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The GSMA represents the interests of mobile operators worldwide, uniting more than 750 operators with almost 400 companies in the broader mobile ecosystem, including handset and device makers, software companies, equipment providers and internet companies, as well as organizations in adjacent industry sectors. The GSMA also produces the industry-leading MWC events held annually in Barcelona, Los Angeles and Shanghai, as well as the Mobile 360 Series of regional conferences.

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GSMA Mobile Money

The GSMA's Mobile Money programme works to accelerate the development of the mobile money ecosystem for the underserved.

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Investing in rural people

ABOUT IFAD

IFAD is an international financial institution and specialised United Nations agency based in Rome. IFAD invests in the very people most likely to be left behind: poor small-scale producers, women, youth, indigenous peoples and other vulnerable groups. Investing in rural areas promotes prosperity, food security and resilience. Since 1978, IFAD has provided US\$22.4 billion in grants and low-interest loans to projects that have reached an estimated 512 million people.

IFAD's multi-donor Financing Facility for Remittances (FFR) aims to maximise the impact of remittances on development. Through the financing of more than 60 projects in over 40 countries, the FFR is successfully increasing the impact of remittances on development by promoting innovative transfer modalities; supporting financially inclusive mechanisms; enhancing competition; empowering migrants and their families through financial education and inclusion; and encouraging migrant investment and entrepreneurship.

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GSMA

Foreword (IFAD)

In 2019, migrants across the globe sent over US\$548 billion in remittances to their families in low and middle-income countries. Surpassing aid, and in almost all cases, Foreign Direct Investment, one half of these annual flows reach rural areas where they provide important support to household livelihoods.

Specifically, three quarters of monthly remittances put food on the table, pay bills, health expenses and other daily needs.

The remainder is saved or invested in a better future. For rural households this "family aid" delivers an average of 60 per cent of their total income. For millions more, these precious resources are their only family insurance plan. rural families in maximizing the development impact of remittances flows to help them build back better, stronger and more resilient livelihoods to withstand present and future shocks.

Remittances flows have proven to be resistant, but not immune to economic shocks. As a result of the COVID19 crisis, remittances flows have suffered dramatic decline due to service interruptions during lockdowns as well as lost income resulting from rising unemployment among remittances senders. Consequently, total remittances are expected to fall by 7 per cent in 2020, with an additional decline of 7.5 percent in 2021, to reach US\$470 billion in 2021

Declining incomes of migrant families will impact their ability to meet basic needs and hinder economic development of the local economies where they live. At IFAD, we believe it is timely and more relevant than ever to assist migrant rural families in maximizing the development impact of remittances flows to help them build back better, stronger and more resilient livelihoods to withstand present and future shocks.

Beyond the impact of this crisis, a significant shift is occurring in the way migrants send money home. Digital transmission is becoming the growing choice for millions of migrants and remittances families against the traditional cash-based solutions that prevailed over the last three decades. This shift in the remittances ecosystem is expected to drive greater access to goods and services, including financial products that are currently beyond the reach of most rural recipients. What is being termed as "innovation by pandemic," the COVID-19 crisis has greatly stimulated the use of mobile money and has highlighted the vital importance of agent distribution networks as essential services. The uptake of digital remittances is irreversible and holds the potential to bridge the important gaps in digital financial services that many rural remittances receiving families now face.

However, accelerated and scaled up action is needed to meet the United Nations Sustainable Development Goals of safer, cheaper and faster remittances transmission. We must accelerate digitalisation and expand access to basic digital financial products, including savings, credit and insurance products. Towards this end, it is of paramount importance to devise, field test and scale up models that link remittances and digital services.

Over the years, IFAD jointly with the European Commission, the government of Luxembourg and the Kingdom of Spain have significantly invested in pilot projects with the conviction that digital remittances could create a fundamental bridge between these regular flows and financial opportunities for remittance- receiving families

The results of the Valyou project showcase how innovative approaches can provide an avenue for migrants in Malaysia to maximize their support to families back in Pakistan and Bangladesh. Adopting a targeted digital and community-based communication strategy, the Valyou project boosted the uptake of formal digital remittances to migrant workers in rural areas. A blockchain solution facilitated the outreach to underserved rural markets, effectively bridging remittances with financial inclusion in addition to curbing cash-based informal remittances. This project proved the value of multi-stakeholder collaboration. Public authorities, regulators and business innovators from different sectors worked in tandem to bring forward sustainable solutions that can maximize the development impact of family remittances.



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GSMA

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Abbreviations

AML/CFT	Anti-money laundering/combating the financing of terrorism
COVID-19	Coronavirus disease 2019
EU	European Union
FINTECH	Financial technology
FFR	Financing Facility for Remittances
GCM	Global Compact for Safe, Orderly and Regular Migration
GSMA	Groupe Speciale Mobile Association
IFAD	International Fund for Agricultural Development
ILO	International Labour Organization
IOM	International Organization for Migration
KYC	Know your customer
LMIC	Low- and lower-middle-income country
NGO	Non-governmental organisation
RSP	Remittance service provider
SDGs	Sustainable Development Goals
UN	United Nations
WB	The World Bank



Executive Summary

Remittance flows are a lifeline for 800 million individuals in the developing world. 200 million migrants overall, half of whom are women, send money back home to loved ones. These funds are often used to support essential aspects of people's lives: sending children to school, covering vital medical expenses, launching new businesses, and building resilience against financial shock, to name just a few.

With COVID-19 set to reduce the amount migrant workers can send home this year by nearly US\$50 billion,¹ it is now more critical than ever to find solutions which make remittances more accessible and affordable. Many migrants were already among marginalised and vulnerable groups facing financial hardship before the pandemic struck, and this status has been exacerbated by recent shutdowns and business closures. Thankfully, digitisation has a great deal to offer migrant workers and their families in building financial resilience – among the most notable digital tools being mobile money, in which transfers are made using mobile devices.

Between 2017 and 2020, Malaysian mobile money provider Valyou piloted an app-based international remittance service, tailored to migrant workers from Pakistan and Bangladesh, using grant funding from the Financing Facility for Remittances (FFR) at the International Fund for Agricultural Development (IFAD). The pilot yielded important outcomes, particularly relevant to formalising remittances, reducing their costs and expanding their reach. The pilot also reinforced both the role of mobile money as a digital lifeline in the era of COVID-19, and the significance of agent distribution networks vas essential services. The pilot also generated key insights into the application of blockchain in cross-border remittances, and opportunities to further support low-income and rural families through with life-enhancing adjacent financial services.

To capture these insights, the GSMA and IFAD undertook a case study of Valyou's mobile money-enabled remittance solution through a learning partnership which focused primarily on the pilot's three-year grant period.

^{1.} World Bank Group and Knomad (2020). COVID-19 Crisis through a migration lens. Migration and Development Brief 33



The principal learnings can be summarised as follows:

• Formalising international remittances flows:

Mobile money makes sending remittances more convenient, particularly for migrants working and living in remote areas. This is largely due to agent distribution networks that compensate for the absence of remittance service providers (RSPs) and bank branches in rural locations.

Leveraging their pre-existing relationship with the local telco Digi, and partnering with mom-and-pop shops and established grocery stores, Valyou was able to set up a targeted physical distribution network, providing an

accessible alternative to illicit remittance

services in Malaysia known as hawala.

- Attracting customers who previously relied on informal hawala services reinforces the role of mobile money in helping to formalise remittance flows, which is intrinsically linked to the mandate of many central banks, such as Bank Negara. The ability to receive remittances directly into a mobile money account also helped to increase convenience and reduce opportunity costs for recipient families in Pakistan and Bangladesh, especially those residing in remote and rural areas. The indirect financial gains from reducing travel costs and time away from income-generating activities played a significant role in securing customers who previously relied on informal channels.
- · Reducing the cost of sending international remittances: In order to reduce the cost of sending remittances, Valyou focused on reducing fixed business costs, and migrating from a cash-heavy and over-the-counter (OTC) model in which services are conducted through an agent's account on behalf of the customer. Using grant funding from IFAD, Valyou invested in changing consumer behaviour and incentivising a new way to remit funds through the mobile money app. Over the three-year partnership period with IFAD Valyou managed to reduce OTC usage threefold and kept the cost of sending remittances at rates significantly lower than the 3 per cent target of SDG 10.c. The migration from OTC proved especially timely and relevant in the context of COVID-19. While the World Bank anticipates a 10.5 per cent reduction in cross-border remittances from the East Asia and Pacific region as a result of the crisis,2 Valyou's renewed business model is demonstrating resilience and agility.
- Efficiency gains via blockchain: In 2019 Valyou introduced a blockchain-enabled remittance service between Malaysia and Pakistan. This integration demonstrated that international remittances via mobile money solutions can be further augmented by blockchain's decentralised approach to identity, which introduced a range of benefits including enhanced security and traceability, operational efficiencies, faster settlement, and instantly competitive foreign exchange rates. These benefits, which can be directly passed on to consumers, are not available through conventional cash-based remittance services or hawala.

^{2.} World Bank Group and Knomad (2020). COVID-19 Crisis through a migration lens. Migration and Development Brief 33

- GSMA
- Opportunities to expand financial inclusion by linking remittances to adjacent financial services: The development of more sophisticated mobile money-enabled services such as credit, savings and insurance has been motivated significantly by opportunities to build financial health and resilience in underserved communities, including low-income and rural-based households. The pilot revealed opportunities to increase awareness of the value that these services can offer underserved households. Especially in the context of COVID-19, but also more broadly, the pilot found a growing appetite for micro-insurance services specific to health - a clear opportunity given the global insurance service gap.
- Using mobile money channels for international remittances can drive financial inclusion for women by usefully, sustainably and affordably increasing their access to funds and financial services. Jeta Digital channels, especially mobile money, have various distinctive characteristics that make them particularly appealing to women compared to alternatives. Pakistan and Bangladesh both currently have considerable gender gaps in financial inclusion, but throughout the grant period more women received remittances via mobile money in both countries enabling them to join the digital financial ecosystem and access a broad and

sophisticated range of digital financial services

beyond remittances.

• Expanding adoption among female recipients

and contributing to financial inclusion of women:

• Role of regulation: Regulation plays an important role both in accelerating the benefits of international remittances via mobile money, and unlocking the opportunity for adjacent services linked to them. In the case of this pilot, the process involved complying with two sets of regulations across different geographies, with consequent delays in introducing the product, which can pose a challenge for short pilot projects. During the peak periods of COVID-19 Malaysia's Movement Control Order (MCO) deemed grocery stores and mom-and-pop shops, which underpin a substantial share of Valyou's agent network, essential. This allowed migrants to send critical remittances back home, and also allowed on-boarding of new customers during the crisis. Declaring remittance service providers and mobile money agents as essential services is critical in times of crisis.7



- 3. Naghavi, N. (2019). Mobile money: Competing with informal channels to accelerate the digitisation of remittances.
- 4. UNCDF (2017). Remittances as a driver of women's financial inclusion.
- 5. Scharwatt. C. (2019). Mobile money: A product of choice for women to send and receive remittances.
- 6. El-Zoghbi, M. (2018). Measuring women's financial inclusion: The 2017 Findex story.
- 7. GSMA (2020). Mobile money recommendations to central banks in response to COVID-19.

SCALING INTERNATIONAL REMITTANCES AND FOSTERING FINANCIAL RESILIENCE THROUGH VALYOU IN MALAYSIA

Migration and remittances in Malaysia





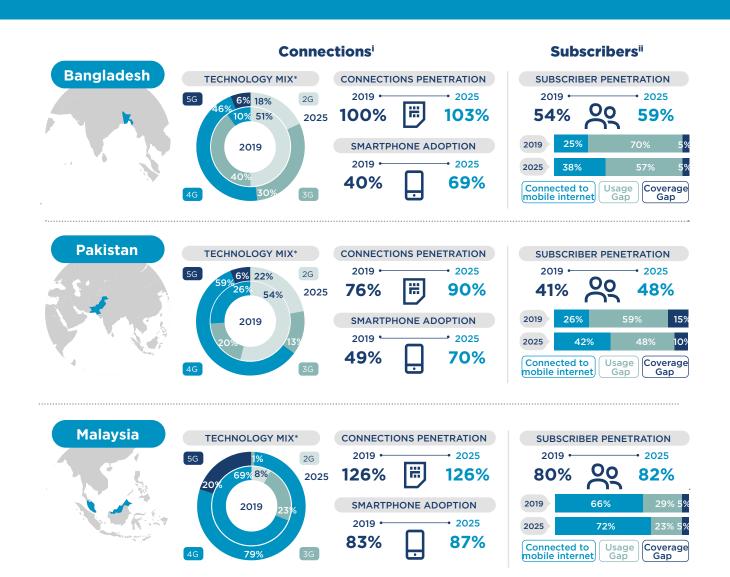








Digitisation levels in Bangladesh, Malaysia and Pakistan



- Unique SIM cards. (or phone numbers, where SIM cards are not used), excluding licensed cellular IoT, that a mobile network has
 registered during the period of analysis. The number of subscribers differs from the number of connections because a unique user can
 have multiple connections.
- ii. An example can be found here: Mobile_Money_Competing_with_informal_channels_to_accelerate_the_digitisation_of_ remittances.pdf

Pilot Outcomes

FORMALISED INTERNATIONAL REMITTANCES FLOWS

Built a targeted physical distribution network of

Mobile money agents have

Mobile money agents have



to informal channels in

MALAYSIA



offering extended alternative

MORE REACH MORE REACH BANK BRANCHES MORE REACH THAN ATMS

MORE REACH **BANK BRANCHES**

IN BANGLADESH

IN PAKISTAN

REDUCED COSTS FOR SENDING INTERNATIONAL REMITTANCES

IFAD funding helped drive scale & maintain costs of sending

The cost of remitting US\$250 - US\$300 through Valyou

at significantly **LOWER RATES** THAN THE

TARGET OF SDG 10.c.

STANDS AT AND IS HALF

of what is currently being offered through other channels in MALAYSIA

EXPANDED ADOPTION AMONG FEMALE RECIPIENTS

Increased the share of women receiving remittances via mobile money

BANGLADESH

INCREASE PAKISTAN

EXPANDED FINANCIAL INCLUSION BEYOND ACCESS AND USAGE

> **Built financial resilience for low-income** and rural-based households through

Enhanced security, traceability and operational efficiencies

EFFICIENCY GAINS DUE TO IMPLEMENTED BLOCKCHAIN SOLUTION

linking mobile money-enabled remittances to adjacent services

ACTIVE **MICRO-INSURANCE**

POLICIES IN PAKISTAN



FASTER SETTLEMENT AND COMPETITIVE FOREIGN EXCHANGE RATES

GSMA

01 Introduction

International remittances – the portion of migrant workers' earnings sent home to their families – are a unique and powerful source of private capital and external financing. In 2019, international remittances to low- and lower-middle countries (LMICs) reached a record US\$554 billion, standing at more than three times the size of Official Development Assistance (ODA), and for the first time surpassing the value of Foreign Direct Investment (FDI).8

Migrant workers are key contributors both to the places where they live and to their communities back home, driving substantive change in around 40 sending countries and more than 125 receiving countries globally.⁹ Funds sent home by migrants also contribute to achieving the United Nations' Sustainable Development Goals (SDGs)¹⁰ of reduced poverty, better health and nutrition, education, improved housing and sanitation, entrepreneurship, financial inclusion and reduced inequality, and the ability to anticipate and mitigate financial risks and shocks.

To build on these benefits, the international community has rallied behind efforts to decrease transfer costs significantly, and maximise the impact of remittances on wider development goals. The International Fund for Agricultural Development (IFAD) has been the main conduit for convening public and private sector actors on issues of common interest in relation to remittances and migrant investment.

Through its Financing Facility for Remittances (FFR), IFAD works to maximise the contribution of migrants to development, promoting the impact of their remittances on financial inclusion, and conducting migrant/diaspora engagement for rural investment in communities of origin.

In parallel, reducing the cost of remittances has become an important policy objective, and stakeholders across the board have made commitments to achieving the SDG target of reducing these to a global average of three per cent by 2030, and eliminating corridors with costs of more than five per cent.

The crucial contribution of migrant workers has also been recognised in the Global Compact for Safe, Orderly and Regular Migration (GCM), adopted in December 2018. Objective 20 of GCM in particular promotes faster, safer and cheaper remittance transfers and financial inclusion of migrants.¹¹





This mobilisation of philanthropic and state efforts to maximise the impact of remittances, and to lower their cost, is concurrent with the emergence of new technology-based commercial solutions. These solutions are stimulating competition, thereby lowering prices and accelerating financial inclusion, and offering effective alternatives to incumbent methods such as bricks-and-mortar cash-to-cash services and informal channels. Consumers meanwhile, including both migrant workers and their families back home, are being provided with options better suited to their day-to-day lives and needs.

Mobile money is therefore emerging as an attractive and effective channel for international remittances. In 2019, the industry reached a major milestone as the number of mobile money accounts surpassed one billion globally.12 Originally a product found in only a few select markets, mobile money is now a global phenomenon, recording astonishing growth in emerging markets and reaching a wide range of customers. Mobile money-enabled international remittances have flourished as the industry has become more integrated with international financial system players. In fact, in 2019 the total value of mobile money-enabled international remittances reached US\$7.3 billion, compared to US\$5.5 billion the previous year.13

Data from GSMA's latest Global Adoption Survey also shows that mobile money is catering to the need of low-income migrants who tend to send low-value transactions on a frequent basis.¹⁴ Mobile money is proving itself as a means to

extend the reach, security and convenience of international remittances, while also increasing their affordability by reducing their cost, in turn accelerating achievement of SDG 10.c.¹⁵

The social contracts that bind migrants to their families typically make remittances resilient to external shocks; the 2008 financial crisis for instance only led to a modest 5.2 per cent decline in remittances in 2009. 16

However, COVID-19 is a unique threat to remittances, the economic and health impacts of which are unprecedented. Migrant workers and their families have not been spared from the dire consequences of rising infection rates, lockdowns, and economic downturn.

The World Bank now predicts the steepest decline of international remittance in recent history, projecting a drop of 14 per cent in remittance flows to LMICs by 2021. Yet amidst this gradual and prolonged decline in volume, remittances are expected to grow in importance and become an even more critical source of external financing for LMICs, as the fall in FDI is expected to be nearly 32 per cent in 2020.¹⁸

The benefits of mobile money in facilitating international remittances are especially pronounced in the context of the global pandemic. Reduced economic activity heightens the urgency for lifeline support to families back home, while the cost of sending remittances becomes a compounded burden for migrant workers. Limits on movement further reinforce the need for digital alternatives which avoid the need for travel and in-person contact.

^{12.} GSMA (2019). State of the Industry Report on Mobile Money.

^{13.} Ibid

^{14.} The average value of international transfers sent using mobile money is relatively low (US\$80 in June 2019) compared to the average size of international transfers across all channels (around US\$500). Remittance senders use mobile money to transfer funds at least twice a month.

^{15.} Naghavi, N. (2019). Mobile money: Competing with informal channels to accelerate the digitisation of remittances.



Against this backdrop, this case study unpacks insights and outcomes gathered through launching and scaling a mobile money-enabled remittance service based on a learning partnership between the GSMA and IFAD. In 2017, IFAD grant-funded Valyou to pilot and expand a mobile money-enabled international remittance offering to serve migrant workers in Malaysia originally from Pakistan and Bangladesh. A snapshot of the grant partnership is captured in Figure 1.

Figure 1

Snapshot of Valyou's journey and current status

Grant partnership between IFAD and Valyou (2017-2020)



^{16.} Asare, J., et al. (2020). Remittances in the time of COVID-19 Challenges and opportunities for growth in developing countries. IGC.

^{17.} World Bank Group and Knomad (2020). COVID-19 Crisis through a migration lens. Migration and Development Brief 33.

^{18.} Ibid

This report assesses operational and strategic opportunities and challenges identified over the course of the three-year grant partnership. Chief amongst these is an assessment of the pilot's success in encouraging change in consumer behaviour from using cash and visiting physical branches to adopting the mobile money app. These findings proved especially timely in the context of COVID-19.

Beyond charting the role of mobile money in digitising and formalising remittances, the report also highlights learnings from linking international remittances from Malaysia to relevant sophisticated financial services such as micro-loans and insurance for the families of migrant workers in recipient countries. Important lessons are also considered around the role of regulation, and information gaps in facilitating more sophisticated mobile financial services.

The role of blockchain technology in enhancing international remittances and introducing efficiencies in the process is also thoroughly assessed. As the pilot between Valyou and IFAD nears completion, this case study outlines takeaways relevant to the international development community involved in work concerning international remittances. It also offers important insights for mobile money providers exploring international remittances as an anchor use case in Asia and beyond.





02 Background

2.1 Migration and remittances in Malaysia

There are over two million documented migrant workers in Malaysia today, with an estimated two million more thought to be undocumented, bringing the total to around 4 million.¹⁹

Malaysia hosts economic migrants from across the world, including those from South Asia,²⁰ the Middle East and Africa. The majority of migrants in Malaysia come from Indonesia, Nepal, Bangladesh, India and Myanmar. Collectively, migrant workers represent 15 per cent of Malaysia's workforce, making it the fourth largest hosting country in East Asia and the Pacific.²¹

Malaysia is among the top 15 remittance-sending countries worldwide, and formal outward remittances in Malaysia have experienced a dramatic growth of 60 per cent over the last decade.

In 2018, outbound remittance flows from Malaysia were estimated at US\$10.8 billion, representing 3 per cent of the country's GDP.²²

Valyou piloted its mobile money remittance product with migrant workers from Pakistan and Bangladesh as an initial entry point due the size of the segment population and their remittance patterns.²³ In 2018, US\$89 million in international remittances was remitted to Pakistan from Malaysia, while US\$710 million was sent back to Bangladesh. Overall, global inbound remittances to Pakistan and Bangladesh represent 7.9 per cent and 5.8 per cent of national GDP respectively.²⁴

^{19.} IOM. Country Profile - Malaysia.

^{20.} Migrant workers from South Asia are increasingly finding employment in neighbouring countries such as Malaysia, Thailand, Singapore and South Korea, which now represents 60 per cent of the foreign labour force in the region. Increased job prospects near their countries of origin allows migrants to remain closer to home, although it also means lower values of money sent back when compared to the total proportion of remittances to Asia and the Pacific from migrants based in Gulf States (32 per cent), Europe (12 per cent) and North America (26 per cent); IFAD. (2018),); IFAD. (2018). RemitScope: Remittance markets and opportunities in Asia and the Pacific.

^{21.} Endo, I et al. (2017), World Bank Blogs. Three things to know about migrant workers and remittances in Malaysia.

^{22.} Knomad (2020). Outward remittance flows 2018.

^{23.} At 28 per cent, migrants from Bangladesh are the second largest population of foreign workers in Malaysia, just after those from Indonesia, who represent 40 per cent of the segment.

^{24.} The World Bank. Migration Remittances Data - Inflows



2.2

Formal remittance service gap in Malaysia

Migrant workers in Malaysia are generally contracted in physically demanding sectors of the economy such as manufacturing, construction and plantations spread across city centres or in semi-urban and rural areas.^{25/26}

To send international remittances, migrant workers living and working in remote areas travel long distances to reach bank branches, money transfer operators, and cash pick-up points. This is often because setting up bricks-and-mortar branches in rural areas involves higher fixed costs for both RSPs and banks. Migrant workers therefore carry cash, sometimes traveling as far as 30km to access a physical branch – this poses significant security risks,²⁷ and is also time consuming and inconvenient, taking away time from income-generating or social activities.

For these reasons, migrant workers in semi-urban and rural cities are more likely to rely on informal channels known as hawala to remit funds home.²⁸ The lack of fixed costs and absence of a formal treasury management system allows hawala channels to operate at sending fees of close to zero, making the services ostensibly attractive.²⁹

Additionally, for rural Malaysia's sizeable population of undocumented migrant workers, hawala affords anonymity through lenience on otherwise legal and necessary KYC requirements at formal access points.³⁰ Valyou's partnership with IFAD sought to tackle the rural service gap directly, offering an alternative to hawala services that aligns with the government's commitments to curb informal remittances and digitise cash. The outcomes of this approach are considered in Section 4.

Figure 2



- 25. World Bank (2020). Using remittance transaction data for timely estimation of the foreign worker population in Malaysia.
- 26. Endo, I et al. (2017). Three things to know about migrant workers and remittances in Malaysia. World Bank Blogs.
- 27. Endo, I et al. (2017). Three things to know about migrant workers and remittances in Malaysia. World Bank Blogs.
- 28. May be defined as money transmitters, particularly with ties to specific geographic regions or ethnic communities, which arrange for transfer and receipt of funds or equivalent value and settle through trade, cash, and net settlement over a long period of time. FATF The role of Hawala and other similar service providers in money laundering and terrorist financing, 2013.
- 29. The World Bank (2017). The role of Hawala and other similar service providers in money laundering and terrorist financing, 2013.
- 30. Endo, I et al. (2017). The role of Hawala and other similar service providers in money laundering and terrorist financing, 2013.

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2.3

Potential for mobile money adoption

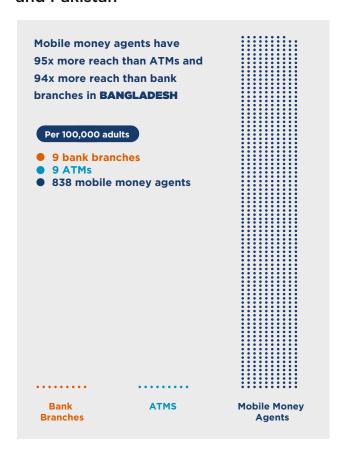
Two overarching and interrelated dynamics created the opportunity for adoption of a mobile money service for international remittances from Malaysia to Pakistan and Bangladesh.

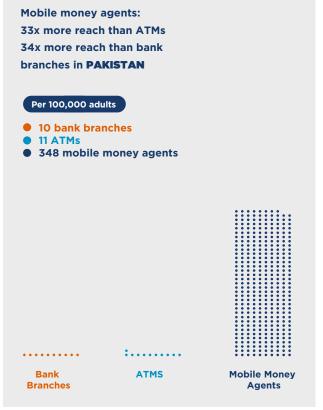
Firstly, Malaysia has achieved impressive levels of digitisation. Smartphone adoption in Malaysia currently stands at 83 per cent, and 61 per cent of the population subscribe to mobile internet,³¹ indicating opportunity for mass-market access to app-based mobile money products.

Secondly, in both Pakistan and Bangladesh, mobile money is widely accessible through agent networks that are far-reaching and significantly exceed both bank branches and ATM access points, as outlined in Figure 3. Despite the reach of agent networks, according to Findex 2017 data, both countries are among the seven economies that are home to nearly half the world's unbanked population.³²

Figure 3

Reach of mobile money agents, bank branches and ATMs in Bangladesh and Pakistan 33/34





^{31.} GSMA (2020). The Mobile Economy: Asia Pacific 2020.

^{32.} World Bank Group (2018). The Global Findex Database 2017

^{33.} State Bank of Pakistan (2019). Branchless Banking Statistics (Oct-Dec).

^{34.} Central Bank of Bangladesh (2019). e-Banking and e-Commerce Statistics Unit - MFS Account.

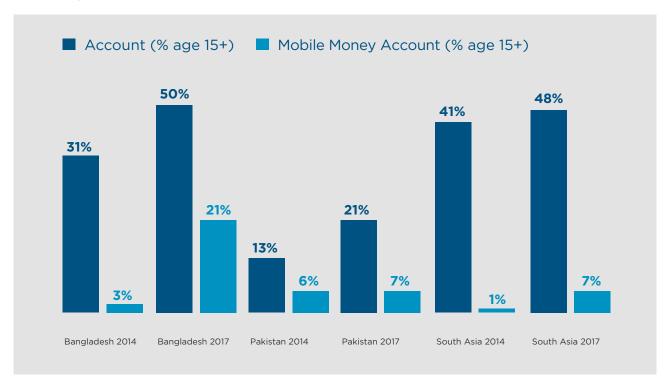
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The growth of agent networks highlights the role mobile money can play in serving as a gateway to financial inclusion for the unbanked and underserved. In 2016, for example, more adults in Bangladesh accessed mobile money services (40 per cent) than adults who accessed banks (19 per cent).³⁵ Additionally, amidst the financial services gap in Bangladesh, mobile money

account ownership leapt from 2.7 per cent in 2014 to 21.2 per cent in 2017 (See Figure 4) – a rise of over 600 per cent.³⁶ While bank account ownership also increased during the same period, it did so by a far lower 40 per cent, demonstrating the catalytic potential of mobile in accelerating financial inclusion.

Figure 4

Standings in financial inclusion (Findex 2017)³⁷



Inward remittances from Valyou Malaysia are accessible via mobile money accounts and on all types of device (i.e. basic/feature phones and smartphones). This enables low-income and/or rural recipients to access funds without using mobile internet through the Unstructured Supplementary Service Data (USSD) channel.³⁸ Some of the major barriers to adoption of mobile

internet among these demographics include the cost of mobile data and smartphone ownership (despite the price dropping significantly) as well as low digital literacy. USSD has enabled mobile money providers to reach almost anyone and has proven instrumental in markets such as Pakistan and Bangladesh with lower rates of smartphone adoption and mobile internet penetration.³⁹

^{35.} Finclusion (2016). Financial Inclusion Insights. Wave 4 Report FII Tracker Survey.

^{36.} World Bank Group (2018). The Little Data Handbook on Financial Inclusion.

^{37.} World Bank Group (2018). The Global Findex Database 2017

^{38.} Patented in 1994, the USSD technology, or Unstructured Supplementary Service Data, is an interactive, menu-based technology, which is supported on most mobile devices. The technology has been used in emerging markets for more than a decade and is sometimes considered to be the 'ancestor' of mobile apps; GSMA (2018). The Mobile Economy: Asia Pacific 2020

How Valyou is pioneering change

In 2016 Telenor Group, the holding company of local telco Digi, acquired an existing Malaysian-based licensed money services business called Prabhu Money Transfer, and secured an e-money license from Bank Negara Malaysia.

That same year, Prabhu was rebranded as Valyou.

The app-based mobile money solution conceived as part of the grant partnership with IFAD was launched, starting with an integration with Easypaisa in Pakistan, followed by bKash in Bangladesh.

Valyou is the first non-bank RSP to offer an app-based mobile money solution in Malaysia, leading account-to-account international remittances via mobile money. The service has gained significant traction: by the end of 2019, US\$202 million was transferred collectively to Pakistan and Bangladesh in remittances through Valyou's mobile money channel. In both corridors the average remittance value tends to be below US\$300, which is lower than the average size of international transfers across all channels globally (around US\$500).40 Migrant workers also tend to transfer funds between six and seven times per year via Valyou, a testament to the service's ability to meet the needs of those who find it convenient to make low-value transactions on a frequent basis.

Beyond the remittance corridors covered by the grant partnership, Valyou has scaled international mobile money remittances to Nepal and Cambodia, with plans to launch a further corridor to Myanmar soon. The features of Valyou's mobile money app also include peer-to-peer (P2P) transfers, airtime top-up, and bill payments. Customers can also cash in and out into the app using Valyou's physical network distribution.

In 2018, Valyou was awarded two RemTECH Awards for technological innovation in the remittance space, including for the enhanced user experience achieved by its cash-in/out business model. The awards from the International Money Transfer Conference were in large part due to milestones reached within the three-year partnership with IFAD.

Merchantrade, a leading Malaysian digital money services provider and e-money issuer, recently acquired a 100 per cent stake in Valyou from Telenor Group. This acquisition was inspired by the

^{39.} In Pakistan and Bangladesh, smartphone adoption stands at 49 and 42 per cent, respectively. Meanwhile, mobile internet penetration stands at 26 and 25 per cent respectively; GSMA (2020). The Mobile Economy: Asia Pacific 2020

^{40.} World Bank. Remittance price comparison databases - Minimum requirements and overall policy strategy.

^{41.} Details can be found here: https://remtech.org/valyou-sdn-bhd/

^{42.} Digital News Asia (2020). Malaysia's Merchantrade acquires fintech player, Valyou from Telenor Group



the impressive growth and scale of Valyou, which has to date served over 1 million customers through its online app-based channels and physical network (which comprises of twenty-two Valyou-branded branches, twenty-three international remittance agents and 1,200 cash-in cash-out merchants).⁴²

The acquisition demonstrates the efficient and effective use of the developmental capital granted by IFAD to scale the business and achieve commercial sustainability. This section focuses on effective strategies adopted by Valyou that proved fundamental in the success and scale of the service.

3.1 Approach to OTC migration

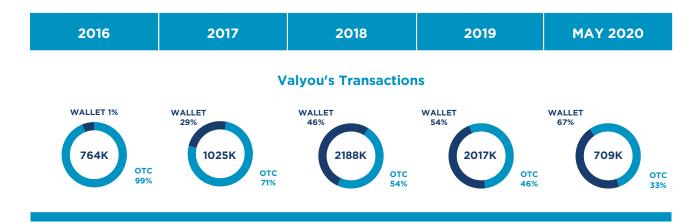
Valyou continues to offer over-the-counter (OTC)⁴³ international remittances – OTC services are offered by twenty-two Valyou-branded branches and twenty-three international remittance agent outlets in Malaysia. The physical OTC branches are part of Valyou's initial core business, and reflect a fixed-cost model. The bricks-and-mortar units largely serve city centres, where there is a high population density of migrant workers, offering an alternative to non-bank RSPs.

Through the IFAD grant and as part of the pilot, Valyou also focused on identifying the business case to reach migrant workers in semi-urban and rural areas. These areas suffer from a pronounced formal service gap, as most banks and non-bank RSPs are reluctant to invest in building physical access points in areas with smaller migrant populations. This was mainly due to assumptions that capital expenditure (CAPEX) requirements would dwarf transaction volumes.

Throughout the three-year partnership period with IFAD, Valyou reached over 262,000 registered mobile money accounts. OTC usage has reduced nearly three times over since 2016, from 99 per cent in that year, to 33 per cent in 2020 (see Figure 5).

Figure 5

Valyou's migration from OTC to mobile money



^{43.} A transaction is considered OTC when it is conducted by an agent's account on behalf of the customer. Mireya Almazán and Lynn Eisenhart (2015). OTC & Mobile Money: Making Sense of the Data.



Two interrelated factors are at the heart of Valyou's rapid and successful transition from a cash-heavy and OTC model to an offering based on mobile money:

- using its pre-existing relationship with Digi to set up a targeted physical distribution network;
- partnering with mom-and-pop shops and established grocery stores to extend the reach of the service.

3.1.1 Strategic and Comprehensive Distribution Network

Valyou used a two-pronged approach to on-board cash-in cash-out merchants, ultimately implementing a far-reaching distribution network tailored to migrant workers throughout Malaysia. This includes:

- Digi's airtime top-up agents: Digi hosts over 11 million mobile subscribers and has a robust network of 15,000 airtime top-up agents. Digi is the preferred mobile network operator amongst migrant workers, largely for being the first to provide pre-paid cards suited to their needs. To meet the specific needs of migrant communities, Valyou used its relationship with Digi (which was also owned, in part, by Telenor) to identify the airtime top-up agents most commonly frequented by workers from Pakistan and Bangladesh. Through analysis of Digi's telco data, Valyou subsequently on-boarded and trained the most relevant Digi airtime top-up agents as cash-in cash-out merchants for its mobile money international remittance service, ultimately recruiting over 1,000 merchants in the areas most populated by migrants.
- Independent cash-in cash-out merchants: In addition to Digi airtime top-up agents, Valyou extended its distribution footprint by cultivating relationships with independent cash-in cash-out merchants in semi-urban and rural areas in

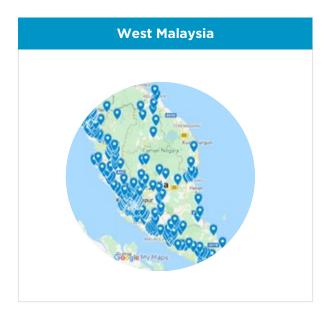
Malaysia, with a focus on sites frequented by migrant workers from Pakistan and Bangladesh. These merchants include a mix of mom-and-pop shops and established convenience and grocery stores. They are responsible for performing cash-in and cash-out, educating and assisting customers to use the mobile money app for sending money home.

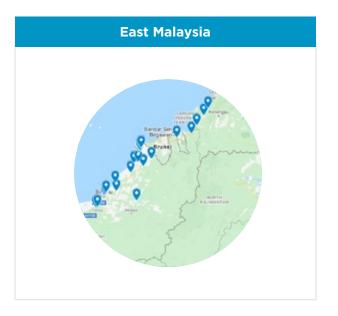
To encourage the participation of the merchants, Valyou provided commission-based incentives for every assisted remittance transaction. As the mobile money-enabled service is gaining prominence, and as the grant partnership with IFAD nears completion, commissions for cash-in cash-out transactions will continue, and these have become a strong and consistent revenue stream for the shops.



Figure 6

Valyou's cash-in cash-out merchants across Malaysia (October 2020)





During peak outbreaks of COVID-19, many of the independent cash-in cash-out merchants who were grocery stores and mom-and-pop shops offered essential services, and were therefore allowed to operate during Malaysia's Movement Control Order

(MCO), whereas OTC branches and airtime top-up agents were considered non-essential and were closed. Valyou's cash-in cash-out merchants model has therefore played an important role in enabling international remittances during COVID-19 - this is detailed in Box 1.



Box 1

Delivering essential remittances during times of crisis

During the COVID-19 crisis mobile network operators in Malaysia collectively aligned with the government's initiative to ensure consumers stay connected and supported. The country implemented an Essential Goods & Services Sector (MCO) and, during this period, operators provided free internet (1GB per day), zero-rated calls to key hotline and emergency numbers, and daily public health information through SMS broadcasts.⁴⁴

Digi supplemented these efforts by offering an additional 1GB of data for postpaid subscribers and reducing or removing the cost of accessing digital education applications, including Classruum and JomStudi. During the crisis, Valyou's OTC business declined by 72 per cent as a result of restrictions posed by the MCO. However, the company weathered the emergency largely due to its merchant partnerships with mom-and-pop shops as 60 per cent of Valyou's agents were deemed as offering essential services under the MCO. This allowed customers to cash-in money into their account and for remittances via mobile money to remain steady. Additionally, to help minimise the spread of the virus through physical contact, Valyou started offering digital on-boarding for new customers through video calls facilitated by its staff. As a result new customer on-boarding continued during this period (Table 1).

Table 1

New customer registration for Valyou's mobile money service during COVID-19

New Customer Registration						
Monthly Average	March	April	May	June		
7.5K	6.2K	7.7K	7.2K	6.4K		

Figure 7

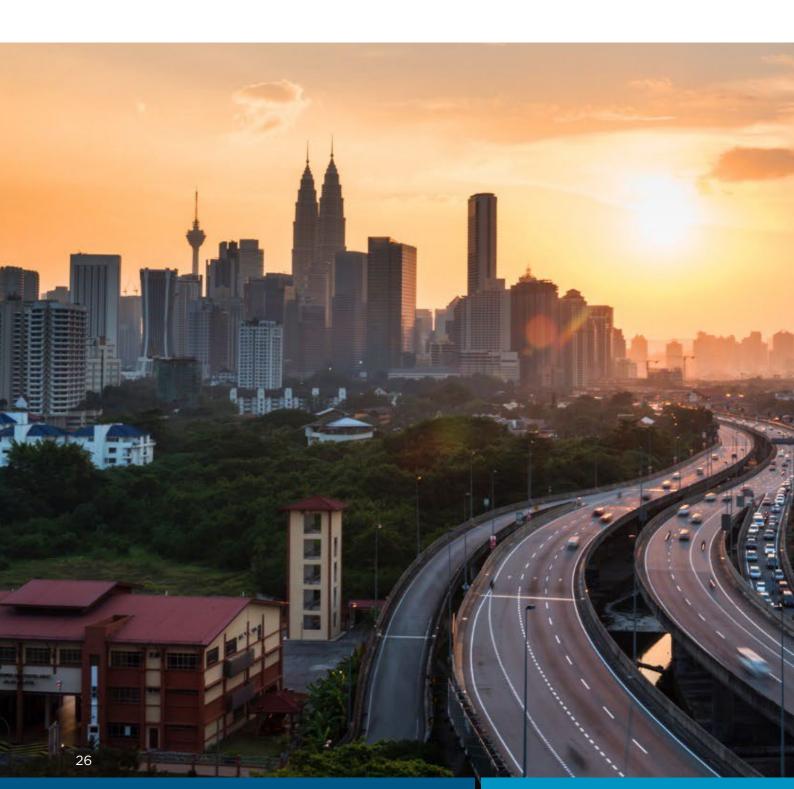
The effects of COVID-19 on Valyou's mobile money app and OTC transactions



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Valyou also weathered the crisis because the mobile money channel offered an alternative to in-person OTC transactions, which meant migrant customers could rely on their phones to reach their families back home. Mobile money-enabled remittances saw a smaller decline of 34 per cent, which was largely due to reduced economic activity (Figure 7).

The MCO period was subsequently followed by the Eid period in all three countries. The transactions increased industry-wide, however the value and volumes were not at par to previous years due to economic hardship.



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3.2

Targeted digital and community-based marketing strategy

Malaysia's migrant workers often learn about remittance channels and options through word of mouth. 46 Valyou pursued a community-based approach, developing promotional videos in local languages (Urdu and Bengali) for platforms including Google and Facebook, which yielded higher engagement among migrants in Malaysia. 47

Valyou also undertook various community education events, including Iftar dinners and targeted information sessions at factories and construction areas where migrants live and work. This includes urban, semi-urban and rural cites within Selangor, Johor, Perak, Negeri Sembilan, Pahang, and Kuala Lumpur, reaching over 6,300 people.

3.3

Valyou's affiliation with Telenor Group

Telenor has deep experience with mobile financial services in several other Asian countries including Pakistan, Bangladesh and Myanmar. The group has approximately 20 million active customers across all the markets, and a broad service portfolio coveringservices such as simple money transfers to digital payments and banking.⁴⁸

To rapidly implement and scale its mobile money offering for remittances, Valyou made strategic use of relationships and partnerships connected to Telenor Group.

As part of the grant partnership with IFAD, Valyou first launched the remittance service in Pakistan with Easypaisa, the first and leading mobile money provider in Pakistan, launched by Telenor Group in 2009. Valyou is also in the process of launching the international account-to-account mobile money

service between Malaysia and Myanmar, connecting to Wave Money, a joint venture between Telenor and Yoma Bank.

Beyond scaling the network of partners on the receiving side, being part of Telenor group provided access to a diverse pool of talent and institutional knowledge – Telenor's staff has a longstanding track record of launching and scaling mobile money services. Valyou leveraged their expertise in all aspects of its business operation and even hired successful staff from outside Malaysia to become part of the new team.

^{46.} Martinez, J. (2017), World Bank Group. Financial Inclusion in Malaysia: Distilling Lessons for Other Countries

^{47.} See example here. https://www.youtube.com/watch?v=6tr0FxkM1qc

^{48.} Details can be found here: https://remtech.org/valyou-sdn-bhd/



04

Linking mobile remittances to adjacent services

As an extension of the mobile money remittance product tailored to migrant workers in Malaysia, Valyou sought to link life-enhancing adjacent financial services that cater to recipient families in both Pakistan and Bangladesh.

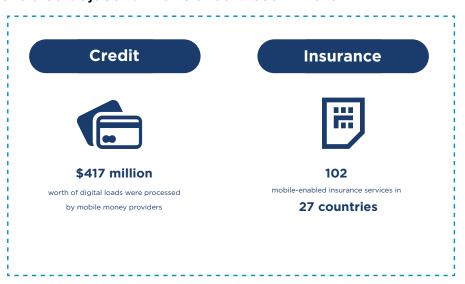
The logic stems from a growing opportunity to better serve low-income households and rural families in remittance receiving countries, many of whom rely on informal means for savings and loans and are often uninsured. Mobile-enabled adjacent financial services – such as savings, credit and insurance – extend financial

inclusion beyond access and usage by facilitating a pathway to prosperity. Insights from the GSMA's 2019 Global Adoption Survey highlight the reach of sophisticated mobile financial services such as credit, savings and insurance, a snapshot of which is provided in Figure 8.

Figure 8

State of mobile money-enabled adjacent financial services in 2019⁴⁹

\$241 million was transferred to mobile money-enabled savings accounts



During the grant partnership with IFAD Valyou identified one micro-credit and one micro-insurance product as potential adjacent services suitable for linking with migrant remittances from Malaysia



During the grant partnership with IFAD, Valyou identified two adjacent services that could be linked to remittances from Malaysia to serve recipient families: a micro-credit offering and a micro-insurance product with Webdoc Health, both through the Easypaisa mobile money service in Pakistan. Having identified these options, Valyou piloted and subsequently discontinued the micro-credit product. Valyou successfully trialled

the micro-insurance service in Pakistan, which will carry forward following completion of the grant.

The acquisition demonstrates the efficient and effective use of the developmental capital granted by IFAD to scale the business and achieve commercial sustainability. This section focuses on effective strategies adopted by Valyou that proved fundamental in the success and scale of the service.

4.1 Valyou's approach and product iteration process

Valyou first trialled a micro-credit product in Pakistan. The product is an existing offering available to Easypaisa mobile money account users and was proactively extended to customers receiving remittances. The offer to remittance recipients included waiving the administrative procedures and credibility assessments required for new mobile loan applications. While the micro-credit offering was marketed in both Malaysia and Pakistan, it received limited uptake. In response, Valyou commissioned a comprehensive qualitative market assessment to identify contextually-relevant financial service requirements for remittance recipients in Pakistan.

The market assessment consisted of key informant interviews with remittance recipients in the Buner and Khushab regions, from where the majority of Malaysia's Pakistani migrants originate. The qualitative assessment included male respondents from various age groups, including students and entrepreneurs in sales, agriculture and garment industries. The assessment also included a mixed sample of feature phone and smartphone users. Despite intentional efforts from EasyPaisa and Valyou teams to include female remittance

recipients in the interview sample, women ultimately responded unfavourably to participation. This was mainly attributed to cultural norms, including tendencies for males to lead household decision-making on financial services.

Overall, the market assessment reinforced the preference and reliance on cash-based, informal means for savings and loans, and an overarching unfamiliarity with insurance products. This was due to a general lack of awareness about suitable formal alternatives and perspectives innately linked to community and cultural beliefs. These insights ultimately informed Valyou's decision to discontinue the micro-credit product and prioritise its micro-insurance offerings during the grant partnership period.



Box 2

Micro-credit product linked to remittances in Pakistan: launched in 2018 and is now discontinued

Easypaisa extended its existing Nano Loan micro-credit product, offered through Telenor Microfinance Bank, to qualifying remittance recipients. Eligibility for the Nano Loan was based on a credit profile generated from transaction data on Easypaisa mobile money accounts and broader Telenor mobile network information (airtime, voice, SMS and data). The customer journey for eligible remittance recipients is illustrated in Figure 9. Facilitating access to the digital loan was a deliberate incentive to further encourage migrants in Malaysia to send money home through Valyou, particularly since the generated credit profile waived the requirement for a guarantor for remittance recipients.

The Nano Loan offered short-term credit over a period of seven and fourteen days, and covered loan amounts starting from PKR850 (US\$6.50) up to PKR10,000 (US\$76). Loan fees differed for each customer, and were based on individual credit profiles. The Nano Loan required a single repayment at the end of the loan term, and offered customers with a good repayment history access to additional credit.

The Nano Loan was marketed in both Malaysia and Pakistan. In the former, Valyou leveraged its agent networks, who displayed and provided printed promotional materials to inform migrant workers on the product and how it works. In Pakistan, marketing text messages were sent to remittance recipients through their Easypaisa accounts, which was supplemented by direct phone calls.

Due to both the limited uptake and insights from the market assessment, the micro-credit product was discontinued. Specifically, the market assessment revealed perceived and actual concerns around the repayment schedules for loans and reputational risks linked with a general inability to repay. An inability to repay was exceptionally daunting in instances where debt collectors could make door-knocking visits visible to a borrower's neighbours and their broader community. Additional factors contributing to a low appetite for mobile-enabled loans included cultural norms against paying or receiving interest and the need for a bank account.



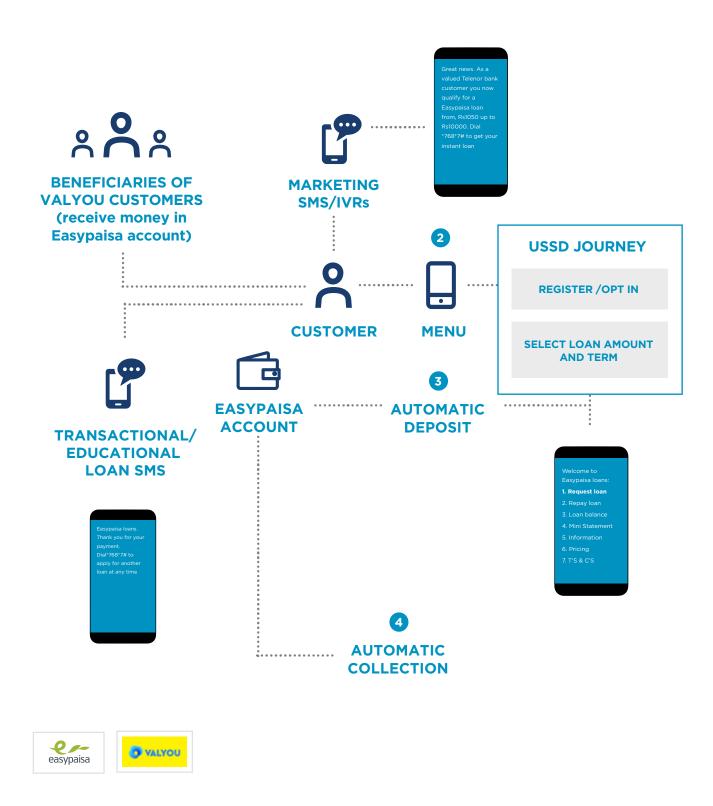






Figure 9

Easypaisa's Nano Loan customer journey for eligible remittance recipients





Box 3

Microinsurance product linked to remittances in Pakistan: launched in 2019 and will resume

The WebDoc Health insurance, underwritten by United Bank Limited, encompasses a comprehensive package including five monthly tele-doctor consultations, in-patient coverage up to PKR5000 (US\$30) per month or PKR60,000 (US\$358) annually, and reduced waiting times.

For remittance recipients, WebDoc Health insurance is free for one year. Following the first free year, remittance recipients have the option to opt-in through their mobile money accounts for continued access to the product for an annual fee of PKR 365 (US\$2.35).

The service was largely promoted through marketing and branding materials displayed at merchant shops in Malaysia, and cash pick-up locations in Pakistan.

Overall, uptake of the insurance product was impressive, with 951 active policies to date. The COVID-19 crisis reinforced the relevance of this service amongst migrant workers and their families. The first wave of renewals, set for October 2020, will provide an indication of the product's longevity and sustainability.











05

The role of blockchain

In 2019, Valyou integrated blockchain technology into the mobile money solution in partnership with Ant Financial and Standard Chartered. The blockchain integration initially focused on the Malaysia-Pakistan corridor, as the remittance product through Easypaisa was more advanced at the time.⁵⁰

Having successfully benefited from the added technology, Valyou is underway with plans to integrate the blockchain solution in the Malaysia-Bangladesh corridor with bKash. 51/52

The blockchain solution enables real-time and round-the-clock remittance transactions while also complying with local regulations and screening requirements for both remittance senders and receivers. The blockchain is a distributed ledger maintained by a consortium of nodes, where every node maintains a copy of the ledger and no single node can tamper with the ledger.

When a migrant in Malaysia sends money, Valyou captures the funds using the Valyou Remittance System. The transaction is then processed onward through to the Alipay Blockchain Network where appropriate account confirmations and sanctions screenings are performed.

Once the remittance transaction is confirmed on the Alipay Blockchain Network, Valyou simultaneously receives a notification and the transaction is sent to an Easypaisa mobile money account to terminate. This process is captured in Figure 10.







Based on Valyou's data, migrant workers largely perform mobile money remittances and related cash-in transactions between 19:00 and 21:00

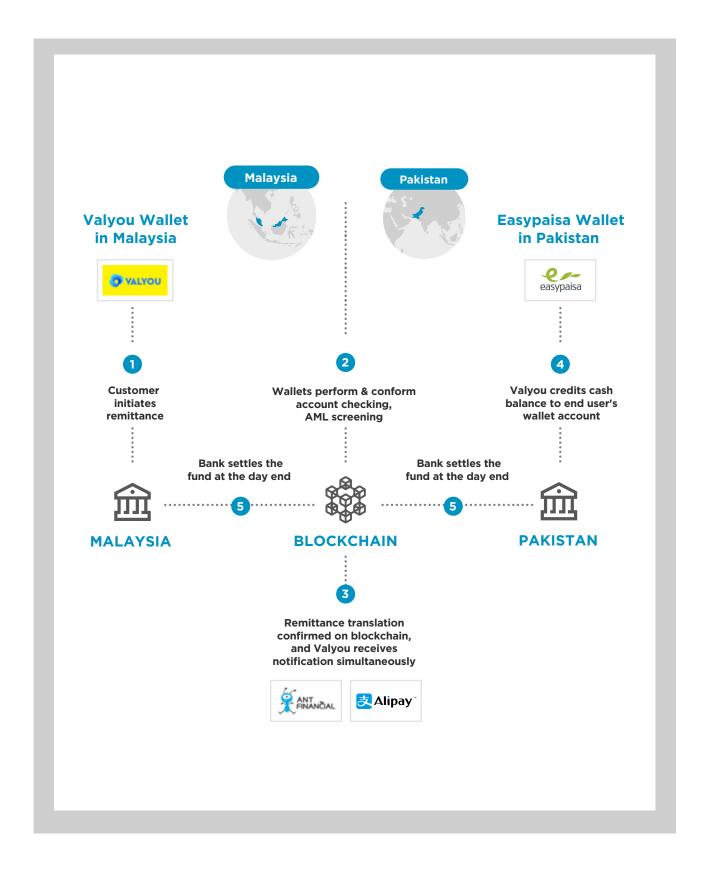
^{51.} Interview with Valyou, 2020.

^{52.} Naji, Lamia (2020) GMSA. Tracking the journey towards mobile money interoperability. Emerging evidence from six markets: Tanzania, Pakistan, Madagascar, Ghana, Jordan and Uganda.



Figure 10

Schematic of the blockhain-enabled remittance solution



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There is an ongoing rise of new blockchain-based solutions across industries and geographies, and use cases that serve development purposes are emerging in tandem. A recent example is the facilitation of secure digital cash transfers and merchant payments for refugees in humanitarian settings.⁵³ In the context of international remittances, blockchain is linked to enhancing cross-border payments by expediting settlement⁵⁴ to enable faster and more secure transactions.⁵⁵

For Valyou, the Alipay blockchain integration yields four main areas of benefit. These include backend operational efficiencies; direct settlement and instantly competitive foreign exchange rates, which are interdependent; and opportunities for network effects through increased partnerships. These gains are unpacked below and are also captured in Figure 5.

Operational efficiencies: Alipay's Blockchain Network integrates Valyou's mobile money remittance service onto a platform with enhanced security features where data loss is prevented, and information on the transaction cannot be altered by any party. This boosts both security and traceability, particularly as conventional remittance transactions involve several correspondent banks that can be difficult to access and follow. In this way, blockchain is reducing reliance on intermediaries and correspondent banks, unlocking clear gains in efficiency and transparency.

Direct settlement and competitive foreign
exchange rates: Standard Chartered is Ant
Financials' core partner bank for blockchain-enabled

international remittances.⁵⁶ As the core partner bank, Standard Chartered acts as a settlement bank between the two licensed mobile money providers in Malaysia and Pakistan. When a remittance transaction is made from Malaysia, Standard Chartered provides instant foreign exchange rates and liquidity to enable real-time fund transfers between providers. This will introduce efficiencies compared to the conventional approach to pre-funding and settlement between financial institutions.

This reduces risks from dollar volatility by mitigating against the usual fluctuations incurred. It takes about 24 hours for a remittance transaction to be settled from Malaysia to Pakistan, and negative implications in terms of a higher foreign exchange rate and a lower remittance margins are circumvented.

Network effects: The partnership with Ant Financial allows Valyou to have concurrent and timely access to other companies joining the Alipay Blockchain network. Due to seamless backend integration processes, Valyou can directly access and easily integrate with other companies within a few weeks, a relatively short timeframe. In future, this can relieve the administrative burden of negotiating several bilateral agreements with financial institutions. Leveraging Ant Financial's network widens Valyou's access to a broader pool of regional and international financial service providers and consumers in an optimal way.

^{53.} GSMA (2017). Blockchain for development

^{54.} Baruri, P. (2016). Blockchain powered financial inclusion. World Bank and Cognizant.

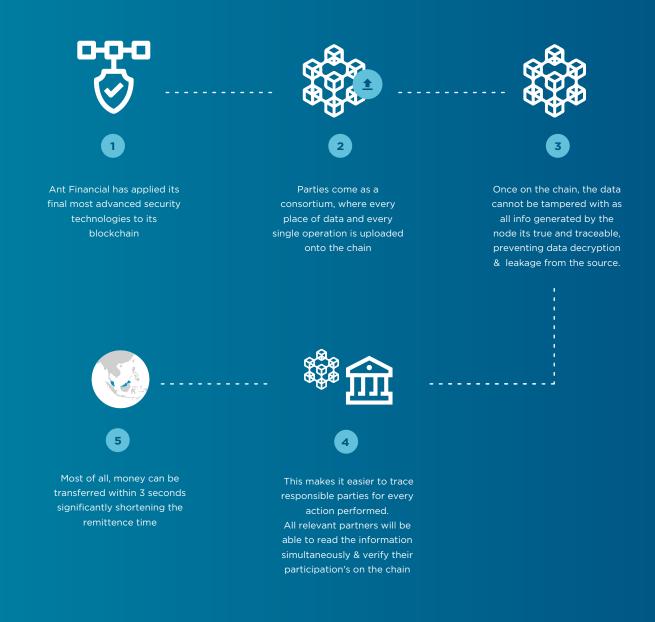
^{55.} Rodima-Taylor, D and Grimes, W. (2019). Review of International Political Economy. Vol. 26, No. 5, 839–862. International remittance rails as infrastructures: embeddedness, innovation and financial access in developing economies.

^{56.} Standard Chartered (2018). We have been appointed by Ant Financial as core partner bank for its new blockchain cross-border remittance service.



Figure 11

Valyou's partnership with Alipay Connect Blockchain delivers a seamless remittance solution through five steps



Evidently, blockchain is supplementing mobile money remittances in a manner not possible for cash-based hawala and OTC services. In future, while recognising that blockchain is not a panacea for international mobile money remittances, Valyou anticipates that the technology can support regulators by unlocking innovations in compliance and oversight.

Emerging benefits from the pilot

Valyou's international remittance solution is unlocking a wide range of benefits for migrant workers, their families back home, and governments on both sides. These benefits are both tangible and intangible, and comprise the following five factors:

· Lowered costs for sending international remittances: As part of the pilot's objective on making formal remittances more affordable and competitive, Valyou used grant funding from IFAD to lower the cost of sending remittances. Valyou recognised the need to incentivise a new way to remit funds through mobile money instead of OTC, which was familiar and comfortable for migrant workers. The incentive was reflected through an initial 100 per cent cost reduction for remittances to Pakistan which concluded in April 2020, and a 50 per cent reduction for remittances sent to Bangladesh. These reductions were driven by a need to encourage change in consumer behaviour and migrate from the use of cash and OTC to mobile money.

As the pilot nears completion, Valyou will phase in transaction fees for existing customers, though at a lower market rate due to sustainable volumes For example, the cost of remitting US\$250 to US\$300 through Valyou is half of what is currently offered through other channels

in Malaysia. IFAD funding has therefore helped Valyou to drive scale and keep the cost of sending remittances significantly under the 3 per cent target of SDG 10.c.

• Increased convenience and reduced opportunity cost for migrant workers: The introduction of a mobile solution to remittance coupled with a wide distribution network enables migrant workers to send money much more conveniently, saving them time and travel. This allows for more productive and meaningful engagements, including income-generating activities and social commitments.

Valyou merchants are much closer in proximity to migrants based in semi-urban and rural areas. Most of these merchants are open until late at night, unlike conventional branches that maintain standard business hours and close in the early evening.⁵⁷ Meanwhile, mobile transactions can be completed at any time.

^{57.} Based on Valyou's data, migrant workers largely perform mobile money remittances and related cash-in transactions between 19:00 and 21:00.

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- · Capturing the informal market for international remittances: Given the convenience for migrant workers noted above, Valyou is directly capturing customers who previously relied on informal hawala services in Malaysia's plantation and rural-based regions. This effectively expands the reach of formal remittance services in the country's hard-to-reach areas. In doing so, it increases the proportion of migrant workers remitting funds through a regulated financial service provider, which widens the traceability of domestic and cross-border transactions. This underscores the role of mobile money in formalising remittance flows, which is directly aligned with the mandate of many central banks such as Bank Negara. While it is difficult to quantify the exact reduction in hawala services, notable evidence is emerging from the Malaysia and Bangladesh corridor. For instance, insights from customer interviews suggest that Bangladeshi tradesmen residing in Malaysia who were previously relying on indirect and informal transfers for purchase of goods for their convenience stores are using the Valyou mobile money app instead.
- Increased convenience and reduced opportunity cost for recipient families in Pakistan and Bangladesh: By using a mobile money solution, remittance recipients gain an alternative to in-person cash collections. Cash collections typically require public transportation to a cash pick-up location within a specific time window. This involves the financial cost of transport, as well as inconvenience and time lost. Additionally, due to cultural norms in the receiving corridors, including in rural areas, for some demographics such as women it can be difficult to travel long distances to collect remittances.⁵⁸

- Increased accessibility in the receiving corridors: Valyou's mobile money remittance solution leverages the agent networks of established mobile money providers in Pakistan and Bangladesh, namely Easypaisa and bKash. In both Pakistan and Bangladesh, mobile money agent networks are far-reaching, and this is underscored by significant agent distribution networks, which exceed both bank branch and ATM access points, as outlined in Figure 1. In Pakistan, the reach of mobile money agents is further extended by interoperability offered through the 1Link.⁵⁹
- Expanding adoption among female recipients: One of the key objectives of the pilot was to increase female participation in the offered product and in turn contribute to the financial inclusion of women in the receiving countries. Bangladesh and Pakistan are markets with large gender gaps in financial inclusion, standing at 29 and 28 percentage points respectively. While the pilot did not manage to reverse these trends in Pakistan, where uptake of the product is still higher among men (71 per cent) than women, promising results emerged in Bangladesh, where more than 50 per cent of customers adopting the product are women. Overall, the pilot resulted in an increased share of women receiving remittances via mobile money accounts in both countries throughout the grant partnership period. In Bangladesh, the percentage of women directly receiving remittances increased by 7 per cent, while in Pakistan the increase was 3 per cent.

^{58.} Interview with Valyou 2020

^{59.} Naji, Lamia (2020). Tracking the journey towards mobile money interoperability. Emerging evidence from six markets: Tracking the journey towards mobile money interoperability. Emerging evidence from six markets: Tanzania, Pakistan, Madagascar, Ghana, Jordan and Uganda

^{60.} El-Zoghbi, M. (2018). Measuring women's financial inclusion: The 2017 Findex story.

07 Future considerations

As Valyou pursues next steps beyond the grant partnership with IFAD, the following areas merit future consideration for financial service providers more broadly, as well as stakeholders involved in the international remittance space, including regulators and the development community:

• Bridging the information and access gap to sophisticated financial services: To successfully extend adjacent services to underserved communities, products must be contextually relevant, and this includes an appreciation for cross-cultural preferences and traditions. Valyou's research on remittance-receiving households in Pakistan identified specific nuances that can be better integrated to ensure the relevance of the product. The research also noted that, despite consumer demand, remittance recipients avoided sophisticated services due to information gaps and a general lack of awareness of formal financial alternatives.

Given the potential for adjacent services such as credit and insurance to enhance the financial well-being of rural and low-income households, it will be necessary to promote consumer awareness campaigns to bridge both the knowledge and access gap. The success of the WebDoc Health

micro-insurance product in Pakistan, which was especially favoured due to COVID-19, highlights how consumers can benefit from a new product upon appreciating the benefits.

 Cultivating an enabling regulatory environment which is fit for purpose: During the pilot, regulation played an important role in advancing the impact of Valyou's mobile money offering. Many regulators are facing a dilemma where they have to embrace technological innovations in favour of financial inclusion and greater development goals while balancing risks. Given that typically the process of enacting regulation takes a long time, awaiting legislation to embrace innovation risks the possibility of instead stifling that innovation, slowing market dynamism and thus undermining access. In the case of this pilot, enabling regulation played an instrumental role in the success of the product but since the process involved complying with two sets of regulations

across different geographies, there were consequent delays in introducing the product. This represents a challenge for short pilot projects such as this one. During the peak periods of COVID-19, grocery shops and merchants representing a significant share of Valyou's cash-in cash-out merchant network were deemed to offer essential services during Malaysia's MCO. allowing them to support migrant workers in sending critical remittances back home. Declaring mobile money agents as designated essential service providers ensures continued access to cash-in cash-out facilities. 61 To achieve more with mobile money solutions for international remittances, there is room to enhance other relevant regulation, including those pertinent to remote on-boarding of customers. Currently, e-KYC requires migrant workers to have a bank account, which is a barrier to the unbanked. In general, and especially during crisis periods, regulators should consider more proportionate AML/CFT criteria that balance the appropriate risk measures with the profile of migrant workers. Moreover, given that mobile-enabled adjacent services are proving to expand the financial arsenal and resilience of underserved communities, there is an opportunity to introduce procedures that assess and approve products more readily. While cross-border mobile financial services present genuine complexities, the promise of digital technology - particularly with respect to scale and reach - should be met with flexible and agile due diligence processes which expedite decision-making on product approvals.

• Exploring how innovative technology can further advance mobile money solutions for international remittances: Integration of blockchain is yielding various organisational benefits for both Valyou and Easypaisa. These benefits include operational efficiencies, faster settlement, enhanced foreign exchange rates and scaled network effects (See section 5 for more details). As blockchain and mobile money-enabled international remittance use cases develop, there will likely be opportunities for additional gains in the realms of user experience and compliance. These benefits are encouraging and should be further explored.

• Strengthening linkages to gender:

While the overall share of women receiving remittances digitally in Pakistan and Bangladesh has increased during the pilot period, there is still a considerable gender gap in the uptake of the digital product in Pakistan. Additionally, despite intentional efforts, Valyou and Easypaisa experienced challenges recruiting women in the interview sample for the market assessment in Pakistan, noting cultural norms as a bottleneck.

Digital channels and in particular mobile money have a number of distinctive characteristics that make them particularly appealing to women compared to other alternatives and can help accelerate women's financial inclusion and economic empowerment. Emerging evidence on the impact of COVID-19 suggests that women's economic and productive lives will be disproportionately affected by the crisis. 63/63 Collectively, these realities present a potent opportunity to perform a deep-dive into how financial service providers can better engage women in emerging markets, to more effectively tailor offerings to their needs and narrow the gender gap for a host of products and services.

^{61.} GSMA (2020). Mobile money recommendations to central banks in response to COVID-19.

^{62.} Lindsey, D. (2020) GSMA. Blog. Why COVID-19 has increased the urgency to reach women with mobile technology.

^{63.} UN Women (2020). From Insights to Action: Gender Equality in the wake of COVID-19.

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08 Conclusion

International remittances increasingly constitute a lifeline for many in the developing world.

Migrant workers pursue employment beyond their countries of origin to remit funds to their families back home and, in so doing, extend an important financial safety net for basic expenses such as food, housing, education and medical care.

The COVID-19 pandemic is reinforcing the need for emergency funds as the economic downturn and reduced mobility increases pressures on migrant workers and their families. Digital channels, thankfully, can help making remittances cheaper and more efficient. This crisis brings great momentum and political goodwill to the move towards digitisation in remittances.

Over the course of a three-year grant partnership supported by IFAD, Valyou expanded a mobile money-enabled international remittance service tailored to migrant workers in Malaysia who originate from Pakistan and Bangladesh. In doing so, Valyou shifted its business model from 99 per cent cash and OTC usage to 35 per cent, reflecting 262,000 new unique mobile money accounts on its platform to date.

Through wide cash-in cash-out merchant distribution networks and a targeted digital and community-based communication strategy, Valyou extended the reach of formal, digital remittances to migrant workers in rural areas previously reliant on informal and illicit hawala services. This supports efforts by the Malaysian government to formalise remittance outflows.

The mobile money-enabled international remittance solution offered by Valyou highlights the unique role played by technology, in accelerating the digitisation and formalisation of international remittance. Firstly in terms of enabling an effective OTC migration and digitising cash, and secondly by introducing organisational efficiencies through blockchain. Technology is therefore making international remittances faster and more secure.

As Valyou's three-year partnership with IFAD nears completion, the company is set to scale its mobile money-enabled offering to additional corridors. In the latter half of 2020, Valyou will also integrate the Alipay blockchain technology with bKash. Finally, Valyou will continue to offer a micro-insurance product to remittance receiving households in Pakistan.

GSMA

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Regulation calibrated to facilitate market entry for non-traditional providers has been crucial in the success of Valyou's remittances product.

Balancing innovation and risks in favour of financial inclusion will expedite product innovation and launch, with positive results for consumers. Although the main concern of

regulators is always the safety and soundness of financial systems, willingness to explore new routes or to use new tools to enhance traditional financial activities will result in greater financial inclusion and developmental gains.

The rapid uptake, continuity, and regional expansion of Valyou's mobile money international remittance offering emphasises the relevance of digital technology to last-mile migrant workers and their families back home.

As international remittances continue to play a crucial role in the development of emerging markets and fast-growing economies, this case study offers important insights for mobile money providers exploring international remittances as an anchor use case in Asia and beyond.





09 Glossary

Term	Definition	Source
Access point	Location where end users can send or receive remittance transfers. An access point can be physical (e.g., bank branch, post office, shop) or virtual (e.g., website, telephone).	CPMI-WB
Agent	An entity that captures or distributes remittance transfers on behalf of a remittance service provider. "Capturing" means receiving the money and instructions from the sender. "Disbursing" means giving the money to the receiver.	CPMI-WB
Anti-money laundering & combating the financing of terrorism (AML/CFT) policies	Money laundering is the process of concealing the illicit origin of the monetary proceeds of crimes. Terrorist financing is the collection or the provision of funds for terrorist purposes. An effective anti-money laundering/counter financing of terrorism framework must therefore address both risk issues: it must prevent, detect and punish illegal funds entering the financial system and the funding of terrorist individuals, organizations and/or activities.	IMF
Correspondent banking	Correspondent banking is the provision of banking services by one bank (the "correspondent bank") to another bank (the "respondent bank"). Large international banks typically act as correspondents for thousands of other banks around the world. Respondent banks may be provided with a wide range of services, including cash management (e.g., interest-bearing accounts in a variety of currencies), international wire transfers, cheque clearing, payable-through accounts and foreign exchange services.	FATF
De-risking	The phenomenon of financial institutions terminating or restricting business relationships with clients or categories of clients in order to avoid rather than manage risk in line with the FATF's risk-based approach.	FATF
Diaspora	Migrants or descendants of migrants whose identity and sense of belonging, either real or symbolic, have been shaped by their migration experience and background. They maintain links with their homelands and to each other, based on a shared sense of history, identity, or mutual experiences in the destination country.	ІОМ
Financial inclusion	The effective access to basic financial services, such as payments, savings (including current accounts), credit and insurance provided by regulated financial institutions to all working-age adults. Effective access is defined as a "convenient and responsible service delivery, at a cost affordable to the customer and sustainable for the provider, enabling previously financially-excluded customers to use The effective access to basic financial services, such as payments, savings (including current accounts), credit and insurance provided by regulated financial institutions to all working-age adults. Effective access is defined as a "convenient and responsible service delivery, at a cost affordable to the customer and sustainable for the provider, enabling previously financially-excluded customers to use financial services rather than existing alternative, unregulated options"	ECB

Term	Definition	Source
E-money	Electronic money (e-money) is broadly defined as an electronic store of monetary value on a technical device that may be widely used for making payments to entities other than the e-money issuer. The device acts as a prepaid bearer instrument which does not necessarily involve bank accounts in transactions.	ECB
FinTech	Fintech refers to technology-enabled innovation in financial services.	BIS
Foreign direct investment	The category of international investment associated with a resident entity in one economy and/or a direct investor) having control of, or significant influence on the management of an enterprise resident in another economy.	IMF
Gender	Gender refers to the roles, behaviours, activities, attributes and opportunities that any society considers appropriate for girls and boys, and women and men. Gender interacts with, but is different from, the binary categories of biological sex.	UN
Home country	The country of origin of the migrant and short-term worker (or any other individual).	EU
Host country	The country where the migrant and short-term worker works and lives.	EU
Interoperability	The technical or legal compatibility that enables a system or mechanism to be used in conjunction with other systems or mechanisms. Interoperability allows participants in different systems to conduct, clear and settle payments or financial transactions across systems without participating in multiple systems.	BIS
Liquidity risk	The risk that a counterparty, whether a participant or other entity, will have insufficient funds to meet its financial obligations as and when expected, although it may be able to do so in the future.	BIS
Low- and lower-mid- dle income countries (LMICs)	For the current 2020 fiscal year, low-income economies are defined as those with a gross national income (GNI) per capita, calculated using the World Bank Atlas method, of US\$1,025 or less in 2018; lower-middle-income economies are those with a GNI per capita between US\$1,026 and US\$3,995.	WB
Migrant worker	A person who is, was, or will be engaged in a remunerated activity in a country of which he or she is not a national.	UN, OHCHR, 1990
Mobile money	A service is considered a mobile money service if it meets the following criteria: • A mobile money service includes transferring money and making and receiving payments using the mobile phone. • The service must be available to the unbanked; e.g., people who do not have access to a formal account at a financial institution. • The service must offer a network of physical transactional points which can include agents, outside of bank branches and ATMs, that make the service widely accessible to everyone. • Mobile banking or payment services (e.g., Apple Pay, and Google Wallet) that offer the mobile phone as just another channel to access a traditional banking product are not included. • Payment services linked to a traditional banking product or credit card, such as Apple Pay and Google Wallet, are not included.	GSMA
Remittance inflow	Flow of remittances coming into a country	
Remittance outflow	Flow of remittances coming into a country.	

Term	Definition	Source
Mobile money account	An e-money account that is primarily accessed using a mobile phone and which is held with the e-money issuer. In some jurisdictions, e-money accounts may resemble conventional bank accounts, but are treated differently under the regulatory framework because they are used for different purposes (for example, as a surrogate for cash or a stored value used to facilitate transactional services).	GSMA
Mobile money provider (MMP)	A legal entity licensed or permitted to provide mobile money services. A service is considered a mobile money service if it meets the following criteria: • A mobile money service includes transferring money and making and receiving payments using the mobile phone. • The service must be available to the unbanked, e.g. people who do not have access to a formal account at a financial institution. • The service must offer a network of physical transactional points which can include agents, outside of bank branches and ATMs, that make the service widely accessible to everyone. Exclusions: • Mobile banking or payment services (such as Apple Pay and Google Wallet) that offer the mobile phone as just another channel to access a traditional banking product are not included. • Payment services linked to a traditional banking product or credit card, such as Apple Pay and Google Wallet, are not included.	GSMA
Money transfer operator (MTO)	A non-deposit-taking PSP where the service involves payment per transfer (or possibly payment for a set or series of transfers) by the sender to the PSP (for example, by cash or bank transfer).	CPMI-WB
Non-bank financial institutions	A financial institution that is not defined as a "bank" (e.g., a financial institution other than a BIS credit institution in Europe or a depository institution in the United States).	BIS
Payment service provider (PSP	An entity that provides payment services, including remittances. Payment service providers include banks and other deposit-taking institutions, as well as specialised entities such as money transfer operators and e-money issuers.	СРМІ-WB
Postal networks	The chain of retail outlets used by the national postal operator.	IFAD
RegTech	Regulatory technology refers to applications of innovative technologies that support compliance with regulatory and reporting requirements by regulated financial institutions.	BIS
Remittance service provider	A regulated entity, operating as a business, that provides a remittance service for a price to end users, either directly or through agents.	СРМІ-WB
Remittances	A cross-border, person-to-person payment of relatively low value. In practice, the transfers are typically recurrent payments by migrant workers (e.g. who send money to their families in their home country every month). The term "remittance transfer" is used for simplicity (i.e., it is assumed the transfer is international).	СРМІ-WB
SupTech	SupTech Supervisory technology is the use of innovative technology by supervisory agencies to support supervision.	BIS
Sustainable Development Goals (SDGs)	A set of 17 "Global Goals" and 169 targets. Spearheaded by the United Nations through a deliberative process involving its 193 Member States, as well as global civil society, the SDGs are contained in paragraph 54 of United Nations Resolution A/RES/70/1 of 25 September 2015.	UN

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