOVERNMENT

The government of Chile has consistently promoted the use of digital government initiatives, some of which impact formalization. By 2022, 86 percent of public services had been digitalized, with objectives to reach 95 percent by 2025 and full digitalization by 2035.

E-Government Initiatives

E-government services are well-established in Chile, which explains its high e-government development index ranking: 7th in APEC. The most well-known e-government initiative is ChileAtiende. Launched in 2012, this was designed as a one-stop shop for people to access multiple government services in the same place, modelled after Service Canada. This website manages as many as 67 million interactions yearly.

As part of this website, one can access the online platform Tu Empresa en Un Día (Your firm in one day). This has reduced the time and cost of starting a business — one can register a new company in only 24 hours. It also allows entrepreneurs to carry out transactions in the lifecycle of firms online without need of lawyers and at no extra cost. The average time required for procedures decreased from three months to five days, and the total cost dropped from US $790 to just US $27. During the first five months of the platform being live, approximately 10,025 firms were created on it.

By improving the ease of doing business, MSMEs now face fewer barriers to formalization. This may explain why Chile's overall ease of doing business ranking is relatively high compared with other emerging economies (at 59th globally). Within this, its score for starting a business is almost the same as the United States.

Supporting MSMEs in accessing digital tools

In Chile, 90 percent of SMEs rate the need to acquire digital solutions as "relevant" or "very relevant", but face significant obstacles such as a lack of specialized personnel, concerns about cybersecurity, and limited access to tailored advice and training. The Ministry of Economy, Development and Tourism's Digitalize your SME program aims to remedy this by providing SMEs with digital tools and learning materials to enhance sales, reduce operating costs and foster better relationships with customers and suppliers. The program was reinforced during the COVID-19 pandemic to offer additional assistance to businesses navigating challenging economic conditions.

Public Procurement

Another initiative is ChileCompra, a decentralized public procurement service designed to level the playing field for micro- and small enterprises (MSEs) and micro, small, and medium-sized enterprises (MSMEs). This platform is built on principles of transparency, cost-effectiveness, and inclusivity, ensuring that the public procurement market is more accessible to smaller businesses (including those owned by women) than is typically the case in the private market. Becoming eligible for public contracts serves as an incentive for formalization within the economy. In 2017, ChileCompra facilitated public procurement totaling USD 12.2 billion across 850 institutions, including government bodies, universities, and other public entities. Of these purchases, 59 percent were made from MSMEs and 43 percent from micro and small enterprises.

Digital Identification

Chile is in the process of transitioning to digital methods of identification. ClaveÚnica was launched in 2012, to respond to the need for identification on online platforms, including state services and other private organizations. It provides citizens with a single digital ID based on a username and password that complements the physical ID card which citizens already possess, and uses the state's digital signature authentication mechanism for citizens. It boasts over 14 million active users and currently supports over 1,600 public sector procedures. However, according to the OECD, there is a lack of interoperability between public and private sector services with the current ClaveÚnica system. Therefore, the OECD recommends that the Chilean government strengthen this system whilst ensuring that ClaveÚnica works for the private sector as well as the public sector.

PRIVATE SECTOR

Many women participate in new informal ventures in Chile, with a significant portion of these starting businesses out of necessity, often working on their own under precarious labour conditions. The main barriers to formalization are the family's economic situation and the cost and time required to complete procedures. The Ministry of Finance also highlights that a lack of connectivity and digital skills are a barrier to the formalization of activities. Despite 62 percent of female micro-entrepreneurs in Chile using ICT tools, only 23.3 percent use them for promoting and disseminating their businesses. The main reasons for their low use are not believing they are necessary to boost their business (61.8 percent) or not knowing how to use these tools (26.2 percent).

A notable initiative to address the digital divide is Emprendedoras Conectadas (Connected Female Entrepreneurs). This program, led by a non-profit, Kodea and supported by Google, aims to promote digital literacy and economic inclusion for women entrepreneurs in Chile. The program provides training in digital tools, business skills, and online presence. As a result, these entrepreneurs can market their products and services more effectively, increasing visibility and reaching new audiences. Although the initiative does not address formalization in its training plan and therefore does not include it as a component to evaluate, it is notable that six months after completing the program, social media e-commerce knowledge increased and 75 percent of participants report increased sales and successfully make online sales through their stores. By selling online and increasing their revenue, these women could be incentivised to formalize in the future.

PUBLIC-PRIVATE PARTNERSHIPS

Upskilling Workers

An example of collaboration with the private sector is "Talento Digital para Chile" focused on inactive, unemployed, vulnerable and female workers by helping them be better prepared to thrive in the evolving digital landscape.agencies and the private sector. They have identified that 1.9 million vulnerable Chileans work in routine tasks with a high risk of automation, which could lead to their displacement and potentially push them into the informal economy. The aim is to prevent this by upskilling workers. This is a key public-private initiative that integrates companies, training institutions, and government, demonstrating how upskilling can prevent formal workers from backsliding into the informal economy by equipping them with essential digital skills. As a result, initiatives like this contribute to e-formalization by helping workers be better prepared to thrive in the evolving digital landscape.

PEOPLE'S REPUBLIC OF CHINA

OVERVIEW

China's digitalization trajectory has been remarkable, propelled by forward-thinking government policies and its dynamic tech industry. The country's digital economy, valued at a staggering $6.94 trillion in 2022, bears testimony to the policymakers' strategic visions. An array of centrally and locally led initiatives epitomize the potential of digital tools for modernizing economic activities and public services. However, persistent urban-rural digital divide and regulatory hurdles for effectively leveraging the e-governance tools leave many small and informal businesses grappling with challenges to formalize. With an informal sector that employs hundreds of millions and contributes significantly to the country's GDP, digital tools are set to offer promising solutions. To incentivize formalisation, the Chinese government could explore innovative options to facilitate the operation of individual businesses and introduce flexibility in addressing tax compliance and labour insurance issues. At the same time, major private sector actors have a role to play in deploying technologies including AI and big data for better management, while helping the gig workers transition towards a more formal status.

Key Statistics

- GPD $17.79 trn USD (2023)
- Population 1.4 bn (2023)
- Informal economy (percent of GDP): 11.6 percent (2020)
- Internet penetration (percent of population) 73.7 percent (2023)
- E-Government Development Index: 10th (of 19 APEC economies in 2022)

INTRODUCTION

As the world's second largest economy, China's economic strength is supported by a substantial informal sector that employs hundreds of millions. It is believed that 183 million full-time and part-time workers were engaged in the informal economy in 2018, with other estimates putting informal employment between one-third to over half of all Chinese workers as of 2016.

China's rapid digitalization is rewiring how informal sectors operate. By the end of 2023, China's urban areas had an internet penetration rate of 83.3 percent, while in the rural areas it was 66.5 percent. The country has one of the world's most vibrant social media scenes dominated by super-apps such as WeChat, Douyin and Xiaohongshu, and 97.1 percent of netizens use at least one social media platform. Tech giants such as Tencent and Bytedance, which own some of these apps, are playing an ever more important role in transforming the informal business activities. The concept of "social commerce," referring to adding buying and selling functions to primarily user-generated content on social media, made e-commerce options more accessible and profitable for informal merchants beyond traditional online shopping sites. Behind this transformation is China's omnipresent online payment options, which have become an everyday means of transacting for nearly 90 percent of China's internet users. Prominent payment tools Alipay and WeChat Pay are also driving digital inclusion for many informal sector participants in a way that has never occurred before. China's cash-less revolution helped transform many erstwhile cash-only ventures and allowed transactions to be tracked digitally, granting the authorities more insight into informal labour conditions and tax compliance that would otherwise remain elusive.

The Informal Economy in Context

- Informal workers are typically between 21 and 40 years old and trending younger.
- Over 80 percent of informal workers have only a high school diploma or even less education.
- Most informal workers are internal migrants without official household registration (*houkou*) in the city they work, meaning they may earn lower wages and are face disadvantages in receiving benefits such as healthcare and pensions.
- Informal jobs are mostly labour, including construction, retail, caregiving, and the ever-expanding network of platform contractors.
- An estimated 90 percent of small businesses, most of them in the informal sector, engage in some degree of tax noncompliance.

GOVERNMENT

Promoting Digital Economy Development

The Chinese government sees digital economic activities as a key driver of high-quality growth and therefore transforming traditional brick-and-mortar forms of production to those using data and information technology as a crucial national strategy to pursue. Forming its policy backbone in driving towards digitalization is the 14th Five Year Plan for Digital Economy Development, which prioritizes moving "digital transformation of industries" to a new level, creating "more inclusive…digital public services" and a "noticeably improved…digital economy governance system."

In achieving the national goal of employing digital tools to make public services more inclusive, governments in various locales have been on the forefront of applying blockchain, artificial intelligence (AI), big data, and 5G to their services. In Kunshan, a major electronics manufacturing hub in Jiangsu province, a groundbreaking "livestream career fair" model was introduced, inspired by China's thriving livestream e-commerce industry. Led by the city's human resources bureau, this initiative aimed to modernize the job market by transitioning from offline to online platforms. The goal was to enhance efficiency, transparency, and accessibility in connecting companies with blue-collar job seekers while eliminating brokerage fees, contributing to formalization. In terms of improving labour protection, the Chinese Ministry of Human Resources and Social Security put forward plans to employ various digital tools to manage social security services and resolve work disputes, streamlining processes such as work injury claims. Such strategic momentum for developing e-government services also gave rise to government investment in several online platforms to help streamline business registration and operation. This digital infrastructure, pending several mechanisms still needed to be established, has the potential to improve the ease of doing business in China which is currently ranked 13th among APEC economies.

Financial Inclusion as Means to Incentivize Formalization

While the Chinese government has not put forth any overarching directive that specifically looks to use digital means to formalize its informal industries, the overall digitalization drive has indirectly led to some positive results for informal workers. Since issuing the Plan for Advancing the Development of Financial Inclusion in 2015 and riding on its newfound edge in FinTech, new financial services models and products, through both traditional banks and Internet-based institutions, have emerged across China's webspace. This makes credit available to a much broader group of micro, small and medium enterprises (MSMEs), self-employed workers, and farmers. Notwithstanding the relatively lax loan approval system and higher rates of default and scam that all contribute to greater regulation difficulties, the use of digital financial means is incentivizing those engaging in the informal sector to manage their businesses more systematically, leading to closer connections between formal and informal financial sectors.

PRIVATE SECTOR

Tech Firms as Key Drivers for "Street Stall Economy"

Owning and operating the economy's most popular online platforms, China's major tech companies have risen to become key investors in digital enablement projects that help the less advantaged — including lower-income groups and those working in the informal sector. One notable wave of such projects was the expansion of the "street stall economy" to boost employment and revitalize China's COVID-hit economy. While the government kicked it off by removing regulatory constraints for street stalls to operate, it was private sector actors that spearheaded the initiatives. Notable examples include Alibaba's street stall assistance project launched via its wholesale platform 1688.com, e-commerce giant JD.com's "Spark Economic Support Plan" that helps retailers expand their online presence, as well as food ordering app Meituan's "Spring Breeze Action Plan" that seeks to bring small food and beverage merchants online by offering precision marketing support and digital skills training.

Street mobile vendors, who had been largely operating outside of market regulations and facing multiple ensuing issues, were given the opportunity to engage in not only a new economic model with online marketing and financial credit modelling capabilities, but also in a digital transformation that enhances profitability and compliance standards. Growing out of this online-to-offline (O2O) model, these platforms also experimented a range of new toolkits in projects like "digital streets" in Shanghai, which leverage AI analytics to help small stores optimise their business strategies.

Private-led Platform Economy and Financial Inclusion

China boasts the world's largest platform economy, with gigantic networks such as Taobao and Meituan giving informal businesses and workers access to vast new customer bases. Digital-enabled on-demand delivery services, a sub-sector of platform economy that has seen tremendous growth in China over the past decade, is one prominent example of private business-led success in maximising productivity and market reach through digital means. Delivery service giants such as Meituan and Ele.me run sophisticated, big data-driven platforms that help merchants reach a broader customer base beyond their physical locations, while keeping 84 million gig workers employed. However, significant challenges remain in formalizing China's platform economy and ensuring adequate labour protections for its workers. In 2019, a mere 8 percent of platform workers had formal labour contracts, leaving the vast majority vulnerable and excluded from legal protections and social security benefits.

Besides growing the customer base and sales, gaining access to capital is also important in keeping resource-scarce informal businesses afloat. Online-based, privately-owned financial institutions have flourished in China to bridge the gap and bank the unbanked. Many informal business owners encounter barriers to meet the criteria — or simply lack financial literacy — to access loan services in the country's traditional banking sector, but the rise of mobile payment apps has revolutionized lending for informal business owners. Platforms like Ant Financial's MYBank and Tencent's WeBank offer mobile-payment-supported business-to-business (B2B) online lending services, making it easier for merchants to borrow money. The big data and AI-powered algorithms these services employ calculate credit limits and interest rates based on the merchant's transaction history, streamlining the loan-granting process.

For example, MYBank boasts a number of firsts as a virtual-based commercial bank in China: the first bank to establish its core banking system entirely on the cloud and the first to leverage AI technologies in SME risk assessment, to being the first to apply graph computing, multimodal recognition, blockchain and privacy-preserving computation to supply chain financing. At the center of MYBank's business model is a concept called the "310 model", which boasts three-minute application and one-minute approval processes with zero human interaction. Ant Group also founded the Ant Financial Credit Rating Co.—a rating firm that serves MSMEs by systemizing the use of credit ratings to enable financing for the underserved. A flagship project that came out of this is the "Ant Corporate Credit", a system which deploys cloud computing, blockchain and AI technologies to help small and micro businesses create their own digital profile and credit record.

These e-finance services platforms, backed either by physical commercial banks or completely virtually by e-commerce and supply chain networks, are able to offer a greater diversity of products and more flexibility to previously untapped customers.

PUBLIC-PRIVATE PARTNERSHIPS

In recent years, Chinese governments at both central and sub-national levels experimented with various ways to collaborate with private sector players, be it on-demand services companies or workers, to more effectively supervise and regulate informal economic activities even if they stay informal for the time being. New public-private collaboration models for the informal sector have also proliferated in different sub-national regions of China. For example, the city government of southern metropolis Guangzhou built venues for regular, multi-stakeholder dialogues among government, union and employee representatives, allowing for workers' interests to be considered in policy formulation. One concrete outcome from these dialogues is a new regulation that stipulates fair pay structures and performance review systems for the delivery workers.

As food delivery, ride-hailing, and e-commerce thrive to become a major source of informal employment in Chinese cities, the central government released a set of guiding opinions in 2021 to call on services platforms to ensure basic protections for the rights and interests of gig workers. In response to this government directive, leading tech companies like Meituan and JD.com made commitments to improving labour rights through devising more worker-friendly algorithms and creating trade unions. While trade unions in private companies — which in China must operate under the state-run All-China Federation of Trade Unions — do not grant workers full rights and collective bargaining power, they nevertheless provide a mechanism for negotiation.

While activities in the informal sector continue to expand, the Chinese government's ultimate policy aim is not to push for formalization, but to keep this section of the economy in check, with more digitally visible and traceable business conducts, and to make sure all these activities are legal and beneficial to the public. To this end, private sector partners were contracted to offer digital solutions that enhance the quality of government services and help businesses fend off uncertainties. For instance, 58.com is an online platform that offers flexible employment options such as delivery drivers and online shopping.

A lesson to be learnt, as the Chinese government takes initial policy steps to enhance regulation and rights protection in the platform sector, is that technology should be given some leverage in policy formulation. The "Opinions on Promoting the Healthy and Sustainable Development of the Platform Economy", issued in 2021, underscores the importance of supporting platform companies in achieving technological breakthroughs, while getting innovative in their business models and marketization, which in turn strengthens the platform economy's ecosystem itself.

HONG KONG, CHINA

OVERVIEW

Hong Kong, China (HKC) boasts a thriving and globally competitive digital landscape, with exceptional internet connectivity and a high e-payment penetration rate. Meanwhile, the city also houses an informal economy that is fueled in part by the emergence of platform-based gig work. This new employment arrangement, however, has created regulatory loopholes that propels strikes and calls for legislative action to be taken to enhance rights protection for the expanding group of informal workers. While the HKC government has taken initial steps in managing the platform economy using its strong track record in e-governance, digital tools could be further leveraged to address the specific challenges and opportunities presented by the informal sector. Taking into consideration proposals put forward by non-profit organizations, existing e-government initiatives and portals could be further enhanced to facilitate easier business registration and e-tax filing for informal businesses, in turn encouraging formalization.

Key Statistics

- GDP $382.05 bn USD (2023)
- Population: 7.5 m (2023)
- Informal economy (percent of total employed): 6.2 percent (2023)
- Internet penetration (percent of population): 93.1 percent (2023)
- E-Government Development Index: N.A. (of 19 APEC economies in 2022)

INTRODUCTION

HKC is one of the most densely populated regions in the world and is a global financial and business hub. The city has approximately 237,000 self-employed and unpaid family workers in 2023. The informal sector continues to expand in HKC as global and homegrown platform companies like Deliveroo and GoGoVan give rise to additional logistics and delivery work opportunities, giving at least 100,000 individuals a new income source.

HKC's ongoing digitalization presents significant opportunities. It is constantly ranked among the top 10 most digitally competitive economies worldwide. The city flaunts exceptional digital connectivity, with 96.1 percent of households having internet access while 5G network coverage exceeds 90 percent. 90.1 percent of HKC's internet users have at least one social media handle, with international platforms like WhatsApp, Facebook and Instagram leading in popularity. Many small-scale informal merchants in HKC are leveraging social media sites to conduct sales virtually. This allows them to start a business without having to rent a physical storefront or go through licensing, as well as to nimbly reach existing and potential customers.

HKC has a high e-payment penetration rate of over 90 percent, with business-to-consumer (B2C) enterprises accepting an average of 4.1 digital payment methods. Major payment solutions used by these B2C companies include Faster Payment Systems at a 70 percent adoption, followed by credit cards at 67 percent, and QR code-enabled payments (e.g., Alipay and WeChat pay) at 61 percent. The HKC government, long adhering to a "big market, small government" economic doctrine, has been taking a less proactive approach to intervening in the informal sector, which is increasingly characterized by burgeoning platform services.

The Informal Economy in Context

- Around 70 percent of informal workers (using data on self-employed and unpaid family workers as a proxy) are above age 40, as middle-aged and senior citizens turning increasingly to ad hoc work
- Most informal workers likely do not have a bachelor's degree
- Migrants, who account for 38.3 percent of HKC's population, participate significantly in the informal economy
- Sectors with large shares of temporary and informal employment include construction, retail, education and non-government public administration, as well as restaurant and land transport
- The informal sector, often cash-based, could contribute to as much as 10 percent of underreported earnings annually

GOVERNMENT

Taking Initial Steps in Managing Platform Economy

As the platform economy expands in HKC and new employment pattern emerges, more gig work is now fulfilled through digital platforms, making it ever more crucial to protect the personal and financial data of the workers among other rights. For its part, the Panel on Manpower of HKC's Legislative Council stated that given the unique work arrangement and business model, mandating the "handl(ing) of the rights and benefits

of digital platform workers by way of an employment relationship may not be conducive to the development of the industry," and that considering these gig workers as employees could adversely impact their autonomy, flexibility, and even income. Therefore, rather than seeking to formalize the sector, early policy efforts focus on creating engagement fora that involve both the platforms and the workers in exploration of protection measures, as well as providing more formalized services on labour conciliation and consultation, work injury claims, and labour law compliance.

Several labour groups in HKC have put forth e-formalization proposals and advocated for government actions. Examples include establishing an electronic self-registration system for informal workers, as well as digitizing salary and payment records as a proof for benefit claims. These digitalization efforts, if adopted, are expected to significantly improve work conditions and protections for non-standard workers.

Strong Track Records in Digital Economy and E-governance

Seeing the digital economy as a key focus area of growth, the HKC government has set forth a series of actions in recent years to strengthen its technological infrastructure and enhance connectivity. In 2022, the HKC government established a Digital Economy Development Committee to set priorities and drive the digitalization process in various industries. Some of the policy recommendations coming out of this committee made their way to the newly-launched Digital Policy Office, which leads in "promoting data-driven, people-centric and outcome-based digital policies." On the delivery of public services, the government launched in 2020 a iAM Smart platform in its endeavour to provide a one-stop digital identity portal for the residents to access health, tax, vehicle and utility services. HKC ranks very high in terms of ease of doing business, coming in 3rd place among APEC economies and globally. One recent government initiative to support the businesses is the SME Link, which is an online platform that consolidated information and services from four SME centres and various government departments, to provide SMEs with easy access to business information, funding schemes, and advisory services. In 2024, the government plans to launch over 100 digital initiatives, employing technologies including blockchain and AI, in areas ranging from license and certificate issuance, government fee payment, to public enquiry hotline services.

PRIVATE SECTOR

As digital platforms flourish in HKC, they help boost workers' access to opportunity, productivity, and market reach. HKC's most popular demand-for-delivery platforms, including food delivery apps Foodpanda and Deliveroo, and logistic services GoGoVan and Lalamove, feature relatively easy sign-up process and user-friendly interface that clear the way for those wanting to engage in gig jobs in a flexible and quick manner. By digitalizing the process of taking orders in a traditional industry, such as Lalamove's adoption of an AI-powered order broadcasting system to replace tedious phone communications, private sector innovation creates more choices and autonomy for informal workers to earn extra income. The logistics sector is another example where Internet of Things (IoT) devices were first used in making operations more efficient and data-driven. Besides, several globally leading tech companies have moved ahead with providing digital skills training to the city's labour force. Google Hong Kong, for example, runs digital upskilling programmes such as Grow with Google and Digital Garage, in which AI machine learning and mobile tools are leveraged to equip residents of HKC with essential skills to meet the growing business demand for digital-savvy workers.

In the meantime, the e-wallet operators that offer payment solutions to delivery platforms continue to expand functions beyond their original mandate, which helps many informal businesses enhance security and profitability. Prominent player PayMe, for instance, launched its PayMe for Business portal that is based

on a Person to Merchant model, allowing businesses to more easily collect funds from their customers. In terms of facilitating access to loans, emerging tools such as WeLend are leveraging AI to automate the application and approval processes, making it faster and more convenient for SMEs and other credit-constrained businesses to borrow. Global payment technology leader VISA is currently expanding the open-loop contactless payment system beyond public transit in HKC, which would allow clients to use the same credential across various business scenarios.

PUBLIC-PRIVATE PARTNERSHIPS

HKC's informal sector remains largely market-regulated so far, and the city's law considers platform workers as "self-employed". They are not covered by the city's Employment Ordinance, leaving many without standard employee protections and benefits. Nonetheless, the government has begun undertaking collaborative initiatives to facilitate greater inclusion of the informal sector. Recognizing the challenges faced by gig workers, the Labour Department formed in 2021 a Liaison Group with representatives from leading digital delivery platforms. Together they took tangible steps such as conducting surveys and focus groups to keep policy makers better informed for the drafting of pertinent regulations.

To further promote rights protection and incentivize formalization, the city's government has a vital role to play in mandating the powerful platform companies to standardize their business operations and worker treatment. Currently, platform companies can exert a significant degree of control over the workers' order assignment and working time through their algorithm, as well as making pay-cut decisions without being held accountable. To this end, civil society is pushing for more tripartite dialogues among the government, platform companies and worker unions. The labourers themselves have also joined hands in pushing the digital platforms towards a more formal recognition of their employment status. The Federation of Hong Kong and Kowloon Labour Unions, the Platform Cooperativism Consortium, and the Riders' Rights Concern Group are some of the strongest collective voices for platform workers.

Digitalizing Informal Business Transactions

Besides public-private collaborative efforts to better include the platform workers, the HKC government also worked with key private partners to create a conducive business environment by digitalizing transactions in the informal sector. In 2018, the Hong Kong Monetary Authority partnered with major banks to launch the Faster Payment System (FPS) to streamline cross-bank payment and optimize digital transactions for local SMEs. Neighbourhood stores and street vendors that once relied on cash embraced the FPS, allowing convenient receipt of contactless payments at reduced or waived transaction fees. Since the pandemic, public-private partnerships were also formed with e-payment companies like Alipay and PayMe rolling out population-wide e-consumption voucher programs totalling US $130 million (HK $36 billion). One outcome was that more market vendors, neighbourhood retail stores and fast-food joints capitalized on the e-voucher scheme and began to accept digital payments. As more "mom and pop" shops go cashless, adoption of digital finance tools helps bring transparency and traceability to countless informal operations, both in terms of tax collection and labour regulation adherence.

INDONESIA

OVERVIEW

Indonesia is rapidly digitalizing, with increasing internet penetration and widespread adoption of digital wallets. Although the informal economy is a low percentage of GDP, most of the workforce engages in it, making formalization a long-term challenge. Current government initiatives such as the Quick Response Code Indonesia Standard (QRIS) and the new Digital Electronic Identity Card are promising to support financial inclusion and make it easier to do business, but more could be done to improve e-government services, internet infrastructure and digital skills. Harnessing the innovation of the private sector, including platforms and FinTech companies, is key to supporting e-commerce and e-payment expansion. At the same time, the government could continue to develop platform worker labour rights.

Key Statistics

- GDP: $1.37 trn USD (2023)
- Population: 277.5 m (2023)
- Informal economy (percent of GDP): 17.9 percent (2020)
- Internet penetration (percent of population): 73.1 percent (2023)
- E-Government development Index: 77th globally

INTRODUCTION

Indonesia is Southeast Asia's most populous country and largest economy. Although the informal economy only comprises 17.9 percent of GDP, recent estimates suggest that informal employment accounts for 75 percent of total employment, making it one of the highest in Southeast Asia.

Access to digital tools has been rapidly increasing in Indonesia, with a significant portion of the population using smartphones and having access to the internet. This digital transformation has facilitated the growth of

e-commerce and digital payment systems, contributing to economic development and financial inclusion. Companies such as Gojek and Tokopedia have become household names, showcasing the economy's embrace of digital platforms for services and commerce. Digital wallets play a major role in the Indonesian e-commerce space, at 72 percent of all transactions. Despite significant progress, cash is still widely used in Indonesia and nearly half of the adult population still doesn't have a bank account. 93.40 million people also did not use the internet at the start of 2024, as connecting to the internet is expensive and slow compared to other APEC nations.

The Informal Economy in Context

- 48 percent of informal workers are household enterprise owners, 26 percent are casual workers or wage employees without contracts and 15 percent are unpaid family workers.
- Over 93 percent of total firms are informal, the majority MSMEs. This complicates tax compliance efforts and labour standards, as informal workers in Indonesia often lack the same protections and benefits as formal employees.

GOVERNMENT

The Indonesian government has placed significant focus on digitalization as a key strategy to formalize the economy and increase the inclusion of the informal sector. Out of the 64 million MSMEs found in Indonesia the government aims to get 30 million MSMEs to go digital by 2024.

E-Government

Several prominent initiatives include the National Digitalization Movement (GNB), and the 1000 Digital Startup National Movement which aim to promote the use of digital tools for public service delivery and financial inclusion.

Another notable government service is the Online Single Submission (OSS) system, which simplifies business registration and licencing processes, making it easier for informal businesses to transition to the formal sector. This initiative aims to reduce bureaucratic barriers and streamline regulatory compliance, encouraging informal workers and small businesses to formalize their operations. Additionally, the government offers incentives such as tax breaks, access to credit, and training programs to make formalization more attractive and viable for businesses operating in the informal economy.

However, Indonesia's ease of doing business ranking is 18th in APEC with a low ranking in terms of starting a business, which suggests that e-government services need to be further improved to support formalization.

Digital Identification System

In 2011 the E-KTP (Electronic Identity Card) system was launched by the Ministry of Home Affairs which enabled citizens to simply access government services, reducing the need for other physical documents. In 2023, the government implemented the rollout of a Digital KTP (Digital Electronic Identity Card) which aims to replace the physical E-KTP card with a digital card via a mobile app. This digital ID could make e-government services more efficient, supporting formalization.

E-payments

Mobile banking apps and digital payment platforms have expanded financial services access, especially in rural and underserved areas. This can be seen by the success of central Bank Indonesia's Quick Response Code Indonesia Standard (QRIS), a QR code standard used to facilitate digital payments and a way of integrating the different digital payment and wallet applications available in Indonesia. By October 2023, 29.6 million merchants (92 percent being MSMEs) and 43.4 million users used the QRIS digital payment system. However, many MSMEs still struggle to adopt technologies such as QRIS

due to factors such as lack of education and internet connectivity, whilst 45 percent of Indonesians still prefer to use cash for offline payments transactions.

PRIVATE SECTOR

Digital Platforms

Major companies such as Goto (formed from the merger of Gojek and Tokopedia in 2021) have been driving digitalization and formalization. Gojek's multi-service platform, which provides access to a wide range of services, including transport, payments, food delivery and logistics, has enabled millions of informal workers to access customers, manage orders, and receive payments digitally, transforming the gig economy landscape. The other major multi-service platform operating in Indonesia is Grab, which also offer a similar range of services to Gojek. Meanwhile, Tokopedia's e-commerce platform has empowered small businesses, including those in the informal sector, to reach a broader market and conduct transactions online, contributing to their formalization. Other major e-commerce companies operating in Indonesia include Shopee, Lazada, Bukalapak, TikTok Shop, and Blibli.

The private sector has also played an active role in promoting the growth and digitalization of MSMEs: examples include Grab's Kota Masa Depan (Future Cities) programme which provides training and support for MSMEs on business management and digitalization. Other examples include GoTo's Tokopedia Academy which provides free educational resources on topics such as digitalization and business.

Indonesia has approximately 167 million active social media users, making it the largest in Southeast Asia. However, in September 2023, the government implemented a ban on social media e-commerce transactions, aiming to protect small businesses from e-commerce competition. This will reduce e-commerce avenues for MSMEs, and whether this will protect existing brick-and-mortar businesses remains to be seen.

Financial Inclusion

With the number of unbanked and underbanked individuals at around 80 percent of the population and geography making travel to physical banks challenging, FinTech companies have stepped in. Fintech lenders have significantly lower operating costs than commercial banks due to their use of technology and lack of physical branches. This cost advantage allows them to strategically serve the unbanked sector, benefiting lower-income individuals and small micro-enterprises, like food stall operators and vegetable traders at traditional markets. As of 2022, there were over one hundred FinTech companies registered. One of these is Kredivo, which offers digital credit services to individuals and small businesses, providing access to credit that was previously unavailable through traditional banking channels.

Microfinancing has traditionally been a major source of financing for many MSMEs. As Indonesia's digital landscape expands, microfinancing has also gone digital allowing more underserved communities access to microfinancing and other financial services. Examples include Amartha, a microfinancing technology platform aimed at servicing rural micro and small-enterprises run by women who have been excluded from traditional microfinancing sources.

PUBLIC-PRIVATE PARTNERSHIPS

Platform economy protections

The government has worked with the private sector to support platform economy workers. The government agency for social security collaborated with the financial sector to enable drivers using the Gojek delivery and ride-hailing platform to register and make contribution payments online and expand access to work injury and death benefits. This partnership encourages Gojek drivers to register with the agency online, with contributions deducted directly from their driver accounts. As more Indonesians join the platform economy, such initiatives are vital to ensure that these workers are supported, and their rights are protected.

JAPAN

OVERVIEW

Japan is a technologically advanced economy with one of the smallest informal economies within APEC. Despite the vast potential of the digital economy to advance Japan's productivity and reduce its informal economy, Japan is lagging behind on digitalization. Its internet penetration is low comparted to other advanced economies, and there is a substantial digital divide, compounded by Japan's ageing population. This is contributing to the slow adoption of e-commerce by SMEs. Japan's e-government services also continue to face challenges. However, e-payments are increasing in popularity, fuelled by private e-payment services such as Paypay. To further support the transition to the formal economy the government could accelerate support of digital skills programs for SMEs, improve e-government services and collect more data on shape of the remaining informal economy.

Key Statistics

- GDP $4.21 trn USD (2023)
- Population: 124.5 m (2023)
- Informal economy (percent of GDP): 10.4 percent (2020)
- Internet penetration (percent of population): 84.9 percent (2024)
- E-Government Development Index: 14th globally (2022)

INTRODUCTION

Japan is the world's third-largest economy, with a population of around 125.1 million. Although the Japanese government does not measure the informal economy, according to the World Bank, 10.4 percent of Japan's total official GDP in 2020 was generated from the informal sector, making it the third lowest in APEC after the United States and China.

Japan may be commonly known as a country with high-end technology and robots, but there is a wide gap in many areas of the country's digital transformation and digital economy. At the start of 2024, internet penetration stood at 84.9 percent, while 18.54 million people in Japan did not use the internet. Alongside its technological innovations, there exists a parallel tradition of utilizing older technologies. This duality is evident in various aspects of Japanese life, such as the continued prevalence of cash transactions, the widespread use of fax machines, and the popularity of flip phones, which have wide appeal for reasons ranging from durability, long battery life, simplicity (notably for older adults), and helping decrease or overcome addiction to smartphones. Japan's comparatively low level of innovation and consumer demand means that the country is not a top-tier FinTech centre, but there is still significant activity, with digital payments on the rise.

GOVERNMENT

The government of Japan does not have specific policies that focus on formalization. Japan's government programming directed at informal economies appears to be mainly focused on initiatives abroad through international organizations. For example, Japan works with the International Labour Organization to support the rights and skills development of informal workers in South and Southeast Asia. However, the government has consistently sought to invest in and support digital transformation and e-government to boost the country's productivity, innovation, and GDP.

E-Government

Former Prime Minister Suga Yoshihide launched the Digital Agency in 2021 to upgrade the public sector's online services and infrastructure, and current Prime Minister Kishida Fumio has vowed to continue the work on the public sector's digital transformation as part of his "new form of capitalism" policy agenda.

However, e-government services continue to face challenges. A notable example has been the government's push to establish the My Number system (a digital national ID system) to streamline various government services by linking such things as vaccination certificates, health insurance cards, pension records, residence records, or even applying for childcare or a passport. Although the system has been around since 2016, and significant government promotion has resulted in about 71 percent of the population obtaining a card, it has been plagued by technical glitches and errors, and continued concerns over privacy violations and data breaches. Regardless of the challenges with this program, the government continues to push for increased digitalization of public services. Prime Minister Kishida's "Transitioning to a Digital Society" action plan is a key component of the "new form of capitalism" suite of policies. Digitalization of more public services can help facilitate the transition workers from the informal to formal economy.

PRIVATE SECTOR

E-commerce

Japan is the fourth largest e-commerce market in the world (behind China, the U.S., and the U.K.) and one of the world's fastest-growing, with annual sales expected to reach US $169.4 billion in 2024. The Ministry of Economy, Trade, and Industry (METI) divides ecommerce expenses into the three categories: merchandise, services, and digital. According to METI's survey data, in 2022 merchandise accounted for US $89.3 billion, services US $39.2 billion, and digital US

$16.6 billion. Japan's leading e-commerce company, Rakuten, has a customer base in Japan of over 100 million. Other top e-commerce sites in Japan are Amazon Japan and Yahoo Japan.

However, when it comes to SMEs, only about one-third were selling over e-commerce and more than 39 percent had no plans to implement online sales for their businesses in 2020. Reasons for Japanese SMEs being hesitant or slow to use e-commerce for domestic or cross-border e-commerce activities include a lack of supporting resources, hesitancy of older adults to buy or sell online, language barriers (in the case of cross-border), and lack of understanding of international marketing trends. Nonetheless, online marketplaces, with support from the government, are making it easier for SMEs to get engaged and reach new audiences. One such initiative is the government's Digital Marketplace, launched in May 2024, which aims to make it easier for the national and local governments to procure IT services from startups and SMEs.

PUBLIC-PRIVATE PARTNERSHIPS

E-payments

E-payments in Japan are gradually gaining traction due to a mix of government support and private sector initiatives. In 2018, Japan's Ministry of Economy, Trade and Industry (METI) introduced the "Cashless Vision" to transition the country towards a cashless society, with a goal of 40 percent of all transactions to be cashless by 2025, coinciding with the Osaka Expo. As part of this plan, the Japanese government implemented a campaign from October 2019 to June 2020 to encourage cashless payments amidst a consumption tax increase. They offered 5 percent rebates for cashless transactions in smaller businesses and provided financial aid to these businesses for implementation costs. Payment operators were also asked to reduce commission fees. A million small stores adopted cashless methods through this scheme.

However, most of the increase in cashless payments can be attributed to the private sector's rapid rollout of

e-payment services. PayPay, Line Pay and Rakuten Pay, fuelled by the COVID-19 pandemic, helped increase the percentage of cashless payments in Japan from 13.2 percent in 2010 to 32.5 percent in 2021. PayPay, owned by Softbank, which holds the biggest share of the market, is only five years old but already has over 60 million users. PayPay launched the "Support Your Local Town Project" in July 2020 to boost consumer spending during the pandemic, offering bonuses for shopping at participating stores across 187 local governments in 41 prefectures. This is supporting many SMEs to adopt e-payments, paving the way for potential e-commerce adoption as well as improved transparency of transactions.

REPUBLIC OF KOREA

OVERVIEW

The Republic of Korea is one of the most technologically advanced economies and has best-in-class e-government services including tax, digital identification and social protection services. These efforts are complemented by innovative private sector initiatives around e-payments and e-commerce. However, its informal sector remains significant compared with other APEC economies. To address this, more data could be collected on this sector and the most vulnerable workers, particularly those in the growing platform economy.

Key Statistics

- GDP $1.71 trn USD (2023)
- Population: 51.7 m (2023)
- Informal economy (percent of GDP): 26.0 percent (2020)
- Internet penetration (percent of population): 97.6 percent (2023)
- E-Government Development Index: 3rd globally (2022)

INTRODUCTION

South Korea's economic landscape is a dynamic mix of technological advancement and traditional industries. However, its informal sector remains large compared with other developed APEC economies. The World Bank estimates that South Korea's informal economy accounted for 26 percent of GDP in 2020.

Digital adoption and innovation are at the forefront of South Korea's economy, significantly enhancing productivity and global competitiveness. The country has embraced digital transformation as a strategic imperative, evident from its leading role in industries such as semiconductors and consumer electronics. The digital economy's success is supported by high rates of smartphone usage and internet access, with 97.6 percent internet penetration, laying a foundation for continuous growth in this sector. Additionally, government initiatives aim to promote further digitalization and transition to

a green economy. Digital wallets such as KakaoPay are popular and make up 71 percent of online shopping payments (2022). E-commerce growth is also explosive with purchases made with mobile phones making up 74.4 percent of the total e-commerce market value.

Despite South Korea's advanced digital adoption and innovation, targeted digital literacy and skills training for seniors could benefit elderly citizens who are overrepresented in the informal economy.

The Informal Economy in Context

- The International Labour Organization estimates that about one-third of workers in South Korea are classified as non-regular.
- The government estimates the number of workers providing services through online platforms is about 8 percent of all employed people in the country (2021).
- South Korea's poverty rate among those aged 66 and older is 43 percent, and rises to 55 percent for those 76 and older.
- 69 percent of seniors over the age of 65 work in some form of temporary or informal employment.

GOVERNMENT

South Korea has positioned itself as a global leader in e-government by leveraging technological innovations to enhance public sector efficiency and inclusivity.

E-Government

Over the past two decades, the Republic of Korea has developed a world-class e-government system. They ranked 3rd in the 2022 UN E-Government Development Index, being the only country to stay in the top 3 for seven consecutive reports. This has reduced red tape and the time needed to engage with government offices. One of its most successful aspects is its "whole-of-government approach", coordinating information and data across institutions. The Digital Platform Government strategy announced in 2022 aims to further break down barriers among ministries to create an integrated one-stop e-government system, emphasizing public-private cooperation by providing access to government-owned data and supporting private companies through Open API. This should further improve the ease of doing business.

HomeTax system

In addressing the challenges of tax compliance, Korea's HomeTax system has been lauded by the OECD as one of the best models of integrated tax administration. This system enables users to handle all tax-related matters without physical contact with the National Tax Service (NTS). Through multiple updates, the portal has adapted to new digital tax services. Simplicity is its main appeal to users. In 2022, it was the second most widely used government digital service, with 83.2 percent usage. By leveraging data-driven approaches and integrating tax administration services, the HomeTax platform exemplifies how digitalization can streamline processes, improve transparency, and enhance user experience for enterprises of all sizes, including the self-employed.

Digital Inclusion

In a regional dialogue hosted by the United Nations Development Programme, South Korea showcased its digital inclusion policies aimed at supporting marginalised groups such as micro, small, and medium enterprises (MSMEs), women, and youth entrepreneurs through innovative digital solutions. By providing these groups with tools such as mobile banking, digital payment platforms, and easier access to credit, the initiative can help MSMEs formalize their businesses and integrate them more fully into the formal economy.

Digital Identity

South Korea has been at the forefront of self-sovereign identity initiatives since 2020, launching pilot projects

that empower individuals to control their digital information and personal data. The government's recent implementation of blockchain technology, renowned for its high level of security, marks a significant shift from centralized data control to a decentralized system. This advancement not only strengthens cybersecurity and addresses privacy concerns but can also play a crucial role in formalizing the informal economy. By enabling digital identification, South Korea is helping informal MSMEs to access state protection and public services, thus integrating them more fully into the formal economy.

Streamlining social protection

Digitalization promises to alleviate the risks and vulnerabilities faced by informal communities by expanding access to social protection and addressing challenges stemming from limited awareness of entitlements and barriers to access. The Bokjiro (welfare) online portal is a comprehensive platform, providing information and access to all social protection benefits via a customised notification system. With connections to numerous central and local government services, citizens can easily apply online or through mobile phones. Interoperability is achieved through data linkages, exemplified by the integration between the Ministry of Employment and Labour's Baro-One jobseeker database and the Ministry of Health and Welfare 's Social Security Information System. This integration facilitates the confirmation of eligibility for specific benefits and the identification of vulnerable groups, optimising resource allocation and support services within the labour market. Moreover, by making social protections more accessible to informal workers, digital platforms like Bokjiro can encourage their transition to formal employment. This not only enhances their security and benefits but also contributes to the overall formalisation of the labour market.

PRIVATE SECTOR

Within the Republic of Korea's significant technology industry, the private sector has provided many innovative opportunities to support increased financial inclusion and e-commerce penetration.

Financial Inclusion

Major players like KakaoPay, a leading mobile payment platform, offer digital financial services like microloans and online payments previously inaccessible to many informal actors. This fosters financial inclusion and generates valuable transaction data that can pave the way for formalization.

E-commerce

E-commerce giants like Coupang provide a digital marketplace for informal businesses, expanding their reach beyond local communities and increasing productivity. Collaboration platforms like Yogiyo, a popular food delivery app, connect informal food vendors with customers, boosting their visibility and income potential. These digital tools empower informal actors and can incentivize formalization for benefits like easier access to credit and legal protections.

Digital skills training

Language barriers and a lack of digital literacy can also hinder the adoption of digital tools for MSMEs. To bridge this gap, private initiatives like the NAVER Business School, offer digital skills training specifically for small businesses and informal vendors. NAVER reported that as of 2022, these training sessions had been played 2.17 million times.

PUBLIC-PRIVATE PARTNERSHIPS

As mentioned, the Digital Platform Government strategy announced in 2022 emphasizes public-private cooperation in its e-government approach. It functions as a platform for public-private cooperation, opening government-owned data and supporting private companies to deliver services through Open API. Additionally, it serves as a testbed for collaborative experiments and innovations between the public and private sectors.

MALAYSIA

OVERVIEW

Malaysia's government has introduced regulations, policies and programs to address informal employment, and the rate of informal employment has decreased consistently from 2012-2022. At the same time, access to digital tools is high. Malaysia has seen significant digitalization across various sectors, including e-commerce platforms and digital payment systems/ digital wallets such as Touch 'n Go eWallet, GrabPay, Boost, Alipay and BigPay. Meanwhile, traditional banks such as Maybank and CIMB have heavily invested in digital banking services such as online account management, mobile banking apps, and digital loan applications. One of the areas that Malaysia can further target is including more digital skills training for informal workers to enable them to benefit from the various digital tools available in Malaysia.

Key Statistics

- GDP: $399.65 bn USD (2023)
- Population: 34.3 m (2023)
- Informal economy (percent of GDP): 30.5 percent (2020)
- Internet penetration: 96.8 percent (2023)
- E-Government Development Index: 53rd globally (2022)

INTRODUCTION

Malaysia boasts a diverse and robust economy, primarily driven by manufacturing, services, and agriculture. Around 23.2 percent of its labour force is estimated to be working in the informal economy. The informal sector plays a crucial role in providing employment and income for many Malaysians but poses challenges for tax compliance and labour standards enforcement.

Access to digital tools in Malaysia is high, with widespread smartphone use and internet access. Approximately 97.4 percent of the population are internet users, facilitating the growth of e-commerce

and digital services. Meanwhile, a total of 44.55 million cellular mobile connections were active in Malaysia in early 2024, equivalent to 129.2 percent of the total population. As of 2024, the size of the Malaysian E-commerce market is estimated to be $10.72 billion and is expected to grow to USD 20.93 billion by 2029.

The Informal Economy in Context

- In 2021, 3.5 million Malaysians were employed in the informal sector, constituting 23.2 percent of all forms of employment in the country.
- 67.5 percent work in the services sector, followed by the manufacturing sector (19.1 percent) and the construction sector (13.4 percent).
- Of those working in the services sector, 24 percent work in wholesale and retail trade activities, repair of motor vehicles and motorcycles, followed by food and beverage services activities at 23.1 percent.
- Women, youth, less educated persons, and workers from lower income householders, rural areas and less developed states are more likely to be informally employed.

GOVERNMENT

Enhancing Digitally Delivered Public Services

The Malaysian government has implemented the National e-Commerce Strategic Roadmap 2021-2025 to enhance digital adoption across various economic sectors as a means of formalizing the economy and increasing the inclusion of the informal sector. The roadmap aims to drive digital transformation by improving internet infrastructure, encouraging the use of digital payments, and supporting SMEs in adopting e-commerce. Examples of digital tools facilitating public service delivery include the MyEG platform, which allows citizens to access a range of government services online, such as applying or renewing business licenses, paying taxes, and managing utility bills. This reduces the need for in-person interactions and makes government services more accessible.

The Malaysian government has also implemented the MyCoID system, an online system that simplifies business registration processes by integrating multiple government agencies into a single platform, making it simpler and more efficient for small businesses to enter the formal economy.

Digital Financial Inclusion

To help track and document financial activities, Malaysia has promoted the use of digital payment systems and mobile banking. Initiatives like the e-Tunai Rakyat initiative provide citizens with monetary and other digital incentives, as a means of encouraging Malaysians to adopt the use of digital wallets. Additionally, the government has launched the Financial Sector Blueprint 2022-2026, which includes policies to promote and strengthen the digitalization process of the financial sector. One key aspect is providing affordable internet connection to the underserved and unserved populations, which will enable the population to access a wider range of financial products and services that were previously out of reach, such as savings accounts, insurance, and credit services that are essential for financial inclusion and formalization. The government also employs digital enforcement tools, such as the Integrated Enforcement Management System (IEMS), to monitor and ensure compliance with regulatory requirements.

Digital Skills and Opportunities

The government has made investments in job facilitation, onboarding and training incentives to increase access to digital labour platforms through programs like eRezeki. eRezeki was launched in 2015 as a digital labour platform aggregator, to help lower-income workers earn additional income by working online. The

program was intended as a strategy to provide skills and opportunities to workers from less developed states by expanding digitalization opportunities. The government introduced the Global Online Workforce Program (GLOW), a digital skills training program designed to enable workers to perform digital work or become digital freelancers. It is targeted at Malaysians currently outside of formal employment and can help get people the skills and opportunities they need to join the formal digital economy.

PRIVATE SECTOR

The private sector has made significant strides in utilizing digital tools to enhance economic productivity and address the informal economy. Major companies like Grab and Shopee have led the charge by providing platforms that enable small businesses and informal sector participants to reach a wider market. Grab's ride-hailing and food delivery services have integrated digital payments, allowing drivers and small food vendors to record their earnings and expenses digitally, which is crucial for accurate tax reporting. Similarly, Shopee's e-commerce platform provides an accessible entry point for small businesses to engage in online sales, benefiting from digital marketing tools and logistics support.

Digital Banking

Digital banks are also expected to play a significant role in Malaysia's digital economy. Currently, the sole operating digital bank in Malaysia is GXBank owned by Grab Malaysia. However, in 2024 the government granted licenses to two other digital banks, Boost Bank – a joint venture between FinTech company Boost and RHB Banking Group, and AEON Bank which is a subsidiary of AEON Financial Service. Two other digital banks have also received operating licenses but have not yet been publicly launched; these two are a consortium led by Sea Limited and YTL Digital Capital Sdn Bhd, and a consortium led by KAF Investment Bank Sdn Bhd. The rise of digital banks is expected to expand financial inclusion for those without access to traditional banking services.

The Platform Economy

The platform economy in Malaysia can be broadly categorized into two categories depending on the type of service they provide: transportation orientated (ride-hailing) platforms and e-commerce platforms. Major ride hailing platforms include Grab, EzCab and MyCar. Grab is currently the largest ride-hailing platform in the country with about 2.9 million registered drivers on the app (2019). As for e-commerce platforms, the three largest in 2024 are Shoppe with 37 million monthly visits, Lazada with 7.6 million visits, and Mudah with 5.7 million visits. The size of the Malaysian e-commerce market was estimated to be $10.72 billion in 2024 and is expected to grow to USD 20.93 billion by 2029. Malaysians differ from other countries in the way they use social media for online purchases with a preference for making their purchases on e-commerce platforms such as Shoppe rather than Facebook marketplace, which they use to look for reviews and recommendations.

PUBLIC-PRIVATE PARTNERSHIP

Public-private sector initiatives such as the Malaysia's Digital Free Trade Zone (DFTZ) have helped support digitalization efforts among SMEs, with initiatives like dedicated office space and facilities for e-commerce operations that are available for SMEs to use, which helps them establish a formal presence.

The DFTZ is a joint venture between the Malaysia Digital Economy Corporation (MDEC), a government agency, and China's Alibaba Group.

Training programs and workshops are also provided via public-private partnerships to enhance business skills and digital literacy among informal sector participants. Initiatives like the Malaysian Research Accelerator for Technology & Innovation (MRANTI) foster collaboration between the government, private sector, and the informal economy. MRANTI provides resources and support for startups and SMEs, helping them scale up and integrate into the formal economy.

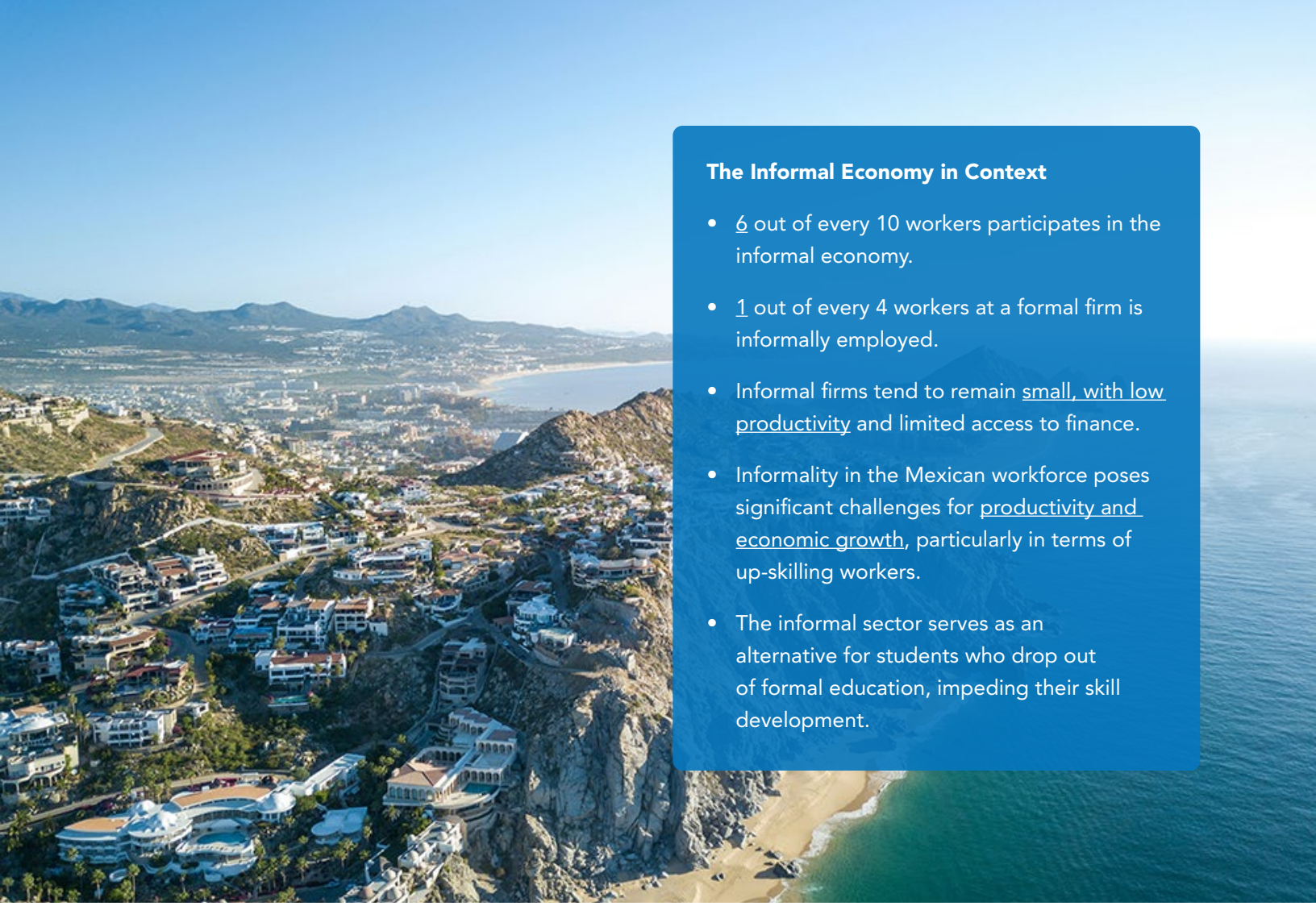
MEXICO

OVERVIEW

Mexico is progressing in digitalization, but its internet penetration in rural areas remains weak. Despite this, 98 percent of internet users in Mexico connect through their smartphones. To address this challenge, the government has implemented several programs designed to reduce the informal economy through digital means. Some of its most successful have been mandatory e-invoicing, improving the transparency of business processes such as permitting, and implementing a national digital identity. To accelerate progress, the government could collaborate with the private sector to support improving internet and mobile coverage, while providing additional support for digitalization; cybersecurity and adoption of e-payments are areas of opportunity for Mexico to support MSMEs to formalize. Unemployment protection, reforming retirement pensions and equal access to programs in the south of Mexico where the highest rates of labour informality exist will also be important.

Key Statistics

- GDP $1.79 trn USD (2023)
- Population: 128.46 m (2023)
- Informal economy (percent of GDP): 31.5 percent (2020)
- Internet penetration (percent of population): 78.6 percent (2023)
- E-Government Development Index: 62nd globally (2022)



The Informal Economy in Context

- 6 out of every 10 workers participates in the informal economy.
- 1 out of every 4 workers at a formal firm is informally employed.
- Informal firms tend to remain small, with low productivity and limited access to finance.
- Informality in the Mexican workforce poses significant challenges for productivity and economic growth, particularly in terms of up-skilling workers.
- The informal sector serves as an alternative for students who drop out of formal education, impeding their skill development.

INTRODUCTION

In 2020, 31.5 percent of Mexico's GDP was made up of the informal economy, comprising around 55 percent of workers.

Despite big investments in infrastructure and overall growth of mobile connectivity throughout the continent, internet penetration stood at 78.6 percent of the population in 2023, lagging behind other Latin American economies., In 2017, internet adoption in Mexico's rural areas was 39.2 percent, significantly lower than the 71.2 percent in urban areas, highlighting a digital connectivity gap. Factors such as low population density and long distances discourage investment in telecommunications infrastructure in rural regions. However, e-commerce is comparatively strong. In 2023, Mexico's e-commerce market reached a volume of $74 billion, making it the second-largest in Latin America, after Brazil. E-commerce is deeply embedded in daily life in Mexico, with a 70 percent penetration rate among adults. Despite this prevalence, cash remains the dominant form of payment. Only 31.7 percent of the adult population made or received digital payments in 2018 compared to an average of 45.1 percent across Latin America and the Caribbean. E-commerce platforms cater to cash preference by providing Cash on Delivery (COD) where customers print a voucher, and pay at local stores like Oxxo upon order receipt.

GOVERNMENT

Simplifying the tax regime

The government has focused many of its formalisation efforts on simplifying the tax regime using digital tools. Significant process has been made in digitalisation of tax filing. In the past, taxpayers used only printed invoices, which were prepared and printed without any tax administration controls. This led to several issues: many false transactions using fake invoices to claim tax deductions, substantial hidden income from transactions without invoices, and the need for tax authorities to manually check for compliance. E-invoicing was made mandatory for all businesses in 2014. Making e-invoices mandatory was preferred by larger companies such as Walmart for ease of filing and standardization and so they pushed their providers to also use e-invoicing, spurring uptake. Mandatory e-invoicing has brought an estimated 4.2 million micro-enterprises into the formal economy and has contributed to the increase in Mexico's tax-to-GDP ratio from 12.6 percent to 16.2 percent between 2012 and 2017.

Another innovative program is the Fiscal Incorporation Regime (RIF). Launched in January 2014, this was designed to promote the transition towards formality through a 10-year discount on tax liability. SMEs that enrol in the Federal Taxpayer Registry, maintain records of their revenues and expenses, and submit bimonthly statements are exempt from paying income tax and VAT during their first year of registration. The discount then gradually decreases over the decade, reaching 10 percent in year ten. The initiative used digital tools such as free web applications to keep accountability records, issue fiscal invoices and submit tax declarations for ease of use. Thereby the initiative combined financial incentives, administrative simplification and digital tools. It has been successful in so far as between 2014 and 2017 more small business owners registered in RIF than in previous regimes aimed at promoting formalisation; these were considered too administratively burdensome and came with no fiscal incentives. The implementation of RIF also coincided with a rise in the number of employers fulfilling their social security obligations, both for themselves and their staff.

Prospera Digital

Prospera is the largest social program in Mexico, providing women with cash stipends under the condition that their children attend school regularly and visit the clinic. However, many of these beneficiaries lack bank accounts, making the business of transferring cash to them risky and expensive. In collaboration with the government and donor funding, UNICEF implemented Prospera Digital which aims to foster a system of electronic transactions, facilitating access to financial services through digital banking solutions. By promoting financial education and inclusion of women, this can support long-term formalization efforts.

Improving transparency of business processes

Guadalajara's implementation of the Visor Urbano website, which centralizes land-use permits and business licences, has drastically reduced corruption by 74 percent. This innovation, initiated through the 2016 Bloomberg Philanthropies Mayors Challenge, has made rules clearer and eliminated agents' discretion in expediting approvals, ultimately curbing bribery. The system's transparency and automation have diminished bribe requests by third parties by 85 percent, benefiting entrepreneurs and builders who now have equal access to information. With over 4,600 small-business licences issued and 34,000 development queries handled, Guadalajara's success has spurred replication efforts in seven other Mexican cities. This example suggests that digitalization can reduce corruption and red tape, fostering conditions conducive to formalization.

Digital Identification

The government has also implemented a number of initiatives related to digital identity. InteroperaMX, a secure data-sharing platform, facilitates the exchange of reliable data among public institutions, aiming for a streamlined public administration where citizens only need to provide information once to the government. As birth certificates are used as proof of identity for 46 percent of all public procedures and services at the federal level, the transition from analogue to digital certificates saves citizens approximately $115.5 million annually, especially benefiting low-income individuals. With 2.75 million birth certificates already accessed, InteroperaMX has enabled eight certified sources and enhanced interoperability across many services.

In 2020, the government also approved a new centralised Digital ID, the Cédula Única de Identidad Digital. This is free and contains citizens' names, surnames, date of birth, place of birth, nationality, and biometric data, together with a unique Population Registration Key (CURP) number. This centralized system has been considered as a positive development for streamlining government services and increasing inclusivity by organisations such as the World Bank. Therefore, it can potentially increase the ease of doing business as well as supporting social protections, which in turn could aid formalization efforts. However, some organizations are against this system due to privacy and cybersecurity concerns.

PRIVATE SECTOR

E-wallet Mercado Pago

Although cash payments are still dominant, e-wallet usage is increasing. Mercado Pago is the largest online payment platform in Mexico. It is the payment system used by Mercado Libre, the leading e-commerce platform in Latin America, which was the most visited online shopping site in Mexico in 2020. It enables users to process payments via various channels, including payment links on social media and WhatsApp, QR codes for in-person transactions, and the Mercado Pago checkout system for online stores. One of their major initiatives is to help small "mom and pop" shops digitalize their operations. In Mexico they serve over a million such businesses, often providing them with their first line of credit to facilitate working capital. They also offer specialized websites for entrepreneurs featuring sales and financial education content and launched two regional initiatives targeting female entrepreneurs and young people. By supporting the financial inclusion and education of informal MSMEs through digital payments, formalization can be encouraged in the future.

PUBLIC-PRIVATE PARTNERSHIPS

E-wallet CoDi

In an effort to boost digital payments, the Bank of Mexico introduced CoDi (Cobro Digital) in 2019, enabling users to make financial transactions quickly, securely, and free of charge through QR codes on mobile devices. However, just 2 percent of Mexicans use CoDi. Part of why CoDi has not succeeded is because it requires a bank account, and as of 2021, only 49 percent of Mexican adults had one. To try and remedy this, the central bank launched Dimo in 2023, which enables users to send money through phone numbers. It remains to be seen whether this initiative will have greater adoption. However, a deeper structural problem lies in the fact that CoDi did not consider the views of the private sector in its adoption. Many banks did not join due to the absence of commission incentives, unlike Brazil's PIX, a similar initiative that has been much more successful. This suggests that the government should involve the private sector more to increase e-payments adoption.

NEW ZEALAND

OVERVIEW

New Zealand has made strong progress in digitalization, offering best-in-class e-government services that reflect its first place ranking for ease of doing business, and robust cybersecurity programs. The government also has many initiatives to ensure that MSMEs gain access to the digital skills they need. However, a digital divide remains, particularly amongst Māori populations, and the informal economy remains an under-researched area. The government could improve data collection of the informal economy to better design e-formalization policies that integrate with its existing e-government services.

INTRODUCTION

The World Bank estimates that New Zealand's informal economy accounted for 11.9 percent of its GDP in 2020, a figure that has been consistent since estimates began in the 1990s.

Key Statistics

- GDP $253.47 bn USD (2023)
- Population: 5.22 m (2023)
- Informal economy (percent of GDP): 11.9 percent (2020)
- Internet penetration (percent of population): 95.9 percent (2023)
- E-Government Development Index: 4th globally (2022)

Internet penetration is high with 96 percent of the population accessing the internet at the start of 2023. However, the Department for Internal Affairs (DIA)

reports that a significant portion of New Zealanders — possibly as many as 1 in 5 — encounter obstacles to digital inclusion. This issue is particularly pronounced among the Māori community, with Māori households being 16 percent less likely to have internet access compared to non-Māori households. Affordability, including the cost of internet access and devices, emerges as the primary barrier to digital inclusion for Māori. Additionally, digital skills training plays a crucial role in addressing this disparity and fostering greater digital inclusion. E-commerce is quite well established, with about 10 percent of all their retail purchases — worth US $7 billion — coming from e-commerce merchants. In terms of e-payments, although cash usage is decreasing, over 40 percent of the population still use cash on a daily basis.

The Informal Economy in Context

- The government does not collect data on the informal economy, but a recent study estimates that the self-employed underreported, on average, around 20 percent of their income.

GOVERNMENT

New Zealand is punching above its weight in e-government, ranking 4th globally in the UN E-Government Development Index. Although not focusing specifically on formalization, the government also has numerous initiatives to ensure that marginalized communities and small businesses gain access to the digital resources and skills they need.

E-Government

New Zealand was one of the first to use electronic documents, e-forms, and e-billing, providing access to digital records. The government website allows citizens to perform tasks like applying for citizenship or renewing a driver's licence from home or work, eliminating the need to visit a post office. The government is continuously innovating to improve its services. For example, businesses can use RealMe, a secure login service that uses the same username and password, for a range of services such as applying for licenses, permits and registrations or filing a Companies Office annual return. This simplicity is reflected in its ease of doing business score, ranking 1st globally in 2019, likely supporting formalization of businesses.

Digital Identification

Its e-government services are supported by a robust digital identity framework. The government recently adopted the Digital Identity Services Trust Framework Act 2023 to facilitate safe data-sharing practices in modernizing government services and to establish a structure to provide secure digital identity services in New Zealand.

Digital infrastructure inclusion

The government completed its contribution to the first phase of the Rural Broadband Initiative (RBI) in June 2016, marking the end of a five-year project. This initiative aimed to provide faster broadband to priority users and communities outside of Ultra-Fast Broadband (UFB) areas. Around 300,000 rural households and businesses in New Zealand now benefit from improved broadband, with rural hospitals and integrated family centres able to access peak speeds of 100Mbps.

For many New Zealanders, particularly those with low incomes, mobile devices like phones or tablets are their sole means of accessing online information and services. However, the cost of mobile data can pose a significant barrier, hindering access to government websites and vital services. As the government increasingly relies on digital communication, this disadvantage becomes more pronounced. Therefore, the government launched the Zero Data initiative, which offers free access to essential

online public information and services for mobile phone users. Through this initiative, participating government agencies cover all mobile data charges, ensuring equitable access to vital resources for those with limited means of online access.

SME digital skills support

Another initiative was the Digital Boost initiative in New Zealand, spearheaded by the Ministry of Business, Innovation and Employment (MBIE). Launched in late 2020 with a $20 million funding package, this program aims to propel the country's small businesses to the forefront of global digital engagement. It focuses on enhancing digital capabilities among small businesses and tourism operators, especially considering the challenges posed by COVID-19. Key initiatives include Digital Boost Educate, offering free digital skills training, and Digital Boost Checkable, which provides personalized Digital Action Plans leveraging AI and data analytics. Additionally, the Digital Facilitation Scheme supports businesses through facilitated learning sessions, while the Digital Boost Alliance Aotearoa fosters collaboration between the government and private sector to inspire digital adoption. Evaluation has shown positive impacts: 23 percent of all businesses report improved revenue after using Digital Boost and 80 percent of Digital Boost businesses now have a website. As of June 2023, Digital Boost had over 60,000 registered users.

PRIVATE SECTOR

E-wallets

According to a 2022 survey, 77 percent of New Zealanders still had a preference for using debit or credit cards, with only 1 in 10 using smart phones for payment. New Zealand's FinTech sector developed their first homegrown digital wallet, called Dosh, in 2021. Since then, other FinTech companies like BlinkPay have been entering the digital payments space and partnering with traditional banks to make online payments simpler for the bank's customers. New Zealand FinTech companies will likely be in a better position to start offering more digital financial inclusion tools for MSMEs and customers with the new open banking standards that have been agreed upon by New Zealand's big banks. This will make it easier for banks to partner with FinTech companies like BlinkPay and Qippay, and for FinTech companies to innovate. As many vulnerable communities in New Zealand live in rural areas without access to the same banking services as urban regions, digital payments could increase financial inclusion. However, with almost 9 in 10 people in New Zealand reporting feeling concerned about data sharing due to hacking and misuse of information, digital trust will be an important factor to promote e-formalization.

PUBLIC-PRIVATE PARTNERSHIPS

Cybersecurity

A notable public-private partnership is Connect Smart, a cyber security initiative designed to enhance cybersecurity awareness and capabilities among individuals and businesses. The program offers targeted advice through a website, along with outreach activities and events such as Connect Smart Week. This initiative aligns with the "cyber capability" goal of the Cyber Security Strategy Action Plan. This function is now being delivered by CERT NZ, which supports businesses, organizations and individuals affected by cyber security incidents and provides trusted and authoritative information and advice.

New Zealand's digitalization efforts are helping foster e-formalization by enhancing access to essential services and digital tools through initiatives like Digital Boost and Zero Data. However, digital divides and data security concerns remain.

PAPUA NEW GUINEA

OVERVIEW

Papua New Guinea's progress on digitalization is significantly behind other APEC-member economies with poor internet and mobile penetration. Meanwhile, its informal economy is substantial. Although public-private partnership initiatives on promoting financial inclusion and digital skills training are promising, more could be done to support citizens in connecting to and benefiting from the digital economy as a necessary precursor for any e-formalization initiatives such as e-government, e-commerce or e-payments. This could be implemented in tandem with digital skills training programs so that informal workers and MSMEs can learn how to use digital tools most effectively. Innovative digital financial solutions will be key to supporting MSMEs and unbanked workers without access to credit and financial services.

Key Statistics

- GDP $30.93 bn USD (2023)
- Population: 10.33 m (2023)
- Informal economy (percent of GDP): 33.3 percent (2020)
- Internet penetration (percent of population): 32.1 percent (2023)
- E-Government Development Index: 170th globally (2022)

INTRODUCTION

According to the World Bank, the informal economy in Papua New Guinea is 33.3 percent of GDP in 2020 and despite progress, the country's digital infrastructure remains underdeveloped, with internet penetration at just 32.1 percent of the population (2023). However, the 3G network coverage in Papua New Guinea is estimated at 65.13 percent in 2024. This differentiation is partly due to poor internet connectivity at home and limited technological knowledge. According to one study, 64 percent who didn't have access to the internet cited "not knowing how to use it by themselves" as the main barrier. Financial inclusion is also limited, with only 37 percent of the population having a bank account in 2018. This means that cash is dominant, and e-payments and e-commerce are in their early stages.

The Informal Economy in Context

- Some estimates suggest that the informal economy comprises more than 80 percent of the population.
- This informal economy is predominantly driven by women's activities, including food production, distribution and trade, and street trading.
- The main issues faced by small businesses include lack of finance, knowledge, skills, materials, and technology. Illiteracy and poor infrastructure are also significant challenges.

GOVERNMENT

E-Government

Although ranked 170th on the E-Government Development Index, the Digital Government Plan was announced which sets out plans for projects to be implemented from 2023-2027. These include improving the ease of doing business through an integrated system between government and businesses. Papua New Guinea also aims to have a country-wide digital identity system by 2025.

Financial inclusion

As of 2019, 75 percent of the country's population remain unbanked. Financial inclusion in Papua New Guinea's informal economy faces multiple barriers, including poor infrastructure and challenging geography which make branch expansion costly. Low levels of education and literacy hinder access to financial services, and many informal entrepreneurs are financially constrained by household needs. Additionally, lengthy and inconvenient banking processes deter people from using banks, and the perception that bank accounts are only for formally employed individuals further limits financial inclusion.

Various government initiatives to improve financial inclusion include establishing micro banks, the National Development Bank, and introducing agent, phone, and internet banking services in commercial banks. In 2013, the Bank of PNG launched the first National Financial Inclusion and Financial Literacy Strategy (2014–2015) and established the Centre for Excellence in Financial Inclusion (CEFI), which coordinates, advocates and monitors all financial inclusion activities in Papua New Guinea. Under this strategy, 586,000 new accounts were opened, enabling an environment for MSMEs to grow their revenue and potentially formalize.

Regulatory Sandbox

The government established its first regulatory sandbox in 2019, with the strategic objective of encouraging the FinTech sector to establish non-bank digital payment solutions for e-commerce that could be deployed across the Pacific. Given PNG's high percentage of unbanked citizens, digital payment solutions will be critical to create pathways for MSMEs to join the digital economy.

PRIVATE SECTOR

To support the Bank of Papua New Guinea's financial inclusion goals, commercial banks and finance firms in PNG are embracing digital products for the 75 percent of the population that remain unbanked. As of June 2024, the Bank of PNG is no longer issuing physical cheques, marking a significant milestone as in 2015, cheques made up 44 percent of transactions in PNG. This is made possible because of the investments in digital services from PNG's big banks. For example, Kina Bank is collaborating with microfinance provider MiBank, which has created a digital platform that enables customers to authorize group transactions without internet access. This partnership aims to target the grassroots and informal sector that MiBank serves. Other platforms are letting customers onboard themselves without any human intervention, with virtual wallets and virtual cards coming as well.

PUBLIC-PRIVATE PARTNERSHIPS

Bridging the Digital Divide

The World Bank estimates that enhancing internet access and connectivity in the Pacific could lead to an increase of over $5 billion in GDP and the creation of 300,000 new jobs by 2040. The Coral Sea Cable System, a telecommunications infrastructure project that connects Australia, PNG, and the Solomon Islands, was completed in 2019 with a 4,700km fibre-optic sea cable delivering

enhanced internet connection for PNG. It is funded by the respective governments and is a joint project of the government of Australia, Solomon Islands Submarine Cable Company, PNG's DataCo, Alcatel Submarine Networks and Vocus. Over the past four years, the project has increased internet capacity by 2438 percent in PNG and has significantly decreased prices.

Digital skills promotion for MSMEs

The UN Capital Development Fund (UNCDF) and the United Nations Development Programme (UNDP) launched the Rapid Financing Facility in 2022 to help women entrepreneurs access affordable digital financial products and services. This initiative aimed to enhance business capacity, enable participation in innovation funds, facilitate e-commerce, and improve access to financial products. Five partners, including Emstret Holdings and Westpac, were selected for performance-based grant funding under two UNCDF funds. The program planned to train 5,000 women entrepreneurs in digital and financial literacy by the end of 2023. It addresses the significant impact of the pandemic on women and emphasizes the importance of leveraging technology for economic resilience. Additional interventions, such as a portfolio guarantee and innovation fund, were planned to further support women-led MSMEs.

Financial Inclusion

Another initiative is The Women's Microbank Limited (WMBL). Supported by the UN's Pacific Financial Inclusion Programme, it tackles challenges such as difficult geographies, inadequate physical infrastructure, and limited technological skills by developing solutions to improve financial service access, particularly for rural women. They implemented a two-fold strategy: setting up smaller, affordable banking points in densely populated rural areas and introducing a biometric identification and authentication system. WMBL launched the first Mama Bank Access Point (MAP) in March 2019 in Morata, Port Moresby. These small structures utilize tablets connected to biometric readers and Bluetooth printers, allowing customers, including illiterate women, to use fingerprints for banking. With MAPs established at the district level, customers no longer need to travel to provincial capitals, as all banking needs including deposits, withdrawals, and loans, can be handled through MAP. Now, with six operational access points servicing nearly 10,000 women, WMBL has increased customer activity and financial literacy, growing its lending portfolio and savings mobilization with the help of Women in Business PNG and other women's groups.

APEC App Challenge

In line with Papua New Guinea's host year theme of "harnessing inclusive opportunities, embracing the digital future", in 2018 PNG explored how digital solutions can connect informal sector entrepreneurs with new customers and enhance trade opportunities. Supported by the APEC Secretariat, Google, and The Asia Foundation, the 2018 APEC App Challenge was launched as part of this initiative, involving 14 teams from nine APEC economies. The challenge aimed to develop apps or web tools that help local artisans in Papua New Guinea's handicraft sector build their brand identities and reach broader markets. The winning team was a father-daughter duo who designed Biluminous, an app to help local artisanal weavers of bilum — a traditional handicraft in Papua New Guinea, to reach a wider customer base and grow their business. This initiative represents a step towards integrating traditional handicrafts into the broader digital economy, fostering growth, and facilitating e-formalization.

PERU

OVERVIEW

Peru has the largest informal economy in APEC and is advancing in digitalization, with internet penetration and efforts to promote digital payments increasing. The government is actively supporting MSMEs to formalize their businesses using digital tools, including electronic payroll and mandatory e-invoicing. During the pandemic, digital incentives for formalization such as access to finance for MSMEs who register their businesses and "Cuenta DNI", a commission-free digital bank account, were rolled out. However, the structural nature of the informal economy and barriers to digital access, especially in rural areas, challenge the effectiveness of these digital initiatives. The agriculture sector poses a particular challenge for formalization, as most agricultural workers work on smallholder farms at subsistence levels. Private sector initiatives that enhance financial inclusion are promising, but government-led initiatives in collaboration with the private sector could accelerate digital formalization. Cooperatives supported by digital communication technology and e-commerce platforms could facilitate the eventual transition of this sector to the formal economy.

Key Statistics

- GDP: $267.6 bn USD (2023)
- Population: 34.35 m (2023)
- Informal economy (percent of GDP): 59.4 percent (2020)
- Internet penetration (percent of population): 75 percent (2022)
- E-Government Development Index: 59th globally (2022)

INTRODUCTION

Although recent economic growth has not been as aggressive as the early 2000s, Peru has a stable economic strategy with a reliable central bank. However, the informal economy remains a significant obstacle to achieving its economic and social potential. Peru has the largest informal economy in APEC, making up 59.4 percent of GDP (2020) and 71.7 percent of the workforce (2023). As with many other economies, COVID-19 had a significant impact on the labour market, causing informal economy employment to rise further, reaching 75 percent of the workforce in 2020.

From a digital perspective, the internet penetration rate in Peru is estimated to be around 75 percent of its population (2022). This rate is low compared to other Latin American economies, mainly due to the historical lack of infrastructure investment in rural areas. Although around 88 percent of rural households have access to a mobile phone, internet connection (20.1 percent) and computer possession (10.1 percent), rates are drastically lower in rural areas. However, with the expansion of fibre optic networks, internet penetration is expected to reach 98 percent of the population by 2027. Although digital payments are increasing, cash still accounted for around 87 percent of payment transactions in 2023. E-commerce is also in its infancy but is growing rapidly. In 2022, e-commerce resulted in more than USD $12 billion in sales — an increase of 30 percent from 2021.

The informal economy in context

- In rural areas, more than 90 percent of informal agricultural workers are families who live on smallholder farms with multiple crops.
- They are often subsistence farmers with few social protections. For these workers, formalization is a far-off concept as they live in poverty and do not meet the minimum income threshold to pay taxes.
- Many face lack of access to markets due to infrastructure and logistical hurdles, so farmers are often forced to sell to middlemen without much bargaining power.
- Using technology to improve yields or to move to higher-value crops that could be exported is almost impossible without the necessary resources.

GOVERNMENT

Formalization has been a significant priority for the Peruvian government for many years and continues to be a leading priority during their chairmanship of APEC in 2024. The government has adopted a wide range of programs, many of which have digital aspects.

Electronic payroll rollout and mandatory e-invoicing

Under improving monitoring and inspection initiatives, the government introduced an electronic payroll (Planilla Electrónica) in 2007. Employers with three or more workers must electronically register information on their workers, pensioners and service providers monthly. This has improved the capacity of the labour authority to supervise and monitor compliance with labour rights. The number of registrations increased faster than total employment between 2008 and 2013. Studies have found that many micro and small enterprises (MSMEs) have joined the formal sector thanks to the digital tool, but ensuring compliance with labour regulations for companies remains a challenge.

A related project is Verifica tu chamba (Verify your Job) implemented in 2021. This is a website that informs users whether they have been registered on their employer's payroll by simply entering their details and those of the enterprise where they work. If the enterprise is at fault, Superintendencia Nacional de

Fiscalización Laboral (National Superintendence of Labour Inspection) (SUNAFIL) will send an alert to the employer, indicating that it has detected that some workers are in an informal situation and urging the employer to register them. Importantly, these alerts are confidential to protect workers from potential retaliation by their employers. A total of 202,453 workers were formalised in 2021 because of this website, representing 68 percent of employment formalizations.

To improve the ease of doing business, Peru has gradually introduced mandatory e-invoicing since 2018 for businesses to increase tax compliance. The International Monetary Fund found that in 2019 electronic invoicing in Peru has had a positive impact on tax compliance, especially among specific groups of taxpayers. A more recent study echoed this, finding that e-invoicing "increases reported firm sales, purchases and VAT liabilities by over 5 percent in the first year after adoption." The impact is concentrated among small firms and sectors with higher rates of noncompliance, suggesting that e-invoicing enhances compliance by lowering compliance costs and strengthening deterrence.

Supporting MSMEs with digital tools

The government also has a number of initiatives aimed at MSMEs. Tu Empresa (Your Enterprise) programme launched in 2017 aims to increase the productivity of micro and small companies, providing them with facilities to formalize, access formal credit, digitize, and develop the capacities of entrepreneurs. In 2019, the program assisted 10,910 MSMEs in formalizing their operations by offering legal registration free of charge through business development centres. This initiative resulted in savings of 3,922,735 million soles for business owners. Additionally, the program delivered 46,997 business advisory services covering areas such as formalization, business management, digitalization, access to financing, and production development.

During the pandemic, the Ministry of Production encouraged formalization of MSMEs through a number of incentives. If they formalized, businesses could access loans through the Microenterprise Development Fund, have free access to the Centre for Productive Innovation and Technological Transfer services to improve their products, and participate in digital fairs organized by the Ministry.

However, it is important to note that Peru's Ease of Doing Business ranking is one of the lowest in APEC with "starting a business" ranking 18th in APEC. This suggests that more could be done to reduce red tape in business registration.

Expanding market reach

In terms of expanding market reach, the government launched the Perú Imparable (Unstoppable Peru) digital platform in 2020. This was launched through the Tu Empresa programme, where MSMEs can display their products free of charge in a virtual catalogue. The platform enables MSMEs to market products through online and face-to-face sales and fairs. It encourages digital payments and acts as a multidirectory to connect businesses with potential customers. By December 2020, 6,038 MSMEs were registered on the platform.

Financial inclusion

Peru ranks low in Latin America in terms of financial inclusion with only 57 percent owning a bank account in 2021. During the pandemic, the government needed to expedite support to people which led to the government's Banco de la Nación to set up Cuenta DNI, a commission-free digital bank account that can be accessed using a mobile phone. Those eligible could use the DNI to withdraw the financial support from a Banco de la Nación ATM, transfer it to a BIM digital wallet or make purchases at retailers affiliated with the Vendemas de Niubiz application. In less than 40 days, more than 1.5 million citizens across the country activated their Banco de la Nación DNI accounts.

Despite having implemented so many initiatives, the ILO states that: "The digital transformation has not been widespread, sustained or homogeneous throughout the public sector, and gaps persist between the three levels of government and also between institutions at the same level of government." Despite the pandemic accelerating digital transformation, the pace has not been sustained.

PRIVATE SECTOR

Private sector initiatives in Peru have focused on supporting financial inclusion. Approximately 43 percent of Peru's adult population is unbanked, so ensuring access to credit is crucial for supporting MSMEs to expand their business and join the formal sector.

Financial inclusion

FinTech companies like Preauth provide technological solutions that help lending institutions secure borrower repayments through collateral, which boosts confidence in extending loans to individuals who are often overlooked by traditional financial systems. Preauth has been recognised for its achievement in increasing credit placement by 15 percent to individuals who were previously rejected.

Yape is another example of how private companies can support financial inclusion. Yape is a mobile payment platform developed by Banco de Crédito del Perú (BCP), one of the largest banks in Peru. It allows users to make instant payments and transfers using their smartphones through a QR code or phone number. The payment platform has over 15 million users and 1 million active entrepreneurs and merchants on its platform. Importantly, Yape Lending provides an option for entrepreneurs to access micro-loans, emphasizing simplicity, user-friendly applications, and speed. This supports access to fair loans with transparent rates to grow their business. The enables entrepreneurs to build credit histories, expand their operations, and integrate into the formal economy. Plin is another popular e-wallet in Peru that was created through an agreement between BBVA, Interbank and Scotiabank.

Cabify, a ride-hailing platform operating in Peru, is also supporting financial inclusion of its workers. According to the World Economic Forum, before working with Cabify, 40 percent of drivers were unemployed or at risk of exclusion and most drivers lacked access to credit. Cabify launched a project in 2019 that allowed drivers to save a percentage of their income automatically through a Banco de Crédito del Perú (BCP) account. The project is expanding to offer drivers coverage in case of emergency.

AGRICULTURE AND INFORMALITY

Cooperatives

Cooperatives can provide solutions to many of these issues. If farmers can use technology such as WhatsApp groups to communicate with each other, they can increase transparency and reduce exploitation by middlemen. They can also potentially form a collective that has higher bargaining power. Initiatives using technology to promote e-commerce have been implemented by the government to reduce the power of middlemen. For example, Casero Digital is an initiative of the Ministry of Production and the United Nations Development Program. It is a digital platform that allows merchants to make unlimited publications of their products and services for free. Another similar initiative led by the Ministry of Production is Productor Digital, which aims to link national producers more efficiently with companies and organizations that demand food products through the use of technology at no cost. However, so far only 200 farmers have been able to sell through this platform, and similar initiatives have also dissolved as soon as government funding dried up.

More successfully, private companies have spearheaded collective organization by providing technology and education to enable farmers to switch to higher value goods. While farmers may remain informal, their goods will then be sold through a formal organization which is a step towards formalization. Being in a form of cooperative can also give these producers greater power as they can better dictate prices and don't have to sell through middlemen.

Cooperatives can also be supported through digital solutions. The Allima Cocoa Cooperative is comprised of 400 small-scale farming families in the district named Chazuta. They faced challenges during the COVID-19 pandemic due to restricted movement hindering market access and technical assistance. An initiative titled AGRI Digitalización linked them with a local e-commerce platform, enabling online sales of beans and cocoa pulp and providing insights into internet sales trends. In addition, digital tools and online services enabled the cooperative to innovate and develop new high-value products, such as macho chocolate and macambo-based items, expanding their market reach and revenue sources. This may encourage future formalization of farmers in this cooperative to export higher value products.

Overall, initiatives in digitalization and financial inclusion, such as mandatory e-invoicing, digital bank accounts, and e-commerce platforms for MSMEs, are helping to reduce informality by simplifying business registration, improving tax compliance, and expanding market access. However, challenges like rural digital access and the agricultural sector's structural informality require continued government-private sector collaboration to increase the effectiveness of these e-formalization efforts.

THE PHILIPPINES

OVERVIEW

The Philippines is making progress in digitalization, with increasing internet penetration and over 65 percent of the population registered with the e-wallet "GCash". The government also has resources and incentives for MSMEs to adopt digital tools and register their businesses. However, MSMEs still struggle to digitalize and access services such as credit. The Philippines also remains one of the lowest rankings on the E-Government Development Index, and its Ease of Doing Business ranking is the second lowest in APEC and 95th globally. Meanwhile, its informal economy is the fourth largest in APEC. Addressing the structural informal economy requires a long-term outlook. The Philippines could leverage its new digital national ID to improve its e-government services, with support from the private sector. The government could also continue working to bridge the digital divide and support MSMEs in accessing digital tools.

Key Statistics

- GDP $437.15 bn USD (2023)
- Population: 117.34 m (2023)
- Informal economy (percent of GDP): 39.8 percent (2020)
- Internet penetration (percent of population): 73.1 percent (2023)
- E-Government Development Index: 89th globally (2022)

INTRODUCTION

The Philippines is the fastest growing economy in Southeast Asia. However, nearly 40 percent of the workforce is classified as in a vulnerable form of employment with nearly 40 percent of GDP comprised of the informal sector.

Internet usage has rapidly increased and 73 percent of the population used the internet in 2023. Smartphone usage is increasing in tandem. In fact, the Philippines has the third highest average screen time in the world. However, there are still barriers that prevent the Philippines from fully embracing the digital economy. In particular, the high cost of Internet access poses challenges for small businesses to use digital technology and expand their operations, with 34 percent of Filipino entrepreneurs highlighting internet connection as an issue. As a result, only a small percentage of MSMEs have been able to fully embrace digitalization. However, the number of e-money users surged from 8 percent in 2019 to 36 percent in 2021 and over 40 percent of the population used e-commerce in 2022.

The Informal Economy in Context

- Street vendors and peddlers constitute a significant segment of the informal economy.
- Informal employment is typically divided into 60 percent male and 40 percent female.
- Around 4 million self-employed Filipino women run home businesses, including convenience stores, garment and shoemaking, direct selling, and personal services.
- Women are increasingly involved in low-paying, labour-intensive home-based subcontracting in industries such as toy manufacturing, and food processing.

GOVERNMENT

The government considers supporting MSMEs, many of whom are informal, central to development. To encourage registration and competitiveness, they have many policies aimed at supporting digital tool adoption.

Supporting MSMEs with Digital Tools

The former Department for Trade and Industry (DTI) Secretary, Alfredo Pascual, has underscored the significance of digitalization in transforming MSMEs into larger enterprises to thrive in the digitally-driven economic landscape. He also mentioned APEC as vital in leveraging cutting-edge technologies to empower MSMEs and provide them with the necessary tools and resources to foster digital proficiency and sustained growth. By improving MSMEs' competitiveness, they are more likely to prosper and reach wider markets, supporting formalization.

The DTI has also recently released the 2023-2028 MSME Development Plan which builds on previous iterations with a stronger focus on digitalization and AI integration. The plan addresses challenges such as market competition and limited resources. It involves incorporating AI-driven tools like a machine learning-based credit scoring model to streamline and speed up the loan approval process for microenterprises.

Consistent with this thrust, President Ferdinand Marcos Jr. recently appointed DTI Undersecretary for the MSME Development Group, Cristina Aldeguer-Roque as the new head of the department, with a marching order to raise the competitiveness and elevate the condition of MSMEs through digitalization. To do this, Secretary Roque outlined a five-point MSME agenda: (1) utilizing AI (artificial intelligence) and digitalization, (2) diversifying operations and markets, (3) funding businesses, (4) franchising, and (5) mentoring.

The DTI has introduced a comprehensive website with resources and training for MSMEs such as accessing financing or navigating exporting products. Some of

these resources are only accessible after registering a business, which can be done online or at a Negosyo centre (business centre), encouraging formalization.

Incentivizing MSME registration

Former President Duterte signed the Ease of Doing Business and Efficient Government Service Delivery Act in May 2018. As part of this, the Department of Information and Communications Technology implemented the Electronic Business Permits and Licensing System (eBPLS) which is a cloud-based portal for government services on enterprise/business assistance. This has cut red tape by simplifying the process for businesses to apply for or renew business permits, as well as to file and pay taxes. This makes it easier for them to operate and integrate into the formal economy.

Although not inherently digital in nature, it is important to note that the Barangay Micro Business Enterprises Act (BMBE) of 2002 gives MSMEs many incentives to register their businesses. If they register, they are exempt from paying income tax and are not bound by the minimum wage law. They also have access to credit through government financing institutions. BMBE certificates are registered free of charge at the Department of Trade and Industry offices or Negosyo Centres. A total of 28,531 MSMEs registered under BMBE from 2016 to 2018, suggesting that incentives for registration are important for encouraging formalization.

Despite these initiatives, the Philippines' Ease of Doing Business ranking is among the lowest in APEC overall, with the lowest score for starting a business and getting credit. This suggests that barriers to formalization for businesses remain.

Helping MSMEs Move Up the Value Chain

In February 2024, President Marcos, Jr. enacted the Tatak Pinoy Act aimed at improving the competitiveness of Filipino products and services in both domestic and international markets by focusing on industry diversification, innovation, and technology adoption. The law's implementing guidelines further highlight the need to elevate industries through advanced technology with the creation of the Center for AI Research (CAIR) and the Industry 4.0 Pilot Factory (I4PF). The CAIR focuses on enhancing productivity and competitiveness through artificial intelligence integration across sectors. The I4PF serves as a hub for testing and adopting cutting-edge manufacturing technologies, helping MSMEs modernize their processes to meet global standards.

Implementing a Digital Identification System

According to a 2017 World Bank Survey, one-fifth of the poorest Filipinos have been denied government services, and one-seventh have been denied government financial support due to lack of an ID. PhilSys, a national identification system for all citizens and resident aliens, was established with a digital version of the national ID officially launched in June 2024. This serves as a valid digital piece of ID for government and private transactions which could streamline e-government services and make them easier to use. This could empower marginalised people to gain access to financial services and social protection, contributing to their formalization.

E-Commerce Platforms

E-commerce platforms have been popular marketplaces in the Philippines that continue to incentivize MSMEs to formalize. In ESCAP's study of e-commerce in East Asia, 41 percent of consumers in the Philippines purchase products online with online marketplaces, Shopee and Lazada, accounting for 75.4 percent of total traffic. While the Philippines is 5th in the ranking in East Asia, there are notable growth potentials, namely, increasing digital literacy and trust, public-private partnerships, and digital infrastructure investments. An example on the partnerships, DTI partnered with online logistics and marketplace platform, SOMAGO to directly encourage MSMEs to join the digital economy. With the ongoing projects to boost internet connectivity across the archipelago, e-commerce traffic in the Philippines is expected to rise by 21.7 percent in 2027. The recently

enacted Internet Transactions Act of 2023, can be an opportunity for informal businesses to formalize by mandating businesses to provide necessary business information and requirements, in order to transact in e-commerce platforms.

PRIVATE SECTOR

GCash: Philippines Most Popular E-wallet

GCash is an e-wallet which allows users with a mobile phone to pay for goods and services, to transfer money, keep and access savings as well as access microinsurance. Its popularity increased rapidly during the COVID-19 pandemic, and it had over 76 million users in 2022, equivalent to over 65 percent of the population. This has not only increased the efficiency of MSMEs through the streamlining of financial transactions, but has also contributed to increased financial inclusion of individuals by allowing the underbanked to access credit. GCash has a "GScore" component which uses alternative data such as settling payments, deposit or transferring funds to evaluate creditworthiness.

Unfortunately, the increased use of GCash has come with heightened cybersecurity risk, with reports of users losing money from their accounts due to phishing. In response, GCash has stepped up their security and increased security measures such as "DoubleSafe," a security feature that enhances account protection to validate the user's identity.

Digital Banks

There are six digital banks regulated by BSP, the Philippine' central bank. Capitalizing on the high rate of mobile phone and internet usage in the Philippines, these banks seek to expand banking and credit facilities to underserved and unbanked Filipinos through their digital devices. Among the initiatives, Go Tyme, partnering with Robinson's Malls have established registration services in its grocery stores to attract underbanked grocers. Maya Bank and UnionDigital Bank is reportedly infusing $48 million and $221 million, respectively, to expand its credit facilities.

PUBLIC-PRIVATE PARTNERSHIPS

Although GCash is spearheaded by a private company, Globe Telecom, the government is increasingly partnering with GCash on government regulations, policies, and guidelines, as well as infrastructure and cybersecurity developments to support the secure adoption of digital payments. For example, in 2022 the DTI partnered with GCash to pilot an e-Commerce Roadshow designed to promote digital solutions in rural communities through digital payments. The government has also recently signed an MoU with Globe-GCash to use the platform to streamline social protection programs and make them more accessible to beneficiaries.

Addressing MSMEs Digital Skills Gap

A notable public-private partnership is the Connecting Women Entrepreneurs to the Digital Economy project. Established in 2020, this partnership includes government agencies, the United States Agency for International Development (USAID), Facebook Philippines, Shopee and Lazada. The project seeks to empower and broaden the reach of Filipina entrepreneurs by providing comprehensive digital marketing training. It includes setting up online storefronts, executing digital marketing campaigns, and utilizing digital payment systems to enhance their effectiveness as online sellers. This is in response to a recent Digital Readiness Study that showed many female entrepreneurs have social media accounts such as Facebook but lack the knowledge and skills to fully capitalize on the digital landscape.

The Department for Trade and Industry (DTI) also signed a Memorandum of Understanding (MoU) with Amazon Web Services (AWS) in February 2023 to provide training workshops to help Filipino entrepreneurs and innovators adopt digital technologies to increase productivity and competitiveness. This will help DTI address the digital skills gap that many MSMEs currently face, necessary for digital tools to be effective at supporting formalization.

RUSSIAN FEDERATION

OVERVIEW

Russia is progressing well in terms of digitalization. The government has some innovative digital initiatives to encourage e-formalization such as MyTax and AUSN. However, its E-Government Development Index remains relatively low, and a digital divide persists. The informal economy also remains very large. This suggests that e-government services could be improved and there could be more initiatives supporting digital skills adoption. Collaboration with the private sector could help facilitate the process of e-formalization, helping to bridge the gap between informal and formal employment.

Key Statistics

- GDP $2.02 trn USD(2023)
- Population: 143.83 m (2023)
- Informal economy (percent of GDP): 43.1 percent (2020)
- Internet penetration (percent of population): 90.42 percent (2022)
- E-Government Development Index: 42nd globally (2022)

INTRODUCTION

Russia's informal economy is significant, contributing 43.1 percent of GDP in 2020, according to the World Bank. However, the methodology differs from Russian national statistics on the informal sector. Employment in the informal sector stood at approximately 19 percent in 2022, meaning nearly one in five Russians aged 15 and older worked in unregulated industries.

Russia's internet penetration rate was above 90 percent in 2024. However, a digital divide persists between regions. In 2022, despite financial service providers such as Mastercard, Visa, Apple Pay, Samsung Pay, and PayPal suspending their operations in Russia, digital payments continue to thrive through domestic systems such as SPSS and Mir. In the first quarter of 2023,

cashless trade accounted for over 63 percent of Russians' total expenses, showing a slight increase compared to the same period in 2022. Additionally, the share of e-commerce in total retail sales rose to 13.8 percent from 11.6 percent in 2022.

The Informal Economy in Context

- Russia's informal economy increased after market reforms in the 1990s, first as a means for survival and later to generate income, and has increased in recent years.
- Wages in the informal economy are around 25-30 percent lower than the formal economy. This can be a result of the low productivity nature of the jobs, such as harvesting crops, cleaning, tutoring and manual labour.
- At the beginning of the 2000s, the typical informal worker in Russia was described as "a man under 30 without tertiary education and living in an urban area". This profile has remained consistent, with another study from 2010-15 finding that informal workers in Russia's service sector are typically male, not very young, without tertiary education, and living in urban areas.

GOVERNMENT

In 2018, a Presidential Decree specified supporting SMEs and individual entrepreneurs as one of 12 priority areas. The government has implemented various measures to reduce red tape and integrate the informal economy into the formal economy.

MyTax

As a result of systemic measures undertaken by both the government and the financial sector, the number of registered MSME businesses and self-employed individuals has grown significantly. For example, official registrations of people as self-employed grew by 39 percent in 2023, as evidenced by the tax authorities. One of the reasons for this increase is the launch of My Tax in 2019 by the Federal Tax Service (FTS) to simplify tax registration and reduce barriers to formalization for self-employed individuals. Accessible via a mobile app or web version, My Tax allows users to register a business in 1-2 minutes, manage income records, generate receipts, and pay taxes. Designed based on user feedback, the app addresses administrative challenges with features like automatic accounting and integration with banks. During APEC's Public Private Dialogue on the Transition from the Informal to the Formal Economy, initial pilot results showed over 162,000 registrations and ₽350 million (approximately USD $3.8 million) in declared taxes by August 2019. According to Yulia Kostevich, Private Sector Advisor in APEC's SME Working Group, the app currently has 9 million users, and 2.9 trillion roubles (around USD $40 bn) earned by self-employed actors officially. Its success could be attributed to the effective promotional campaigns that were run across every region in Russia that included roundtables, seminars, webinars and an ambassador program.

Automated Simplified Taxation System (AUSN)

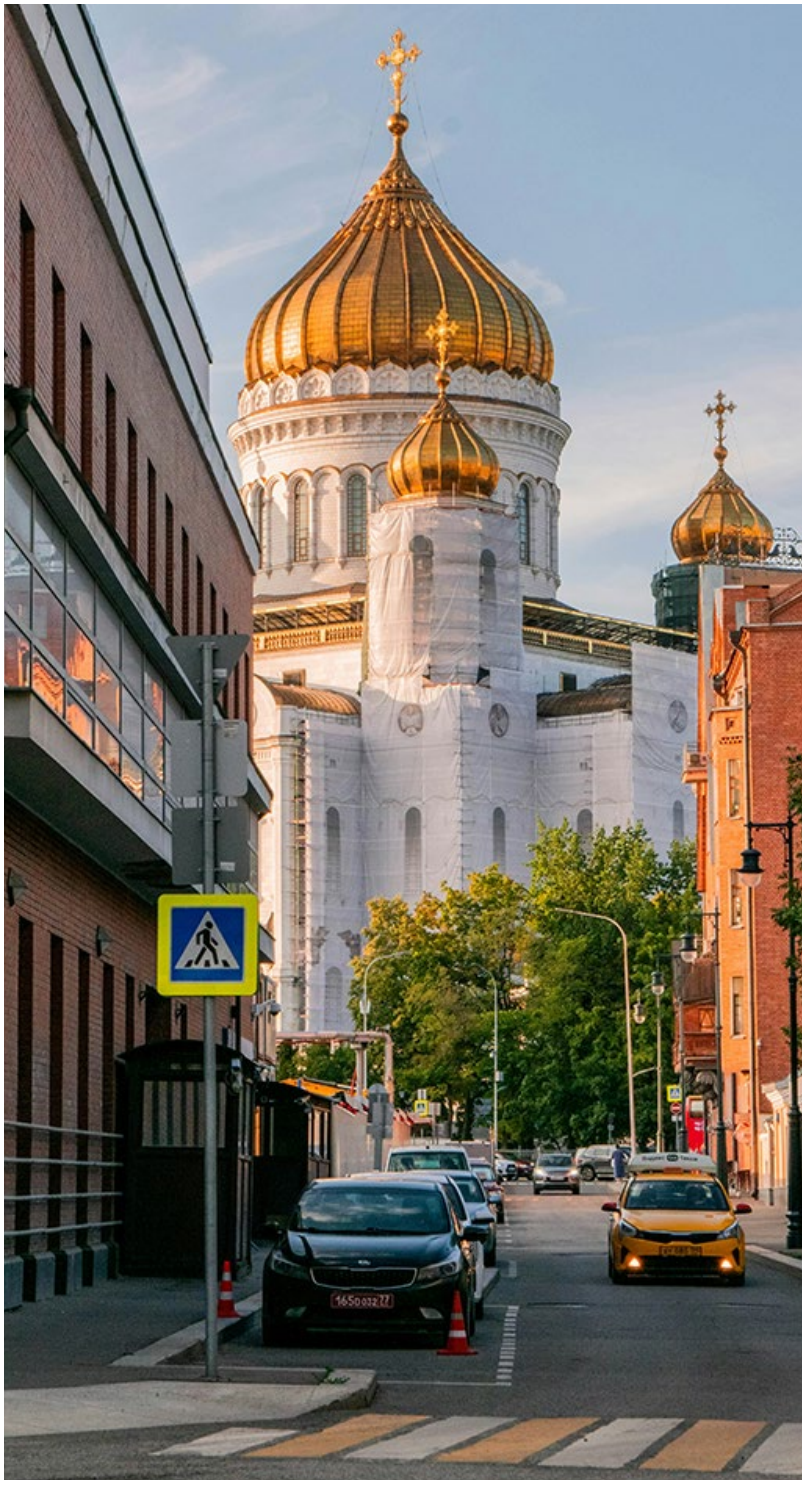
To increase the ease of doing business for MSMEs the government collaborated with financial institutions to develop the Automated Simplified Taxation System (AUSN). This system is a regulatory framework designed to reduce the administrative burden on SMEs and sole entrepreneurs by automating financial data exchange between these SMEs, financial institutions, and tax authorities. This initiative began as an experimental

legal regime in July 2022 and will run until December 2027 in four regions. AUSN employs digital process automation and open banking models to promote formalization and financial inclusion. Eleven authorized banks facilitate this system by transferring transaction data to tax authorities, who then automatically calculate and communicate tax amounts to the taxpayers. This means that these micro-SMEs don't need to calculate taxes manually and fill out a tax declaration, improving the ease of doing business. The early results have been positive. The Moscow Times reported that for the first 6 months of its implementation, the tax amount paid through the AUSN scheme was 9 million roubles (around $100,000 USD), and for the second 6 months it grew by 105 million roubles (around $1.2 million USD).

The AUSN program also has social guarantee payments. Under this program, organizations and individual entrepreneurs do not pay social insurance premiums. The income and contributions of every employee remain the same but will be paid by the government, not by MSMEs. This provides another incentive for filing taxes using this method, potentially encouraging formalization.

SME Digital Platform

The government also launched the SME Digital Platform in cooperation with the JSC Russian Small and Medium Business Corporation (national development institution in the field of small and medium business) in 2022. The platform provides unified access to government and commercial services, including for registering a business, obtaining financing, developing entrepreneurial competencies, production cooperation and sales, access to public procurement. Additionally, it features a mechanism for the targeted selection of services and support measures, with the platform analyzing potential barriers that may prevent users from receiving state support.



Gosuslugi

The Public Services Portal of the Russian Federation "Gosuslugi" comprises the national e-government system of trusted identities and provides access to all major public services. It has 110 million personal accounts of individuals and 3.5 million accounts of businesses – sole entrepreneurs and legal entities, which can, for example, send notifications to authorities via Gosuslugi in digital format.

Nation-wide high-speed internet access

The Strategy for developing the communications industry by 2035 aims to increase the share of households with broadband access to the internet to 97 percent by 2030, including in sparsely populated and remote areas (currently broadband access rate is 86 percent, while internet penetration rate is approximately 90 percent).

Formalization of the taxi market

The Federal Law on Taxis FZ-580 (2022) and the Federal taxi information System "Taxi", launched in 2023, have significantly changed approaches to the regulation of taxi activity in Russia. They have created regional registers and a legal framework for the self-employed to work in the industry, prohibiting aggregators to engage in unregistered taxi services.

PRIVATE SECTOR

VTB Bank

In terms of financial inclusion and digital payments, VTB Bank is among the leading financial institutions of Russia that implement initiatives for MSMEs. VTB has launched Business Platform VTB, a website and a mobile app for medium and small business customers, enabling them to receive more than 80 products and services,accept QR-code payments via the Faster Payments System with a low cost, without requiring cards or terminals. Products are available without visiting a physical office, and the app facilitates instant online transactions. For self-employed individuals, the app provides features to create and send receipts to customers, track income from cash and non-cash transactions. Entrepreneurs are also involved in piloting an AUSN, and can register self-emloyed status directly, generate tax reports and payments online without paperwork..VTB also has an internet portal, Closer to Business, which offers information support to entrepreneurs, including free online training, courses, business cases, webinars, expert articles, and e-library resources. In 2020, the portal saw a twenty -fold increase, reaching 50,000 new users, and in 2023, it had 50,000 users, demonstrating its value as a business resource for both novice and experienced entrepreneurs. These initiatives are helping SMEs improve their digital skills and adopt digital payments, facilitating e-formalization.

PUBLIC-PRIVATE PARTNERSHIPS

MyTax

Although MyTax was primarily government driven, it did involve collaboration with the private sector. The government collaborated with digital platforms and FinTech companies such as Avito or the Yandex taxi app to bring more individuals into the program. By integrating those digital platforms with My Tax, it enabled users of those digital platforms like taxi drivers to formalize.

Overall, digitalization efforts like MyTax and AUSN are advancing e-formalization by streamlining tax processes for small businesses. Despite progress, challenges such as a large informal economy and regional digital divides remain, indicating a need for further digital integration and private sector collaboration.

SINGAPORE

OVERVIEW

As Southeast Asia's digital and financial hub, Singapore continues to exhibit one of the highest rates of starting and operating businesses. The nation ranked 2nd in the world in the Ease of Doing Business Index, the highest among all Southeast Asian countries. At the same time, Singapore's digital economy is one of the fastest growing in the region. In 2022, the digital economy contributed almost 18 percent of the country's nominal GDP at $77.5 billion. Through its *Smart Nation Initiative*, a comprehensive policy guiding Singapore's digitalization journey, the government intends to transform the nation into a "tech-driven city-state".

Unlike the rest of Southeast Asia, the majority of Singapore's economy is formalized due to an array of regulations and incentives implemented over the years. Recent government digital services have helped to expand the rate of formalization and enhance the use of digital tools among the hawker populations. But despite recent efforts to promote workers' rights and compensation for those employed within the platform, or "gig" economy, many of Singapore's informal workers continue to face issues in securing stable income streams and bargaining for better working conditions.

Key Statistics

- GDP $501.43 bn USD (2023)
- Population: 5.92 m (2023)
- Informal economy (percent of GDP): 12.3 percent (2020)
- Internet penetration (percent of population): 96.9 percent (2023)
- E-Government Development Index: 12th globally (2022)

INTRODUCTION

In 2020, Singapore's informal economy contributed to just over 12 percent of its economy — the lowest rate of informality within Southeast Asia. This can be attributed to the government's strong regulatory framework. First, all businesses are required to register formally with the Accounting and Corporate Regulatory Authority of Singapore to operate. After registering, businesses are provided with a Unique Entity Number (UEN), which is required for any kind of transaction with government agencies. Secondly, during the 1990s, the state expanded a compulsory savings scheme called the Central Provident Fund (CPF) to workers who were self-employed and earned less than 6,000 Singaporean dollars. This allowed many more informal workers to apply for the savings scheme, which further encouraged them to formalize.

In terms of digitalization, 99 percent of Singaporean households were connected to the internet in 2023, and around 97 percent of Singaporean residents own smartphones, according to a 2023 government report. In 2022, there were approximately 4.9 million active social media users. At the same time, Singapore's digital economy is projected to become the largest in Southeast Asia, reaching $150 billion by 2030. Recognizing the numerous benefits digitalization offers, the government announced the Smart Nation initiative in 2014 with the goal of fully transforming the nation's economy, government, and society.

The Informal Economy in Context

- Specific demographic data on the informal sector is limited, with the Singaporean government yet to release any recent information on the nation's informal sector.
- In 2019, out of the total 1.4 million foreign workers in Singapore, 999,000 were low-wage work permit holders mainly working in construction, manufacturing, shipping, services, and domestic work. Non-resident workers, primarily migrants from South and Southeast Asia, are significantly more likely than resident workers to engage in self-employment and other forms of informal employment.
- In 2022, there were more than 268,000 migrant domestic workers in Singapore. Migrant domestic workers are excluded from Singapore's main labour law, resulting in unregulated working hours and in some cases, mistreatment from their employers.
- More than 60 percent of the gig workers were aged 50 and above, while nearly 80 percent of them did not possess an education above the tertiary level.

GOVERNMENT

In 2018, the Singaporean government launched the Digital Government Blueprint (DGB), which launched a roadmap of 15 key performance indicators (KPIs) for transforming the nation's technologies to help build a digital economy. Some of the KPIs include the percentage of payments (inbound and outbound) completed via e-payments, the number of public officers trained in data analytics and data science, and the number of services that offer digital options for wet ink signatures.

In particular, between 2018 and 2020, the DGB was altered to deepen digital integration into policymaking processes and to prioritize citizen-centric services, leading to the use of emerging technologies like artificial intelligence (AI) to enhance user experiences across various sectors. Overall, the emphasis on digitalization and the subsequent fostering of a digital culture allowed many citizens and businesses to transition more quickly and efficiently to online services amid the challenges posed by the COVID-19 pandemic.

Formalization of businesses through digital services

The government also continues to increase formalization through the introduction of digital government services. All businesses operating within Singapore are required to register formally with the Accounting and Corporate Regulatory Authority of Singapore through BizFile+, a government portal. After registering, businesses are provided with a Unique Entity Number (UEN). This distinctive identifier is mandatory for any government transaction, such as applying for licenses and permits, lodging statutory filings, and filing income tax returns. Additionally, by registering through BizFile+, businesses are provided with several advantages — including access to government funding, allowing customers to search for and transact with the business, and securing intellectual property — encouraging more businesses to formally register.

Digitalization as an enabler for improving the ease of government to business interactions

In 2020, Singapore's Smart Nation and Digital Government Office (SNDGO), together with the Ministry of Trade and Industry (MTI) and Government Technology Agency of Singapore (GovTech), launched the GoBusiness Gov Assist portal to facilitate more seamless and convenient experiences for business interactions with the government. It simplifies and reduces time spent on government transactions for businesses operating in Singapore, including licensing applications and navigating government financial incentives. Businesses can access the dashboard by logging in through Singpass and indicating their business' UEN, to apply for more than 200 licences across sectors without having to visit separate portals for different licences.

Increasing protection for platform workers

In 2020, Singapore's Manpower Ministry (MOM) estimated that around 79,000 people (3 percent of the nation's resident population) were employed in the platform or "gig" economy. The majority of these informal workers were operating as private hire car drivers (30,600), taxi drivers (26, 300), and delivery workers (16,700). As temporary or independent contractors, many platform workers were found to be suffering from unstable income streams, limited bargaining power, and an overall lack of workers' rights and protections.

In 2021, recognizing some of the challenges faced by gig workers, MOM set up a public consultation and an Advisory Committee to enhance the safety of self-employed individuals in the platform economy. The Committee identified several areas of focus, including efforts to create housing and retirement provisions, and to enhance financial safeguards for work-related injuries. In 2022, a working group was established consisting of members from the government, labour movement, and industry, tasked with strengthening the bargaining power of gig workers. In 2023, the state accepted recommendations from the working group, empowering gig workers to advocate for better working conditions through representatives that function like trade unions. Additionally, through the PayNow app, an electronic funds transfer service available to customers of participating Singaporean banks, platform workers can apply to receive compensation for workplace injuries and CPF payments.

Digital Capacity Building

Recognizing that SMEs account for 99 percent of Singapore's economy and employ two-thirds of the workforce, the government introduced several initiatives to foster digital readiness among the nation's businesses. In 2017, the Infocomm Media Development Authority (IMDA) launched the SMEs Go Digital Program, which sought to increase the adoption of digital technologies among the nation's SMEs. The program provides free digital consultation and step-by-step guides, as well as funding to adopt digital solutions evaluated and approved by IMDA. During the pandemic, the government also implemented the Digital Resilience

Bonus (DRB) to provide payouts of up to SGD $10,000 (USD $7547) to businesses seeking to boost their productivity using digital tools such accounting and HRM systems, digital ordering, e-commerce, and data analytics. If made simple and accessible, targeted initiatives such as these could provide incentives for informal MSMEs to join the formal economy.

PRIVATE SECTOR

The digital divide in Singaporean businesses

According to the 2023 inaugural Singapore Digital Economy (SGDE) Report, the technology adoption rate of businesses grew from 74 percent in 2018 to 94 percent in 2022, resulting in a heightened demand for tech professionals. Unfortunately, bigger companies have taken up much of the digitalization, with many small and medium-sized enterprises (SMEs) struggling to catch up. For example, as per the "Digital for 100: Business, technology and fulfilling lives" report, only 30 percent of respondents working in SMEs stated that they use digital technology in most or all their business processes and operations compared to 86 percent of larger businesses. Furthermore, only 28 percent of SMEs are currently operating online payments, compared to 70 percent of large businesses. There is an overall gap in digital adoption among Singaporean businesses.

PUBLIC-PRIVATE PARTNERSHIPS

Enhancing digitalization among hawkers

The Singaporean government has partnered with various companies over the years to provide innovative services or technologies to foster digitalization. For example, The Singapore Together Alliance for Action— Online Ordering for Hawkers, adopted during COVID-19, was spearheaded by the SG Digital Office and the National Environment Agency (NEA). It aimed to assist hawkers to transition to digital platforms, develop sustainable business models, and raise consumer awareness about online ordering. This effort involved delivery platforms, hawker associations, community partners, and government agencies working together to empower hawkers to embrace technology. Concurrently, further joint multi-agencies efforts by Enterprise Singapore, Infocomm Media Development Authority, Housing Development Board, JTC Corporation and National Environment Agency, together with NETS which is owned by the 3 largest banks in Singapore, looked to help stallholders adopt e-payment options through the Hawkers Go Digital programme

Between June and September 2021, the SG Digital Office and the NEA interacted with 5,500 hawkers to promote the initiative. Some food delivery platforms, such as "FoodPanda" even launched their hawker digitalization campaigns, during which volunteers would answer any concerns hawkers had regarding the use of digital platforms. Additional incentives included a $2.30 (SGD 3.00) cash bonus for every 10 digital transactions until July 2021 during the COVID-19 pandemic, and the covering of all transaction fees until December 2024.

As of September 2021, 47 percent of the hawkers were using digital platforms, while more than 300 existing users signed up for additional online ordering services. Furthermore, as of August 2023, close to 2 million electronic payment transactions occurred across 11,600 stalls in hawker centers and coffee shops. Around 94 percent of these transactions were conducted through SGQR, the Singapore Government QR code system.

CHINESE TAIPEI

OVERVIEW

Chinese Taipei has made notable progress in digitalization, boasting a high internet penetration rate and a significant increase in e-payment adoption. The government's signature DIGI+ initiative aims to build a robust digital economy with enhanced smart infrastructure and digital equity. However, the island faces challenges in bridging the digital divide and improving e-government services. Chinese Taipei's economy consists of a substantial group of atypical workers, particularly in street food vending and caregiving. Increasing their digital capability, such as by providing better access to digital platforms and FinTech tools, could help informal workers and businesses better integrate into formal and regulated economic activities. Further work needs to be done in building confidence and creating incentives for participants in the informal sector to fully embrace formal business practices and a digital-augmented future.

Key Statistics

- GDP $802.96 bn USD (2024)
- Population: 23.32 m (2024)
- Informal economy (percent of total employed): 7.01 percent (2023)
- Internet penetration (percent of population): 90.7 percent (2023)
- E-Government Development Index: N.A. (of 19 APEC economies in 2022)

INTRODUCTION

Chinese Taipei is a prosperous high-income economy with a significant portion of its workforce participating in the informal sector. The island's informal sector encompasses an estimated 806,000 individuals engaging in atypical employment arrangements, including part-time, temporary, and dispatched work (dispatched workers are those who hold contracts with dispatching agencies rather than the client company they provide services for). Estimates suggest that underground economic activities could account for as much as around 28 percent of Chinese Taipei's GDP, exceeding the levels in advanced economies by around 15 percent. The city's ubiquitous street food scene alone, which the government is keen to sustain as a unique culture, employed a substantial 476,000 people in 2018. While the authorities made attempts to include the night markets in the formal economy to better manage hygiene and food safety issues, some cities in the 1990s settled with transforming these markets to "tourist night markets" run by self-governing associations, which gives some legality to the peddlers regardless of the informal work. Recent policy initiatives for regulating the night market economy tend to focus on encouraging youth entrepreneurship and adopting modern business strategies such as digital marketing.

With an 84.3 percent internet penetration rate and 95 percent of users accessing the internet via mobile devices, the island is well-positioned to leverage digital tools for economic growth and inclusion, including in the informal sector. In line with the Digital Nation and Innovative Economic Development Plan (DIGI+), the island's Ministry of Digital Affairs (MODA) has been doubling its efforts to connect residents to the internet and other digital platforms. Seeing access to broadband services as a "human right for everyone," the ministry works closely with major telecommunications service providers to improve connectivity in remote areas, which currently lag behind the island-wide average (72.23 percent versus 89 percent for broadband coverage above 100Mbps). Addressing the existing digital divide would allow more tourism activities and street trading in these regions to go digital. Chinese Taipei's population is highly active on international social media sites such as Facebook, Instagram and Line. With 88.5 percent of its netizens using at least one social media platform, social media marketing is critical for all businesses. Across the island's night markets, vendors have sought to offer a virtual-real, online-to-offline experience to their digital-savvy customers, making a stronger impression and driving additional traffic to their stalls.

Chinese Taipei's mobile payment rate has risen from a mere 4.8 percent in 2014 to a sizable 72.2 percent in 2021, driven by popular apps such as LINE Pay, JKOPay, and Taiwan Pay. The government is offering tax incentives until 2025 to encourage small businesses to adopt digital payment, with the expectation of reaching a 90 percent mobile payment adoption by the same year.

The Informal Economy in Context

- Informal work is popular among individuals aged 45 or above, employing 425,000 workers in this age group
- Education level does not significantly differentiate participation in Chinese Taipei's informal workforce, although those with lower educational attainment found it easier to access informal opportunities than formal ones
- Street food vendors and caregivers represent a substantial share of the informal workforce
- Underground economy contributes a significant portion of the unreported and under-reported tax revenues, which account for 1/3 of the total.

GOVERNMENT

With a vital informal economy that traces back decades, Chinese Taipei's government is keen on structural reforms to uplift conditions in the informal sector and keep pace with the realities of a post-COVID digital era. As platform economies have flourished in recent years, the island's digital ministry has become creative in approaching what it regards as a key agenda. The central idea is to retool the sharing economy with software, so that it would go beyond offering immediate services and be able to facilitate freer exchange of resources in abundance – such as connecting start-ups to capitals they need – across various sectors of the economy.

Transforming Digital Economy and Governance

Chinese Taipei has a robust digital economy that holds a key position in the global tech supply chain, accounting for approximately 19.2 percent of its GDP as of 2022. Concerned by the sector's relative reliance on hardware manufacturing, the government has, during the last decade, put its priorities on steering away from such reliance and boosting the digital services industry. DIGI+, a key 8-year initiative launched in 2017, seeks to build a digital economy of US $201.5 billion (NT $6.5 trillion) in 2025 by "enhanc[ing] digital infrastructure, re-construct[ing] a service-based digital government, and realiz[ing] a fair and active internet society with equal digital rights."

Smart government and digital transformation of public services is a key component of DIGI+ and has received considerable policy attention. In the Digital Government Program 2.0 (2021-2025), programs are being laid out to leverage civil big data to build a smarter, more integrated system of the island's workforce. Key databases for the health and welfare status of its labourers across different cities, counties and industries are put together for data analysis and predictive modeling, informing policymakers on human resources allocation and improvement of the work environment, as well as where support and risk management are most needed.

PRIVATE SECTOR

Night Market-tested Digital Initiatives

Besides government efforts, the strong private sector and civil society of Chinese Taipei play active roles in embracing digital trends. The night markets, which are traditionally an important contributor to the island's informal economy, have run numerous initiatives of such kind. A local organisation named Taiwan Food DAO, leveraging the non-fungible token (NFT) functions on global consumer social platform OurSong, launched a Web3 experiment with the Shida Night Market to help food stalls attract more customers. The Ningxia Night Market offers another example of a comprehensive digital overhaul. In 2014, Ningxia Night Market was a step ahead of other major night markets in accepting EasyWallet and soon after, other mobile payment methods such as JKOPay and Alipay. When Alipay was first introduced in Ningxia Night Market in 2015, some food vendors who initially had concerns about having to pay taxes saw an increase in traffic to the participating stores, and were incentivized to register and compete. Increased adoption of digital payment methods means these night market businesses are more receptive to formal business conduct.

A number of digital tools have proven effective in addressing the common challenges faced by many night market runners: the lack of customers, labour, and a profitable business model. To better seize the opportunity brought by burgeoning food delivery apps, the industry-founded Ningxia Night Market Development Association and secured an exclusive agreement with Uber Eats, which resulted in significant expansions of sales channels and consumer reach for food vendors in the area. At the same time, it enhanced business resilience during the pandemic by keeping sales largely unaffected. Other explorations the association made include a virtual-real integrated community service model that could, with the help of e-commerce channels and smart food management technologies, bring the cost down and raise profit by 30 percent.

Platform Economy and Protecting Labour Rights

Chinese Taipei's platform economy has experienced rapid growth for over a decade, with food delivery platforms hiring nearly 88,000 workers as of 2020. The proliferation of platform service providers, including Uber Eats, Foodpanda and Foodomo, has added concrete economic gains for the workers and businesses. Uber Eats, one international brand that has cemented its leading position in Chinese Taipei, contributed US$2.51 billion (NT $81.5 billion) to the local economy in 2023. 70 percent of its delivery drivers, especially those who have family duties to fulfill, identified the flexible working arrangements as their top reason for engaging with the platform. The app is also particularly helpful in driving market reach and revenue for small-scale food and beverage businesses, with 70 percent of delivery partners getting regular pick-up orders from small and family-owned restaurants.

Although recent waves of digitalization have created new job opportunities, such processes also give rise to unprecedented labour conflicts that often require innovative responses. The Digital Economy Association of Taiwan (DEAT) has been an active non-government force in advancing proposals to address the downsides for workers, especially amid the popularization of smart logistics and delivery platforms. One such proposal, formulated through discussions with informal workers, gig economy practitioners, platforms and academics, focused on creating an Independent Contractor Plus (IC+) structure to provide social security to gig workers without jeopardizing their much-valued flexibility. Industry representatives, highlighting that the current informal work arrangement does offer more freedom to workers in terms of when and which platforms to work with, would like to see changes happening in formalizing the offering of insurance products (e.g. usage-based) to gig workers to better suit their needs.

PUBLIC-PRIVATE PARTNERSHIPS

Teaming up for Digital and Financial Empowerment

Chinese Taipei ranks 8th in APEC and 15th globally for the ease of doing businesses. Its governments at different levels work actively with ICT partners to promote digital conduct of informal businesses and foster greater digital inclusion. Taking the island's top agriproduct producer Yunlin county in the western region as an example, in 2021, the county government adopted paperless and contactless transactions at night markets to reduce COVID-19 transmission risks from using cash. The Hi QR Pay app operated by Chunghwa Telecom, the island's largest telecom service provider, was employed to integrate several popular mobile payment options and streamline shop owners' payment collection processes with minimum physical contact. Yunlin's government also procured an e-commerce system for online ordering from physical night market and grocery stores, warranting business recovery in a safe and hassle-free environment when the county was transitioning out of social distancing restrictions. In addition, in partnership with Chunghwa Telecom and a design company named Guolea, the Yunlin government launched a series of online courses on smart transformation to help boost digital literacy among small businesses, so that they can update their marketing strategies and reach additional customers online.

Another major prong of collaborative initiative lies in providing financial and technical support to SMEs to go digital. Through its Cloud Application Service Coaching Plan, the Taipei city government has worked with software firms since 2014 to create incentives for small companies and vendors to adopt cloud-based solutions. Examples of tools include shopping guide apps and systems for financial and customer relations management, which were expected to help business users formalize their operational workflow. Free trials and necessary hardware were also offered to encourage sign-ups. Winning over 200 participants in the first year of launching, a strong collaborative dynamic emerged from the initiative with informal business owners finding value in cloud-based solutions to how they work out accounts and take orders, while looking to further apply cloud technologies in customer engagement and marketing.

On driving financial inclusion, three providers received Chinese Taipei's first virtual banking licenses in 2019 to make new micro-loan and financing options available outside of traditional banks with greater tech-powered efficiency and speed. Initiatives like this could support the informal sector to move away from cash and have more options for loans, encouraging formalization.

THAILAND

OVERVIEW

Thailand has made positive strides in digitalization, with a high internet penetration and significant e-commerce and e-payments sectors. However, its e-government development index and ease of doing business rankings are mid-range within APEC, whilst its informal sector remains one of the largest. Thailand's post-pandemic recovery has been weaker than the global average, leading to calls from the financial services sector for the government to take action to bring the informal economy into the economic system to promote transparency and support the country's digital economy. These indicators suggest that current policies are not fully leveraging digital tools and their potential to promote formalization. To address this, Thailand could enhance its e- government services and introduce stronger incentives for MSMEs to formalize, including better access to credit and simplified taxation, which remain significant hurdles.

Key Statistics

- GDP $514.95 bn USD (2023)
- Population: 71.8 m (2023)
- Informal economy (percent of GDP): 48.4 percent (2020)
- Internet penetration (percent of population): 85.3 percent (2023)
- E-Government Development Index: 55th globally (2022)

The Informal Economy in Context

- Around half of all informal workers are aged 40-59.
- Many of the informal workers possess only a primary level of education.
- More than 55 percent of informal workers are located in the agricultural sector, earning nearly 50 percent less than the formal sector.
- Of the 10-11 million Thais in the tax system, only around 4 million pay taxes as a result of low incomes and the significant presence of the informal economy.

INTRODUCTION

Thailand remains one of the largest economies in Southeast Asia. In 2023, around 52 percent of the nation's total workforce were employed in the informal sector, with a significant portion working in agriculture. Thailand's informal economy is the largest in Southeast Asia (when measured as total percentage of GDP).

From a digital perspective, Thailand's internet penetration rate is 89.5 percent (1Q 2024) and 73 percent of Thai citizens have at least one social media account. The gap in internet access between different regions and demographics has narrowed. In the first quarter of 2024, the lowest use of internet was in the north of Thailand at 82.7 percent, compared to 96.1 percent in Bangkok. Seniors also have relatively lower access to advanced internet features, with 62.4 percent of Thai seniors using basic feature phones that offer limited internet capabilities, according to a 2017 survey. Despite these demographic divides, Thailand currently boasts the highest rate of digital payments in Association of Southeast Asian Nations (ASEAN) with one in every five people actively using some form of cashless payment application. Thailand's digital economy is expected to remain the second largest in Southeast Asia in gross market value (GMV) from 2023-2030. The nation's e-commerce market is also booming. E-commerce is the largest contributor to Thailand's digital economy, with GMV expecting to grow to $30 billion in 2025. The Thai government has acknowledged the value of the digital economy with policy initiatives to promote the digital economy and e-payments in support of their aim of becoming a cashless society. Thailand's total mobile wallet adoption is expected to reach 63 percent by 2025. They have also embraced data as an economic tool, striving to become a data-driven nation.

GOVERNMENT

Promoting Financial Inclusion

In 2015, the Thai government initiated the National e-Payment Master Plan in 2015 which includes five core initiatives: the PromptPay system to facilitate e-payments; expansion of electronic data capture networks and tools to reduce cash dependency; digitization of the tax system; implementation of a state e-payment system for efficient social welfare distribution; and promotion of electronic payment systems. This plan has led to widespread encouragement from both public and private sectors for businesses and consumers to shift from cash towards electronic payment methods and financial services such as digital wallets, credit/debit cards, QR code payments, and bank transfers which are often linked to e-commerce platforms. In 2023, 99.8 percent of total volume payment transactions were done via e-payment channels. According to BOT statistics, the e-payment value in 2024 was USD $15,953 (541,305 billion Baht).

PromptPay was launched in 2017 as a key initiative of this plan and was developed through a public-private partnership between the government (via the Bank of Thailand) and Vocalink. PromptPay allows users to make e-payments using unique recipient identifiers like phone numbers, citizen IDs, or QR codes linked to their bank accounts or digital wallets, allowing quick and simple transfers. It has continuously grown, with registrations reaching 78 million by May 2024.

The government also recently received cabinet approval for an e-wallet scheme which would directly deposit 10,000-baht into "Thang Rat", a government e-wallet app for an estimated 50 million Thai citizens. The money has to be spent on food and consumer products in the recipients' electoral districts and is expected to support 80 percent of SMEs nationwide — despite receiving criticism from Thailand's central bank, academics and opponents. Handing the money through the government app, with the support of blockchain technology will allow the government to directly trace transactions.

These initiatives could support the financial inclusion of informal MSMEs to transition into the formal sector. Many MSMEs currently rely on the informal economy as they can't access proper sources of funding, according to the Federation of Thai SMEs. Digital payments can increase the transparency of records, reduce the amount of cash in society and support MSMEs to build credit to access financing. Enhancing the financial inclusion of MSMEs could also support the government's initiatives to target informal debt, which is estimated to exceed USD $1.4 billion.

Building the Digital Economy

The Thai government has also recognized the vast opportunities of cultivating a digital economy with the 20-year Thailand Digital Economy and Society Development Plan implemented in 2016. The plan aims to digitally transform the nation by 2027 and establish Thailand as a global leader in the digital economy before 2040, with a focus on six core strategies: 1) infrastructure, 2) digital economy, 3) inclusion and equality, 4) digital government, 5) skills and the future of work, and 6) trust. Programs include digital training for government officials, educating local communities on digital skills to generate income, and creating a Digital Economy and Society Development Fund to support research in both the public and private sectors.

To promote digital skill development among its workforce, the Thai government established the Digital Skill Development Academy (DISDA) led by the Ministry of Labour. DISDA operates by providing digital skills programs and courses to Thais who are interested in entering the digital workplace. Similar programs could also be created for those already working in the informal sector and wanting to grow and formalize their business via digitalization.

Developing digital capacity among MSMEs (which made up almost 99.5 percent of all enterprises in Thailand in 2022), increasing national digital literacy through targeted education campaigns, and promoting e-government services can be tools to encourage

formalization. The Digital Thailand Plan also includes the construction of country-wide high-capacity digital infrastructure (particularly the continued improvement of the 5G ecosystem) which will further support internet penetration and bolster the digital economy.

PRIVATE SECTOR

Thailand's Ease of Doing Business ranking is 9th in APEC and 21st globally. Thailand's strength in creating a business-friendly ecosystem is protecting minority investors. The most significant areas for improvement are in making it easier for businesses to register property and to pay taxes — both of which can create barriers for businesses to formalize.

Areas where private sector innovation has added to the digital economy and created digital tools that could enable formalization are in e-commerce and e-wallets. Fintech companies like TrueMoney, headquartered in Bangkok, have played a key role in digital wallet uptake in Thailand — a stepping stone to financial inclusion and the formal sector. Digital wallet usage jumped from 2 percent in 2017 to 23 percent in 2022 and accounted for 25 percent of total e-commerce transaction value. TrueMoney is the most widely used digital wallet with 17 million active users.

E-commerce and social media

Thailand's e-commerce market is made up of major private sector companies like Shopee, Lazada, Central, Hompro, Jib, and Kaidee. However, social media plays the most significant role in promoting e-commerce for MSMEs which make up the large majority of the informal sector. Facebook is particularly influential for marketing to consumers as it is the most widely-used social media platform. Since COVID-19, more MSMEs have turned to digital tools with 86 percent of MSMEs having used digital tools for business purposes in 2021, and more than two-thirds self-taught on how to use the digital tools. This suggests that digital tools such as social media platforms can have wide application in increasing market access for MSMEs, especially as Thailand's economy becomes increasingly more digitalized.

PUBLIC-PRIVATE PARTNERSHIPS

The Platform Economy

The market value for food delivery and ride-hailing businesses in Thailand is expected to rise from the $1.1 billion in 2020 to $7 billion by 2025. Looking at the online food delivery sector specifically, revenues for this sector are projected to grow at 11.3 percent between 2021 and 2024— from $329 million in 2020 to $455 million in 2024. While no official database exists on the number of workers employed in the gig economy, a 2018 report by McKinsey estimated that platform workers were around 30 percent of Thailand's workforce. By 2027, the number of platform employees is expected to reach 35-40 percent of the total workforce. Like in many other economies, this provides opportunities for food businesses to reach more customers through digital means. It can also be a flexible form of work for platform workers, providing more opportunities.

However, like many other gig workers in other countries, those employed in the platform economy lack the bargaining power to demand better pay and better working conditions. Given that gig workers are not formally recognized as employees in Thailand, they have access to only minimal social security schemes. Therefore, the ILO has encouraged the Thai government to consider including gig workers in formal employment to be eligible for benefits and social protection or alternatively, promote existing security schemes for gig workers and regulate platforms to provide the minimum standard of working conditions.

Overall, Thailand's digitalization efforts, such as expanding e-payments and e-government services, could help formalize its large informal sector by increasing transparency and encouraging more businesses to enter the formal economy.

THE UNITED STATES (USA)

OVERVIEW

The United States is a leader in digitalization and technology adoption with high internet, e-payments and e-commerce penetration. The government also has innovative digital initiatives to support SMEs and has worked with the private sector to roll out digital loans and greater internet connectivity. Despite these achievements, more could be done to improve e-government services and make them more user-friendly. Although the United States has the lowest informal economy as a percentage of GDP among APEC economies, digital platform economy workers are increasing rapidly so this trend should be closely monitored, as their integration into the formal economy will be crucial for inclusive growth.

Key Statistics

- GDP $27.36 trn USD (2023)
- Population: 334.95 m (2023)
- Informal economy (percent of GDP): 8.5 percent (2020)
- Internet penetration (percent of population): 91.8 percent (2023)
- E-Government Development Index: 10th globally (2022)

INTRODUCTION

The World Bank estimates that the informal economy in the United States made up 8.5 percent of GDP in 2020. As of 2024, internet penetration stands at 91.8 percent and the US has one of the fastest fixed and mobile broadband speeds in APEC. However, a digital divide remains, caused by lack of affordability and availability as well as some lack of digital literacy in marginalized populations. In terms of e-payments, cash is only used for 16 percent of transactions. According to a 2023 Forbes survey, more than half, (53 percent) of people use digital wallets more often than traditional payment methods,

highlighting a significant shift towards digital payment solutions. E-commerce is also well-established with more than 81 percent of the population shopping online. Increased digital engagement can help drive the shift from informal to formal economic activity as businesses integrate into more structured, traceable platforms.

The Informal Economy in Context

- Studies have found that there is a high prevalence of informal work participation among part-time employees. Caregivers make up a large segment of the informal economy.
- According to the U.S. Bureau of Labor Statistics, 36 percent of U.S. workers are freelancers or independent workers. If the current growth trend continues, over half of the workforce will be part of the gig economy by 2027.

GOVERNMENT

The government doesn't have specific policies that promote formalization, but they have many programs focused on supporting SMEs. The digital initiatives within these programs, such as digital loans and e-government services, indirectly contribute to formalization by encouraging SMEs to engage with formal financial systems and government services.

Procurement

The US government awards over US $500 billion in procurement contracts annually. Government agencies are required to use the System for Award Management (SAM) to advertise all contracts over $25,000. SAM is comprehensive online database which serves as a centralized repository for procurement-related data, including business details, financial information, and certifications. Once businesses register with SAM, they can find and apply for government contracts and participate in set-aside programs designed to increase their chances of winning contracts. For example, the Women-Owned Small Business (WOSB) Program reserves federal contracts specifically for women-owned businesses and aims to allocate at least 5 percent of all federal contracting dollars to WOSBs annually. The system also allows agencies to find and prioritize small businesses for opportunities to meet the federal government's goal of 23 percent of contracts awarded to small businesses. SAM allowed the Biden-Harris Administration to exceed its small business federal contracting goal, awarding 27.2 percent or $154.2 billion in federal contract dollars to small businesses in 2022. Levelling the field for small businesses to access government contracts can encourage them to register and formalize.

E-Government

Although the US is a leader in technology with more than 10.3 percent of GDP stemming from the digital economy, the US is still behind on e-government. Currently, only 2 percent of government forms are digitized. Additionally, 45 percent of government websites are not mobile-friendly, and 60 percent are not fully accessible to users with assistive technologies. This might be contributing to the US's poor sub-score in the ease of doing business rankings on the ease of starting a business (55th globally). Enhancing e-government services will help streamline administrative processes, making it easier for informal businesses and workers to transition into the formal economy by providing more accessible, user-friendly digital platforms. In response to these shortcomings, the government has recently developed a digital framework (Delivering a Digital-First Public Experience) which comprises actions and standards aimed at assisting federal agencies in designing, developing, and delivering modern digital services.

PRIVATE SECTOR

E-wallets

The United States is one of the world's e-payments leaders with companies such as PayPal supporting efficient and secure online transactions. Businesses are rapidly adopting e-payments to keep up with customer demands. Despite this, cash use remains steady at around 20 percent of all payments after the pandemic, and most people still carry cash on a daily basis. Digital forms of payment can encourage formalization by reducing cash usage and supporting e-commerce adoption, which often requires businesses to operate within more formal structures.

Etsy

Etsy is a platform which enables creative small businesses to expand their market reach. Most Etsy sellers are women who run one-person businesses out of their homes. Etsy encourages formalization as it tracks sales and automatically calculates, collects, and remits US sales tax on behalf of sellers in the US. In 2021, Etsy sellers generated $14.3 billion for the U.S. economy, marking a 167 percent increase since 2018, partly driven by the pandemic. They also created 3.8 million jobs, nearly enough to employ the entire population of Los Angeles.

PUBLIC-PRIVATE PARTNERSHIPS

PayPal partnered with the Small Business Administration (SBA) in the Paycheck Protection Program (PPP) to provide critical funding to SMEs underserved by larger banks. The initiative aimed to cover payroll and other essential expenses, with loans being forgivable if specific conditions were met. PayPal, along with Intuit, was among the first FinTech companies to participate, beginning in April 2020. They facilitated numerous small loans, averaging $28,000, significantly lower than the program's average. This support helped digital SMEs reverse negative revenue trends, leading to a 14 percent year-over-year growth post-loan. PayPal SMEs with PPP loans saw a 177 percent increase in total payment volume compared to those without, demonstrating how digital financial inclusion can support business growth and formalization.

Affordable Connectivity Program

Broadband rollout has been primarily market-driven, favouring areas with denser and wealthier populations. Consequently, many regions end up with limited competition, resulting in monopolistic or duopolistic markets. This leads to American consumers facing higher prices compared to those in other countries; studies reveal that they pay 2-3 times more per month than European Union consumers for comparable services. The US government has taken steps to close this affordability gap through FCC's Affordable Connectivity Program which offers monthly discounts on broadband service to eligible households; more than 14 million households had enrolled by 2022. The government has also launched the American Broadband Initiative, aimed at encouraging private investment in broadband infrastructure and services to address connectivity gaps across the United States. This will further support the transition from informal to formal economic activities.

VIET NAM

OVERVIEW

As one of the fastest-growing economies in Southeast Asia, Viet Nam continues to make progress in digitalizing its economy. The country has seen a 30 percent growth in digital technology firms, and the digital economy contributed close to 15 percent to Viet Nam's GDP in the first half of 2023. Through its Digital Transformation Plan and Digital Infrastructure Plan, the state intends to transform the nation's economy, government, and society to fully utilize and benefit from digital advancements.

At the same time, Viet Nam continues to grapple with one of the highest rates of informal employment, with close to 70 percent of all employed workers (roughly 33.6 million) located within informal sectors. While the government has implemented initiatives aimed at reducing informalization through the use of digital tools, particularly within the agricultural sector, it has yet to introduce policy reforms or incentives to encourage formalization in other industries. Vietnam also continues to rank low in the Ease of Doing Business Index (70) below other Southeast Asian countries: Singapore (2), Malaysia (12), and Thailand (21). This low ranking can be attributed to the nation's weak performance in resolving insolvency and a lack of tax payment coordination among ministries.

Key Statistics

- GDP: $429.72 bn USD (2023)
- Population: 98.86 m (2023)
- Informal economy (percent of GDP): 14.4 percent (2020)
- Internet penetration (percent of population): 79.1 (2023)
- E-Government Development Index: 86th globally (2022)

INTRODUCTION

Viet Nam is one of the fastest-growing economies in the world. In 2022, the nation's GDP growth rate reached an impressive 8.0 percent with a population of 98.2 million. However, informal employment still accounts for the majority of workers in Vietnam, with close to 70 percent of those employed being in informal sectors in 2021, totalling 33.6 million informal workers.

In terms of digitalization, around 78 million internet users existed in Viet Nam at the start of 2023, with close to 80 percent of the total population having access to internet. The country's user base on digital platforms witnessed a 46 percent growth compared to 2022. The nation's subscriptions per 100 inhabitants in 2022 stood at 21.7, the second highest in Southeast Asia after Singapore (27.4). The high rate of subscriptions can be attributed to the Vietnamese government's investment in broadband development through the state-owned enterprises Viettel, Vietnam Posts and Telecommunications Group (VNPT) and Mobifone. Additionally, the state sought to enhance digital penetration through policies such as the National Broadband Plan (2016) which stipulated 3G/4G networks to cover 95 percent of residential areas and fixed-line broadband reaching at least 40 percent of households by 2020.

The Informal Economy in Context

- Out of the 33.6 million informal workers recorded in 2021, most were concentrated in the agriculture, forestry, and fishing industries (41 percent), followed by wholesale and retail trade (15 percent) and manufacturing and processing (13 percent).
- More than 2/3 of informal workers were located in rural areas.
- Male workers represented 56 percent of the country's informal labor force, while female workers accounted for 44 percent. At the same time, around 72 percent of all working males were employed informally, as compared to 65 percent of female employees.
- Informal workers often lack extensive professional and technical qualifications. As the level of education and training increases, informal employment decreases for both men and women.

GOVERNMENT

Increasing the use of digital tools among farmers

The Vietnamese state has spearheaded most, if not all, efforts to formalize or implement formalization processes within the informal sector. Some of these formalization initiatives include the Labor Code, Law on Social Insurance 2014, as well as training for rural workers. In 2018, around 20 million workers in the agriculture sector were informal, with close to 90 percent of all Vietnamese farmers operating small family farms with limited access to land and equipment. To address these challenges, the Government of Viet Nam announced in 2021 plans to integrate millions of farmers and small businesses into nationwide e-commerce platforms, aiming to address the limited role of e-commerce in agriculture and other largely informal industries. Through the government program, farmers will be able to obtain and share information and receive IT training to be able to navigate the sites. For example, as of April 2024, 2 million farmer households throughout Viet Nam received training in digital skills, resulting in around 50,000 farm products being listed for sale on various e-commerce platforms.

Despite some initial successes, challenges persist due to limited financial resources, lack of investment in information technology, regulatory barriers, and overall resistance from farmers to new technologies. At the same time, many of the agricultural products listed on e-commerce are goods sold readily throughout Vietnam,

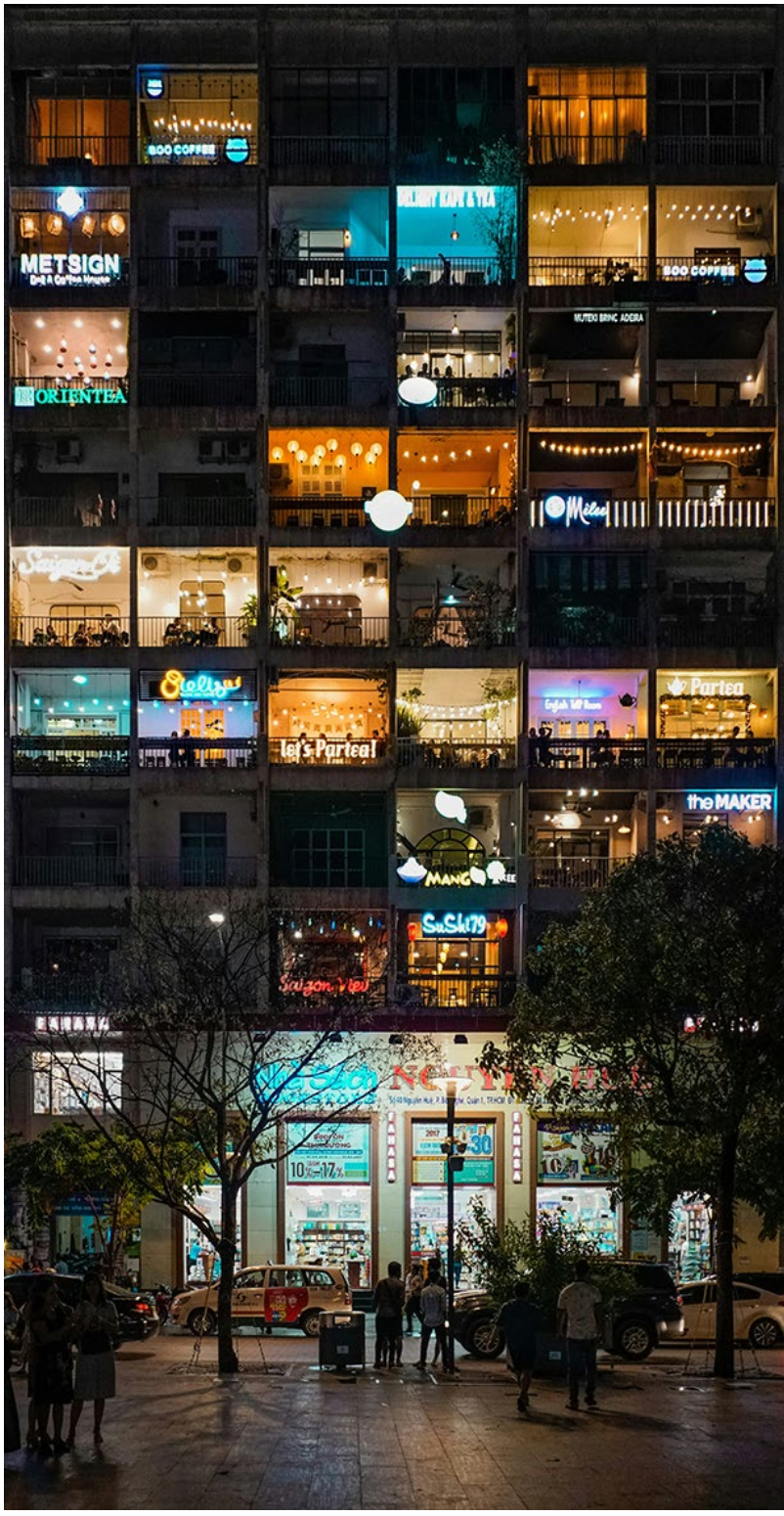
meaning that farmers have struggled to compete with other large-scale distributors. In response to these challenges, the Viet Nam e-Commerce and Digital Economy Agency (IDEA), set by the Ministry of Industry and Trade (MoIT), has begun to connect businesses to other e-commerce platforms while also providing free training sessions to businesses, including local farmers. These combined efforts seek to bridge the gap between traditional informal practices and the digital economy, enhancing formalization while expanding market access and digital capabilities for Viet Nam's agricultural sector.

Fostering the Digital Economy

In 2022, the Vietnamese government introduced the National Strategy for Development of Digital Economy and Digital Society by 2025, which focused on three important pillars: digital government, digital economy, and digital society.

As part of the "digital government", the state developed the National Public Service Portal, which was launched in December 2019. This platform provides public services online, such as enabling the electronic filing of important documents and making cashless payments. By providing more government services online, the state hopes to reduce corruption among public officials, improve transparency, and foster better regulatory compliance, which would, hopefully, encourage greater formalization.

On the other hand, "digital society" has emphasized the need for greater digital integration within society, where paperless and electronic payments become the norm. In 2020, more than 90 percent of Vietnamese citizens still preferred to pay by cash, with the vast majority of the population not owning an online bank account. Thus, one of the key focuses of the government includes fostering digital education, especially among the rural and marginalized communities —namely, the ethnic minorities of Viet Nam —improving access to digital services and infrastructure, increasing financial inclusion, and alleviating barriers to taxation and compliance.



PRIVATE SECTOR

As of late 2022, over 50 percent of Vietnamese companies had established websites, and 35 percent regularly updated their online information. At the same time, 44 percent had leveraged social networks for product and service sales, and a quarter of businesses had begun utilizing e-commerce platforms. Additionally, according to a 2023 survey on the digital readiness of different companies conducted by Hanoi Open University, most businesses were found to be in the introductory stages of digitalization, with private companies showcasing a higher rate of digitalization as compared to state-owned enterprises.

Several local investors have also helped to expand the number of start-ups, focusing on broadening digitalization within Viet Nam. For example, ThinkZone Ventures has invested in 17 local tech-enabled startups ranging from digitizing transportation, food, and delivery services since the company's establishment in 2018. Additionally, VinaCapital has invested in 18 early-stage tech startups through its $100 million platform — VinaCapital — which prioritizes startups to improve existing agriculture, financial services, media, and retail systems.

In contrast, many of the digitalization services and benefits have yet to be extended to the informal employment sector. For instance, a study that examined the opportunities and challenges in implementing digital solutions to plastic waste management in Viet Nam found that several types of online software proved promising for improving and sustainable practices in plastic waste collection. However, the waste sector, comprising primarily informal, unregistered workers, faced barriers in implementing the software due to legal constraints, high investment costs, overall low digital literacy among stakeholders, and a lack of guidelines to promote the digitalization of the waste sector. This study shows that while there is an interest in applying digitalization to informal sectors in Viet Nam, barriers to implementation remain multi-faceted. In addition to investing in digital tools, initiatives must consider the legal status of informal workers who still face barriers in enrolling into state digital programs and training sessions. Additionally, digitalization must be accompanied by regulatory changes that encourage the uptake of digital platforms and tools within informal sectors.

PUBLIC-PRIVATE PARTNERSHIPS

The Platform Economy

According to a 2023 report from the Department of Digital Economy and Digital Society, the number of monthly users on digital platforms through mobile apps in Viet Nam exceeded 500 million. The most widely utilized digital platforms included those developed locally, such as the messaging app "Zalo", the e-wallet application "MoMo", and the web browser "Coc Coc".

Against the backdrop of the growing use of locally developed platforms, local developers have urged the government to play a middle-man role. For example, whenever a new platform is launched, the state can organize events to promote the platform and allow citizens to interact with it in order to generate greater interest. Other developers encourage the government to help domestic platforms in accessing technology, finance, and skilled workers. Additionally, there is a growing sense of urgency for the state to implement a legal framework that encourages continued investment into digital platforms.

This emphasis on digitalization is also linked to the formalization of the economy, as increasing digital adoption can facilitate the transition from informal to formal sectors. By leveraging digital tools and platforms, Viet Nam aims to enhance economic transparency and integration, thus supporting broader formalization efforts.

B: RESEARCH APPROACH

The research used both quantitative and qualitative data to build a comprehensive repository of examples from member economies.

Most data were obtained through open-source materials and interviews with subject matter experts, ABAC business leaders, and informal and formal MSMEs were also used to supplement the analysis. The report's key findings and recommendations are also based on discussions with the ABAC Digital Formalization Advisory group, with insights from APEC's May 2024 Public Private Dialogue on the Transition from the Informal to Formal Economy also taken into consideration.

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