Charting new pathways for cross-border payments
Charting new pathways for cross-border payments

Content

Section I: Market Overview  3
Section II: Challenges & Impact of Market Regulations  4
Section III: Payment Ecosystems  6
Section IV: Future Outlook  8
Section I Market overview

Industries globally are undergoing digital transformation, and the payments space is no exception. Governments and institutions are migrating towards cashless platforms for both domestic and cross border payments. With the increased adoption of digital payment platforms and added convenience for the end-user, the volume of cashless payments is expected to increase by almost 80%, from 1 trillion transactions in 2021 to 1.9 Trillion by 2025.

Asia and Africa are the emerging leaders in digital payments, and transaction volumes are expected to increase by 109% and 78%, respectively, by 2025. Considering that ~30% of the population in Asia and ~50% in Africa is unbanked, onboarding individuals on digital payment platforms can be vital for financial inclusion. While various payment solutions are available in these markets, including prepaid cards & close loop payment products, digital wallets appear to be the most preferred choice for onboarding consumers and including them in the purview of banking services. Penetration of mobile devices and improvement in internet services has further boosted the usage of digital wallets for payments, and it is expected to grow to 75% by 2025.

In addition to offering Peer-to-Peer (P2P) and Peer-to-Merchant (P2M) payments, digital wallets help improve cross-border payments’ end-user experience. Currently, cross border payments are plagued with high transaction fees and poor last-mile connectivity, which act as a deterrent for retail customers wanting to process small-ticket transactions. This is particularly pronounced in the developing markets of Asia and Africa, where a significant part of the population receives funds from other nations. With cross-border payments volume increasing at ~6% CAOR and forecasted to reach $30 Trillion by 2022, cross-country collaboration between solution providers can help develop a payment ecosystem and thus create further business opportunities.

Figure 1: Cashless payments (Billion)

Source: IBSi Research Analysis

Figure 2: Digital wallet transactions ($ Million)

Source: IBSi Research Analysis

Figure 3: Percentage of banked population, 2020

Source: IBSi Research Analysis
Section ii Challenges e impact of market regulations

Challenges

For a long time, traditional remittance services have been a source of income for many households in developing nations of Asia and Africa. While the service has evolved into a robust mechanism over time, it faces certain challenges, limiting its adoption at a much larger scale.

Interoperability in financial services refers to networks connecting multiple parties from settlement networks and participating banks to ERPs and integrated payables platforms. This integrated payment system can speak different languages of payment systems for seamless exchange of information.

Interoperability is commonly considered a direct path to financial inclusion. Nigeria and Indonesia are two examples of markets that have seen progress with interoperability, particularly as regional leaders in fintech, yet both countries host some of the world’s largest unbanked populations, which stand at around 60% and 52%, respectively.

Interoperability enables customers to pay merchants and transfer money without considering which mobile money provider they are using. Additionally, end-to-end interoperability may provide more people with access to financial services and enable new services to address the needs of the underserved user groups. To achieve this at scale, a high degree of reliability must exist between all systems involved in enabling transactions, resulting in increased trust in the financial system. Testing of the end-to-end value chain plays a crucial role in garnering trust.

The Cost associated with remittances is usually on the higher side, considering the target user group of this service. Since processing a cross-border payment requires multiple banks and local regulatory systems, a steep fee that comprises bank fees, operator fees, local taxes, and forex rate fluctuations are charged for each transaction. Though every country has different taxation policies, payments are often subject to value-added tax, customs charges, and duties.

Last Mile Connectivity refers to the actual movement of value/money from one account to another. This part of the process is often disrupted due to differing regulations and the availability of infrastructure. In addition to being underbanked, Asia and Africa also face a comparatively lower penetration of internet services which makes last-mile connectivity a challenge for remittances. Implementing last-mile connectivity solutions that push funds directly into the end user’s bank account / digital wallet/card can help boost financial inclusion and help support underbanked population groups.

The deployment of Lyra in rural India has helped the Government of India provide last-mile banking services in remote locations. The solution requires low power and uses the POS to improve services. It has enabled 1.29 lakh banks to extend their services to areas with low digital literacy and network connectivity.
Regulations

When the government mandates interoperability, participants sign a common agreement overseen by a central institution managed by the regulator. Several challenges, as well as opportunities, are associated with remittances, especially in Africa. For instance, Africa has the highest costs associated with transaction processing/fees globally, which averages ~9% for making a transaction of $200. This cost is quite high when we compare it to the world’s average of ~7%.

The African Development Bank, for instance, is working with multiple governments across the continent to introduce measures and policies to increase remittance flows. In 2019, the launch of PRIME (Platform for Remittances, Investments and Migrants’ Entrepreneurship in Africa) to cut the costs associated with remittance so that remittance services can be more widely used across the African continent was one of many such measures.

Figure 4: recent regulations in Africa and Asia, 2021

The increased importance of Intra-Africa payments and clearing. Rise in the use of African currencies for cross-border payments.

In Asia, especially India, the guidelines regulating cross-border payments include the Foreign Exchange Management Act, Prevention of Money Laundering Agreement, Rupee Drawing Arrangement, and granting AD-I and AD-II licenses to certain banks. Across Southeast Asia, the global financial settlement network EMQ in 2021 announced that it augmented its real-time cross-border payments across the region by adding Thailand’s PromptPay to the network.

These initiatives are a clear indicator of the fact that regulators are actively taking steps and are being more inclusive towards the participation of private institutions in the holistic digitization of economies. By easing regulations and providing operating licenses to solution providers, governments are aiming to, and are also being successful, in increasing the adoption of low-cost remittance services to consumers.
**Section III Payment ecosystems**

The digital wallet ecosystems have come a long way from being closed-loop ecosystems that supported the exchange of funds only between the same provider to going open loop and supporting services across different providers. The scope of the ecosystems has increased manifold. A breakthrough has been achieved in this space with further expansion of the digital wallet ecosystem to support cross border payments. Today, digital wallet consumers can make Real-Time fund transfers in major currencies to the recipient’s digital wallet or bank account in another country.

By leveraging the existing network of payment service providers and deploying interoperable systems that support the exchange of payment messages across different payment schemes, solution providers have expanded the reach of cross border payments. Any individual who is an existing consumer of MMO, MPO, and digital wallet provider, among other services, can now automatically be a part of a larger ecosystem that allows the user to transfer funds to another member country. Additionally, service providers can verify the recipient’s identity by using a unique identifier (for instance, mobile number) before initiating the payment. This has enhanced the end-user experience. Revision and rollout of new market regulations have significantly supported the expansion of payment ecosystems and has helped in the financial inclusion of the unbanked/underbanked population.

The South African Development Community (SADC) launched the TCIB (Transactions Cleared on an Immediate Basis) in 2019, allowing consumers to exchange low-value cross-border payments in real-time. TCIB has been deployed as a central infrastructure that integrates with Banks and Non-Banks based out of the SADC member countries and processes transactions across the region, thus giving way to an interoperable payment ecosystem.

![Model Payment Ecosystem](image)

**Figure 5: Model Payment Ecosystem**

MNO: Mobile Network Operator; MTO: Money Transfer Operator; MMO: Mobile Money Operator

Source: iBSI Research Analysis

Notes: EMO currently licensed in Hong Kong, Indonesia, Singapore is registered as a Canadian Money Service Business. It continues to expand its network infrastructure globally and enhance its product portfolio with near real-time payments capabilities across Cambodia, China, Hong Kong, India, Indonesia, Nepal, Philippines, Singapore, South Korea, Thailand, Vietnam, UK, and 19 countries in the African continent.
Understanding Remittance Patterns

Income from remittances has long supported households in developing nations of Asia and Africa. In a ranking of the top 10 remittance receiving countries, seven countries lie in either of these continents. Spending patterns observed across these continents are quite similar, with minor variations based on the individual country. Households in developing nations that rely solely on remittances typically spend half of their income on Essential Expenses, i.e., Living Expenses & Medical Bills, followed by Discretionary Expenses; Savings and Education. This presents a contrast when compared to the spending pattern observed in developed nations where almost only a third of income is spent on Living Expenses and nearly half of the total income is spent on discretionary expenses.

Age distribution of the population also plays a crucial factor in the adoption of digitized remittances services. Asian and African nations boast a relatively younger population group that is savvy to technology and are the earliest adopters of new-age solutions for banking needs.

Women constitute almost half of the global migrant population that uses cross border remittance services. Analysis of remittance data, suggests that women tend to send small amounts more frequently and hence pay higher overall transactional fee.

Considering the fact that almost half of Sub-Saharan African population and a third of South East Asian population does not own a traditional identity document, a larger portion of this number being women, limits them from opening a bank account for storing funds. Relaxation in existing KYC processes and further penetration of digital wallets can help curb this problem. It has been observed that the female population in these regions has relatively less awareness towards mobile money.

Figure 6: Age distribution

![Age Distribution Chart]

<table>
<thead>
<tr>
<th>Age Distribution in years (%)</th>
<th>Asia</th>
<th>Africa</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-20</td>
<td>25%</td>
<td>11%</td>
</tr>
<tr>
<td>20-50</td>
<td>44%</td>
<td>38%</td>
</tr>
<tr>
<td>50+</td>
<td>31%</td>
<td>51%</td>
</tr>
</tbody>
</table>

Source: IBSI Research Analysis

Although this difference is marginal at ~5% (in African nations such as Senegal and Uganda), the difference is significant in Asia, where the gender gap in terms of mobile money awareness is ~17% (India) and ~25% (Pakistan). Additionally, the gender gap in mobile money ownership across low and medium-income countries has only marginally narrowed down to ~33% in 2017 from ~36% in 2014, indicating a strong need to drive awareness. Lack of financial literacy and the overall social status of women in these regions have been cited as key reasons for this gap.
Section IV Future outlook

Heading into the future, multiple trends, as mentioned above, are paving the path for continued cross-border payments growth across Asia and Africa. COVID-19 pandemic has permanently reset the payments trajectory. Digital wallets are becoming the next normal. The recent momentum of e-wallets in cross-border payments is likely to accelerate in the coming years, particularly in emerging markets. Further, upcoming development is being witnessed in last-mile connectivity with merchants moving towards digitisation. Moreover, bilateral arrangements are considered as top drivers for real-time cross-border payments.

Revenue from Cross-border payments has been a pivotal contributor to Asia’s ongoing payments growth, registering an average annual increase of ~6% between 2011 and 2019. As the economy emerges from COVID-19’s aftermath, consumer-related cross-border payments are expected to once again present the largest opportunity for further penetration and innovation. The African continent is gradually picking up pace in this area. To thrive in the new normal, banks can take steps to enhance cross-border offerings and international payments propositions, such as establish close alliances with institutions of smaller scale in other countries, upgrade technology standards, and increase engagement with regulators on bilateral or regional partnerships.

About TerraPay

Headquartered in Amsterdam, TerraPay is a licensed digital payments infrastructure and solutions provider. Since 2014, the company has been building an ever-expanding payments highway that empowers businesses with an uninterrupted, secure, and real-time global passage for every payment, however small or large. Registered and regulated across 15 global markets, TerraPay is a leading global partner to banks, mobile wallets, money transfer operators, merchants, and financial institutions, creating a rich payment ecosystem that supports a range of diverse payment types and instruments. With a single integration, the company connects their partners to this deep-rooted global network, backed by strong compliance and security standards.

Headquarter Address

Terra Payment Services (Netherlands) B.V.
Burgemeester Verver-Aartselaan 8, 2254BA Voorschoten, Netherlands

Anwesha Mukherjee
+91 97172 41606
anwesha@terrapay.com

Rizwan Qazi
+971 5822 03002
rizwan@terrapay.com