

BSP Digital Payments Transformation Roadmap 2020-2023

I. Vision and Strategic Outcomes (Targets by 2023)

The BSP's thrust to promote financial inclusion and digitalization of payments are mutually reinforcing: they go hand-in-hand, each enabling the other. As the BSP continues to foster the growth and development of digital payment innovations through enabling policies and regulations, it also promotes further financial inclusion. Digital payment innovations lower transaction costs and eliminate the oft-cited barriers to owning a transaction account.

The widespread use of the internet and emergence of technological innovations make digital payments ubiquitous, more accessible and affordable, thereby propelling the progressive shift towards a cash-lite economy. Moreover, with the sudden onset of the COVID-19 global pandemic, the shift towards digital payments has become an imperative as physical distancing rules become the norm under the "New Economy" environment. By using digital payments with due care and vigilance, Filipinos reduce the need for mobility and prevent health risks from face-to-face and over-the-counter (OTC) financial transactions. The greater usage of digital payments will also facilitate the growth of Fintech businesses engaged in e-commerce businesses as the consumption of goods and services is increasingly driven by online purchases.

Objective

An efficient, inclusive, safe and secure digital payments ecosystem that supports the diverse needs and capabilities of individuals and firms, towards achievement of the BSP's mandates

Strategic Outcomes

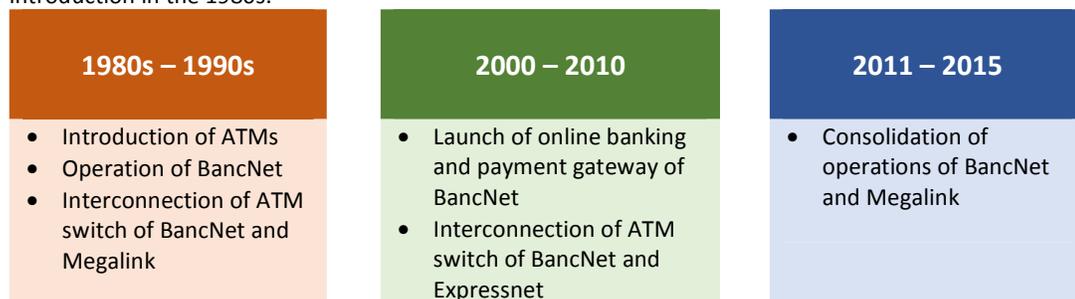
- a. **Strengthened customer preference for digital payments by:**
 - Converting 50% of the total volume of retail payments into digital form, considering that payment services are the gateway of most Filipinos to the formal financial system. This shift can be made by offering customers faster and more affordable payment options that provide greater convenience.
 - Expanding the financially included to 70% of Filipino adults, by onboarding them to the formal financial system through the use of payment or transaction accounts. With the use of these accounts over time, they are able to build financial profiles with their payment service providers (i.e. banks and non-bank e-money issuers).
- b. **More innovative and responsive digital financial services** characterized by (1) innovation-driven use of consumer data to design financial products and services that are responsive to the needs of consumers, including those from the lower income sectors; (2) PhilSys-enabled Know-Your-Customer (KYC) to allow more individuals to access financial services; and (3) availability of a next-generation payment and settlement system to facilitate real time processing of financial transactions of the banking public and of the Philippine economy.

II. Background

The Current Landscape of Digital Payments and Digital Finance Inclusion

The first signs of electronic banking in the country sprouted in the 1980s with the introduction of the automated teller machine (ATM). Initially, banks formed three different ATM consortia (Expressnet, Megalink and Bancnet). ATM services did not turn out to be as efficient as intended with several consortia co-existing and operating in silos. This prompted banks to open up their systems to inter-ATM network transactions until eventually all networks merged into one consortium that has serviced the whole banking system since 2015 (see Figure 1).

Figure 1. A snapshot history of ATMs in the Philippines: ATMs continue to capture public interest since its introduction in the 1980s.



Source: BSP-Payment System Oversight Department (BSP-PSOD)

The favorable acceptance of card-based facilities (e.g., debit and credit cards) prompted banks to deploy more point-of-sale (POS) terminals, replacing the traditional “imprenters” where these cards were swiped each time a payment transaction was made by cardholders. However, as of end-2019, ATMs continued to grow (albeit at a slower pace), while the number of credit cards and POS terminals have been declining, suggesting that other forms of financial access and payments services are being explored by consumers.

Table 1.

Number of	2017	2018	2019	Growth Rate 2018-2019
ATM Terminals	20,276	21,278	21,777	2.3%
POS Terminals	181,748	103,852	79,693	-26.0%
Credit Cards	8.44 million	9.4 million	9 million	-4.2%

Source: Financial Inclusion Dashboard Q4 2019

But perhaps, the biggest game changer in the field of financial technology came at the start of the 21st century with the rise of the internet. It opened up opportunities for greater operational efficiency for banks and other payment service providers, as banks began to design and launch internet banking facilities that allowed their clients to access information on their accounts, transfer funds, pay bills, apply for loans, and make other banking and payment transactions using personal computers.

These innovations in the financial and payments ecosystem paved the way for the Philippines to become the first country to introduce the concept of mobile money services in 2001. This concept was first introduced by a telecommunications company in order to

reach the unbanked and underserved segments of the economy. Through these mobile money services, consumers were able to do fund transfers and remittances, pay bills, and purchase goods with the use of only their mobile phones. These services were initially made available through SMS and was then the first use case for digital remittances by utilizing the SMS technology through mobile phones. These developments, in turn, were the impetus for the BSP to issue electronic money or “e-money” regulations as a way of creating an enabling regulatory environment that can support the growth of mobile money services in the country. With the growing young and tech savvy population and low rates of financial inclusion, these mobile money services carried the potential to acquaint these segments of the population with a simple and convenient way of digitally storing value and using these funds to perform different payments transactions.

These opportunities continue to be present given that, as of January 2020, internet users in the Philippines were estimated to include 63 million people - more than half of the country’s 105 million population - and largely belong to the age group of 16 years old and above.¹ Similarly, the country has a substantial chunk of the population using mobile phones, with an estimated 75.66 million users as of 2020.² At the same time, the Philippines topped the average internet usage index in Asia, with Filipinos found to be spending an average of 10 hours and 2 minutes a day in the internet.³

Another significant development that contributed to a change in the payment landscape is the deepening mobile phone penetration rate. According to a 2015 country diagnostic of the Better Than Cash Alliance (BTCA),⁴ mobile penetration rates in the country exceed 100%, with mobile data accounting for over 45% of gross revenues of the telecommunications sector. The recent 2019 Financial Inclusion Survey (FIS) Report showed similar results. Sixty-nine percent (69%) of adult respondents have a mobile phone, of which 75% own a smartphone. This is equivalent to 52% of total adult population with a smartphone, significantly higher than 38% in 2017.

With mobile phones being a viable channel for mobile banking and electronic payments, there has been a substantial growth in the number and amount of e-money transactions which reflects the ongoing shift towards digital payments as shown in the following table:

Table 2.

E-Money	2017	2018	2019	Growth Rate 2018-2019
Total amount of transactions (Inflow+Outflow) (in billion PH)	963	1,090.1	1,485.3	36%
Active e-money accounts (in millions)	2.2	5.0	8.8	76%
Prepaid cards linked to E-money	25.2	28.2	20.6	-27%

Source: Financial Inclusion Dashboard Q4 2019

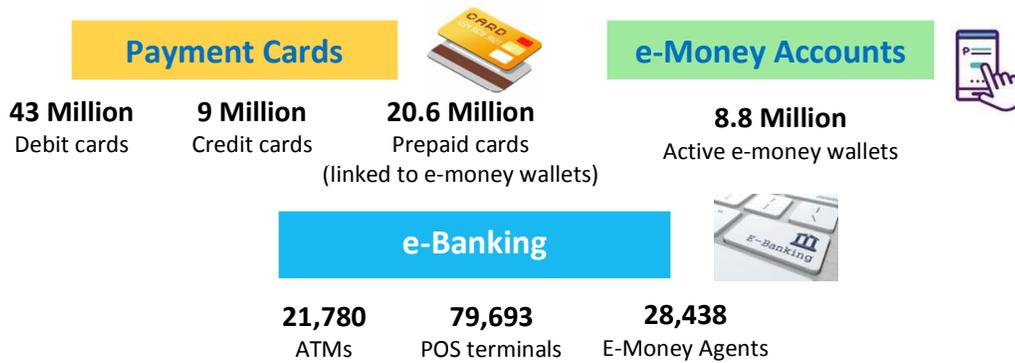
Figure 2.

¹ Number of internet users in the Philippines as of January 2020, www.statista.com

² Number of internet users in the Philippines as of January 2020, www.statista.com

³ Philippines tops world internet usage index with an average 10 hours a day, The Guardian News and Media

⁴ Better Than Cash Alliance Philippine Country Diagnostic (July 2015), which may be downloaded through this link: https://btca-prod.s3.amazonaws.com/documents/38/english_attachments/UNCDF-BTCA-Philippines-diagnostic-20151014.pdf?1445264531

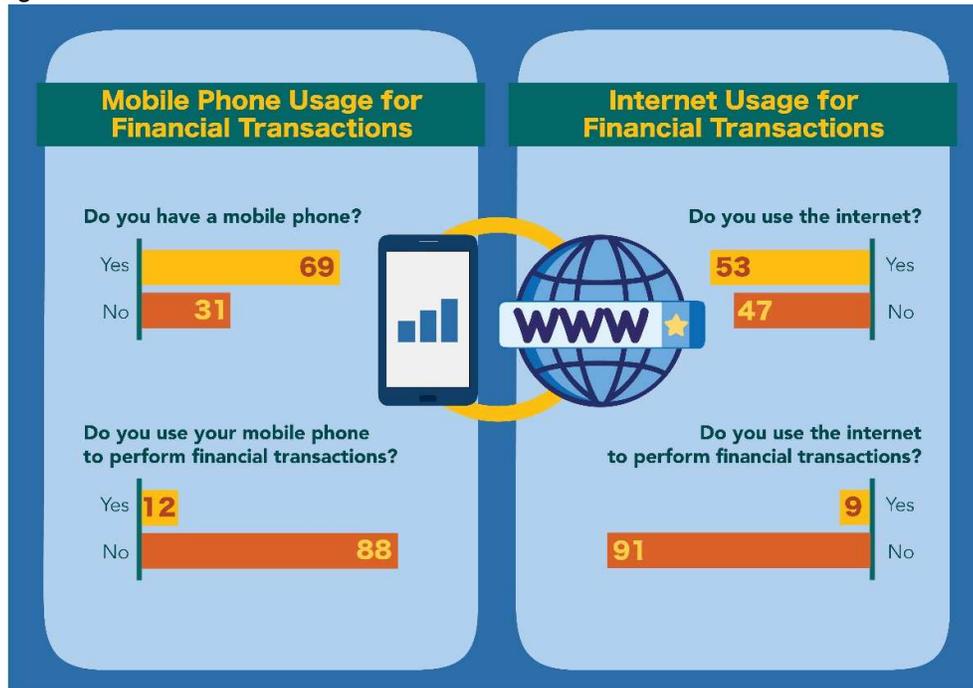


But majority of Filipinos remain financially excluded and underserved

Despite these developments, however, current data on usage of digital financial services show a seeming disconnect as a large segment of the population remain financially excluded. In the 2019 FIS Report, it was found that 71% of the adult population or around 51.2 million Filipinos continue to lack ownership of a transaction account, a basic indicator of financial inclusion, and the most basic tool to make digital transactions.

Interestingly, only 1 in 10 adults use their mobile phones and the internet for financial transactions. Despite a majority of the adult population being mobile phone users, only 12% of mobile phone owners and 21% of adults owning an account use their mobile phones to perform financial transactions. The same holds true for internet users with only 9% of those having internet access reportedly using the internet for financial transactions.

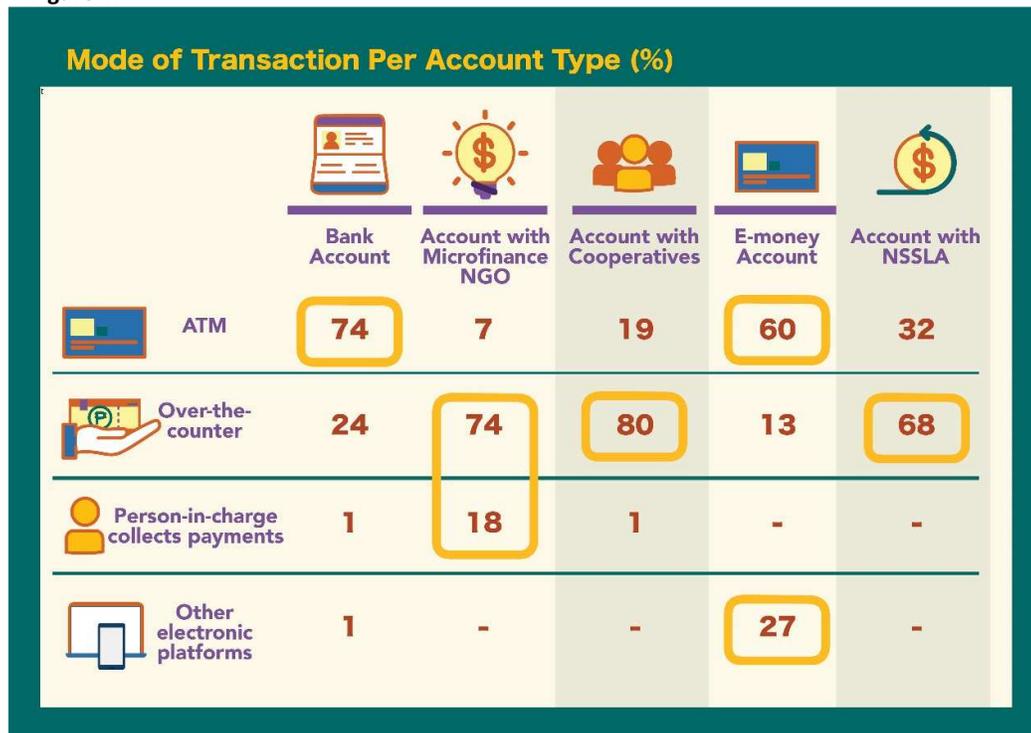
Figure 3.



Source: 2019 FIS Report

Internet or mobile banking significantly lags behind other modes of transaction for all types of accounts. Bank and e-money accounts are still mostly transacted via ATMs, but 27% use online or electronic platforms. OTC is the most used mode of transaction for all other types of accounts. Even microfinance NGO accounts registered the lowest use of ATMs, suggesting that these are not tied to a card or other payment instruments.

Figure 4.



Source: 2019 FIS Report

The Demand Side of Payments

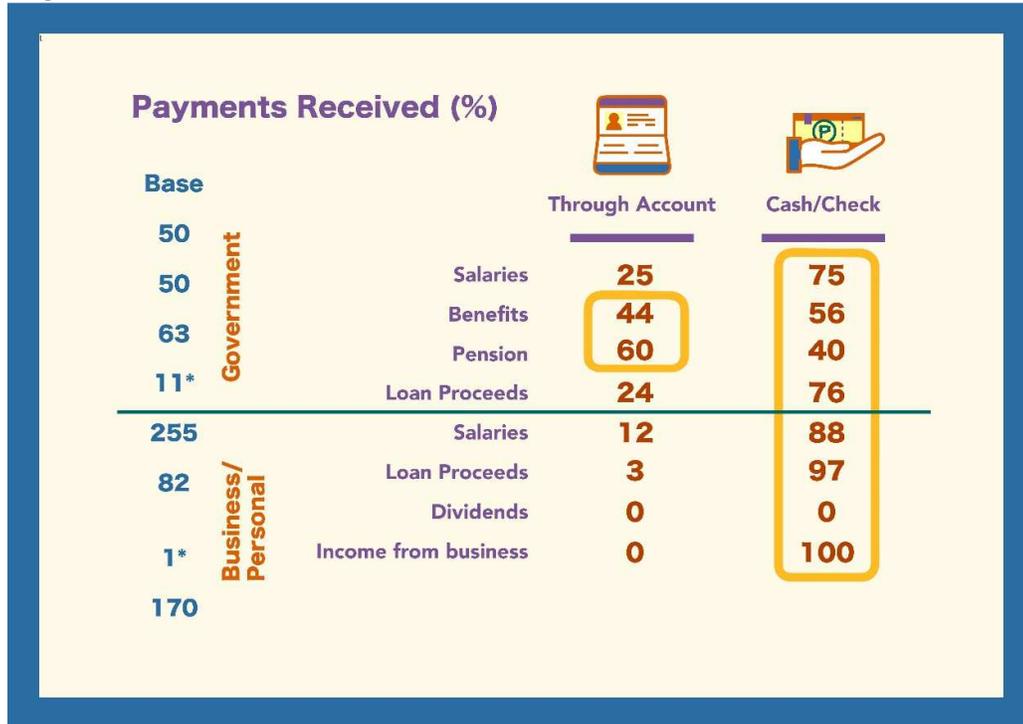
According to the 2019 FIS, payments continue to be the most dominant financial transaction with 61.2 million Filipinos, representing 85% of the adult population, making and receiving payments of various forms such as income (i.e., salaries, benefits, pension, dividends or income from business), loan proceeds, and insurance pay-out.

Payment transactions remain significantly cash-heavy, with the OTC method still preferred over other modes. Even the least cash-heavy transactions such as payment of government loans and contributions are skewed toward OTC. This is followed by salary deduction, which is an alternative mode for payment of government loans (43%), social contributions (42%) and taxes (16%). Only 1% of payers paid their bills online, while a measly 0.1% paid their personal loans via auto-debit or auto-credit arrangement.

Even payment disbursements from the government such as salaries (75%), loan proceeds (76%) and benefits (56%) are mainly received in cash, while majority (60%) of pension payouts are received through an account. Meanwhile in the private sector, payments received in the form of business income (100%) and loan proceeds (97%) are also predominantly in cash. For payment of salaries, however, 88% of recipients accepted their salary in cash/check while only 12% received their salary through an account.

The use of cash for payments was made by choice as this mode is still considered to be more convenient (85%), more secure (28%), affordable due to lack of fees (20%) and reliable (19%). Payments via salary deduction are also considered convenient (39%) and done due to lack of choice (49%).

Figure 5.



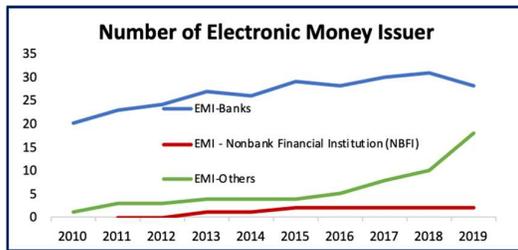
Source: 2019 FIS Report

The Supply Side of Payments

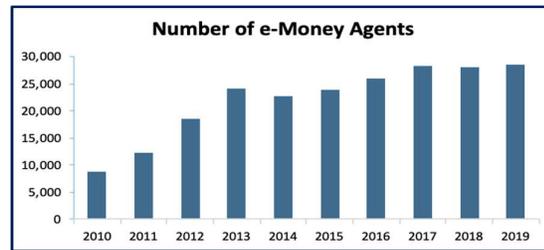
At present, e-money issuers include banks, non-bank financial institutions supervised by the BSP, and non-bank institutions registered with the BSP as money transfer agents.⁵ Since 2010, there has been a trend increase in the number of e-money issuers (see Figure 6). Similarly, e-money agents/distributors who function as cash-in/cash-out agents of e-money issuers have also been increasing (see Figure 7). The latest data also suggest exponential growth in prepaid cards until 2016 (see Figure 8). However, in 2017, prepaid cards materially declined as issuers had to migrate to the Euro Mastercard Visa (EMV) standard for added card security. Issuers delisted many accounts until the clients concerned claimed their EMV-compliant cards.

Figure 6. Number of e-money issuers: There is a trend increase in the number of e-money issuers. **Figure 7. Number of e-money agents:** E-money agents have also been increasing.

⁵ The BSP defines e-money as a monetary value represented by a claim on its issuer that is (1) electronically stored in an instrument or device (either cash cards, stored value cards, or e-wallets accessible via mobile phones or other access devices); (2) issued against receipt of funds of an amount not lesser in value than the monetary value issued; (3) accepted as a means of payment by persons or entities other than the issuer; and (4) withdrawable in cash or cash equivalent.⁵ Source: BSP Circular No. 649 dated 9 March 2009.

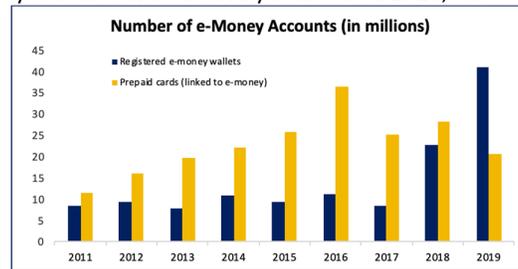


Source: BSP-PSOD



Source: BSP-PSOD

Figure 8. Number of e-money accounts: There is a notable increase in prepaid cards until 2016. The number of e-money accounts was relatively stable until 2016, then surged in 2018 and 2019.



Source: BSP-PSOD

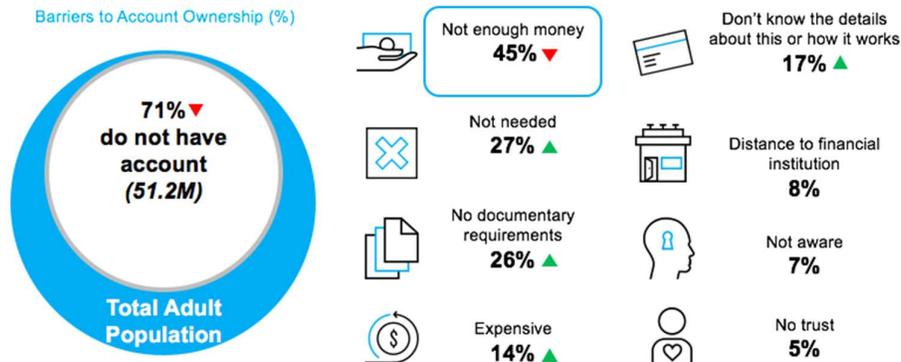
The BSP scanning showed that most of the payment service providers, banks and non-bank electronic money issuers alike, were operating closed-loop systems, allowing only intrabank or intra-institution funds transfer. Hence, the BSP recognized the need for regulatory reform to address this and developed a system of governance that would break closed-loop systems and ensure that the potential payment service providers (PSPs), including the small banks in far flung places, can participate in the payment system. This system of governance is called the National Retail Payment System (NRPS). The NRPS helped level the playing field among PSPs as new entrants can now offer an improved experience to the consumers and force the incumbent dominant players to innovate and improve their payment services.

Socio-economic disparities, changing perceptions, lack of financial literacy are challenges to owning an account, thus making digital payments difficult

Despite the fact that some barriers have been addressed, cost concerns and perceptions on utility still remain as primary considerations for not owning an account. A primordial reason cited is the lack of enough money, as reported by almost half (45%) of the unbanked. This is a valid concern, particularly in the Philippines where poverty persists and incomes remain low. This is followed by the perceived lack of need for an account (27%) and inability to meet documentary requirements (26%).

At the same time, lack of awareness is a main reason for not using a mobile phone or the internet for financial transactions. This is followed by lack of trust, weak signal or slow internet connection, and preference to transact at the bank or ATM. These reasons indicate an entrenched culture and mind-set of preferring various methods of payment other than digital means.

Figure 9.



Source: 2019 FIS Report

Correlated to the issue of affording an account are the gaps in smartphone ownership and internet access, which are visibly divided along the lines of locality, geography and income.

Locality wise, urban areas have 6 out of 10 adults that are smartphone owners and internet users, compared to 4 out of 10 in rural areas. Geographically, 7 out of 10 adults in Metro Manila have a smartphone and use the internet, while this figure drops as one goes farther from the capital (Balance Luzon – 6 in 10, Visayas – 4 in 10, Mindanao – 3 in 10). In terms of income, 8 out of 10 adults in socio-economic class ABC own a smartphone and are using the internet which is twice as high than class E where only 4 out of 10 adults have a smartphone and with access to the internet.

Providing for a safe, efficient, and robust payment and settlement infrastructure to facilitate financial transactions of all Filipinos and the Philippine economy

Under the Republic Act No. 7653 (The New Central Bank Act) approved in 1993, the central bank established facilities for interbank clearing with deposit reserves maintained by banks in the BSP used as the basis for the clearing of checks and the settlement of balances. Payment instructions were then physically delivered by banks to BSP for settlement at designated time periods during the day.

To address risks and improve processing time that can be made from a manual system, procedures to transmit payment instructions electronically were developed beginning 1997. Electronic fund transfers (EFTs) were sent through a clearing unit and thereafter electronically transmitted to the BSP for settlement by batch at designated time periods. Participant banks then electronically received updates on the balances of their demand deposit accounts (DDAs) at certain time periods (e.g., on an hourly basis) during the day.

As the financial system became more integrated, sophisticated and more complex, payments and settlement systems became more exposed to risk. International-setting bodies agreed that a real time gross settlement (RTGS) system is a powerful payments infrastructure that can limit risks for interbank transactions as it provides timely and final settlement of time-critical payments on a continuous basis. In year 2002, the BSP established the *PhilPaSS* for the payment and settlement of financial transactions and settlement in Philippine Peso through banks' DDAs using a fully automated RTGS design. This system is owned and operated by the BSP through the BSP Payments and Settlements

Office. The *PhilPaSS* clears and settles on a per transaction basis (rather than by batch), real time (vs. deferred), and on a gross basis (rather than on a net basis). To economize on the use of central bank money, *PhilPaSS* also integrated a deferred netting system or DNS which provides frequent netting of payments within the day for bulk transactions that are not time sensitive. Further, participants are given access to the system to enable them to send EFT instructions directly to the BSP and to monitor their accounts/ records online and any time during the business day.

In addition to electronically transferring funds amongst participating-financial institutions, participants in *PhilPaSS* are able to manage their DDAs on-line through the system.

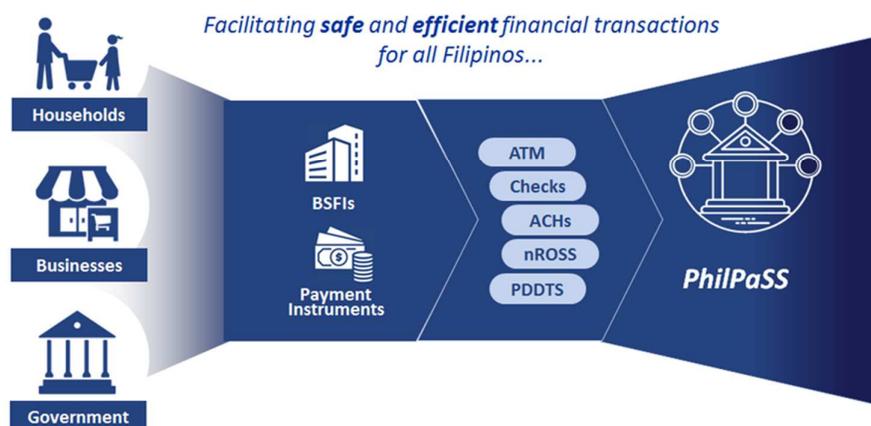
By minimizing payment and settlement risks through *PhilPaSS*, the BSP is able to provide safe and efficient payment and settlement systems for Filipinos (3rd pillar), and enhance the availability, convenience, efficiency and integrity of financial transactions (2nd pillar of financial stability) as well as of financial markets (1st pillar of monetary stability).

Integrating more payment systems in *PhilPaSS*

The BSP endeavors to have a more integrated payment & settlement system to allow for more & more financial transactions to be secured & completed on a timely manner, thereby enhancing the integrity of these transactions & furthering economic development. The *PhilPaSS* started off with processing only interbank transactions of commercial & rural banks. In succeeding years, interbank transactions of other institutions were incorporated – investment houses/ NBFIs in 2003, & thrift banks & financing companies in year 2009. Payment instructions for checks & peso trades (clearing done through the Philippine Clearing House Corporation or PCHC), ATM transactions, and interbank & interdealer repo transactions (through the Settlement Highway of the Philippine Dealing System or the PDS) were soon thereafter enrolled.

Figure 10.

The Philippine Payment and Settlement System (*PhilPaSS*)

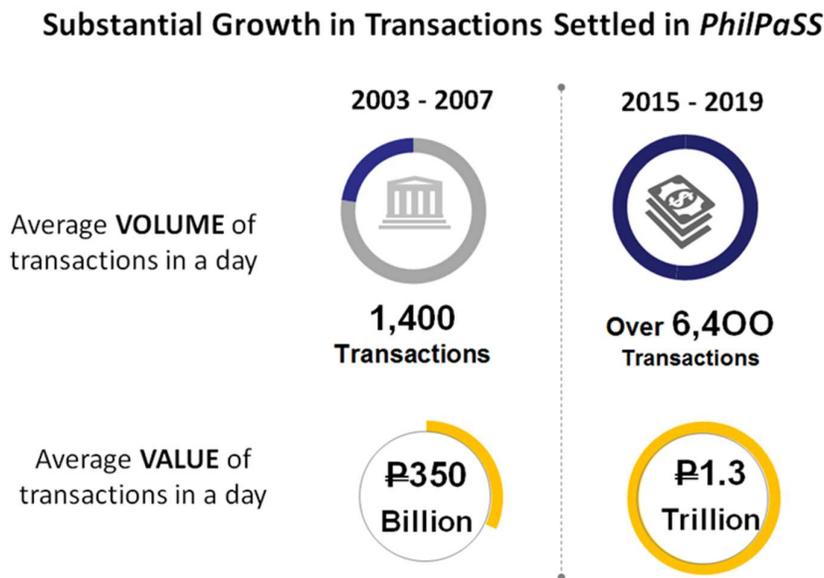


In the first 5 years of operations, *PhilPaSS* processed about 1,400 transactions on average in a day, valued at Php 350 billion per day. In the last 5 years, *PhilPaSS* is already

processing more than 6,400 transactions valued at Php 1.3 trillion daily. Financial transactions that settle today in *PhilPaSS* include:

1. Payment instructions initiated directly by participants for customer payments, government collections, and other interbank transactions;
2. Transactions with the BSP such as deposits, withdrawals, payment of supervisory fees, deposits of maturing loan obligations, settlement of investments in BSP’s short-term liability products, and fees collected for on-line application of foreign currency denominated loans; and
3. Transactions through other financial infrastructures that provide essential services to the banking public such as those made through the ATMs, ACHs (InstaPay and PESONet), checks, as well as trades of government securities (allowing for compliance with international standards on delivery versus payment) and of peso-US dollars (international standards on payment versus payment).

Figure 11.



Bridging the Gaps in Financial Access and Digital Payments

Introduction of the Basic Deposit Account (BDA)

To further encourage account ownership among the unbanked, the BSP approved in 2018 the framework for banks to offer a basic deposit account (BDA). Allowing for the BDA addresses the barriers oft-cited in owning an account, which include high costs, lack of money, inability to meet documentary requirements, and perceived low utility of a bank account.

Allowing Agent Banking

Another policy to serve the unmet need for financial services amidst the country’s unevenly scattered geography is the introduction of cash agents. With prior BSP authorization, cash agents were introduced to make bank services physically accessible to

more clients. These agents are retail outlets (e.g., convenience stores, pharmacies, pawnshops) where one can avail banking services (e.g., apply for a bank account including BDA, cash deposit and withdrawal, fund transfer, bills payment). Cash agents enable banks to leverage on innovative digital solutions to serve a wider client base, particularly in the low-income and rural areas where there is limited commercial incentive to establish a full branch or even a micro-banking office.

Launch of the National Retail Payment System (NRPS)

For this reason, the NRPS was a landmark initiative that was launched in December 2015 to reform the country's retail payment system and accelerate digital payments in the country. It is a policy and regulatory framework whereby the BSP provides regulatory oversight fundamentally in the form of policy direction to the PSPs. The framework also requires interoperability among the PSPs by creating multilateral arrangements which are referred to as automated clearing houses (ACHs). These ACHs provide their detailed rules for clearing and settlement.

To be interoperable, banks and non-bank e-money issuers should be interconnected through a clearing switch operator (CSO) that is designated by the ACH participants. The NRPS framework minimizes the credit exposure of the ACH participants to the settlement bank by requiring the settlement of the participants' net clearing obligations in central bank money. Hence, the net clearing positions determined by the CSOs are all settled through the country's real time gross settlement (RTGS) system, also known as *PhilPaSS*.

Currently, two ACHs have been established: 1) the Philippine EFT System and Operations Network (PESONet)⁶ for batch EFT credit payment scheme; and 2) InstaPay⁷ for real-time low-value EFT credit push payments. The PESONet went live in November 2017 and serves as an alternative to the paper-based cheque system. Meanwhile, the InstaPay was launched in April 2018 and is utilized mainly by individuals.

Regulatory and Policy Support

On the regulatory front, the BSP sought the proper balance to ensure that innovations are encouraged while consumer protection is upheld and threats to financial stability are mitigated. To ensure that banks responsibly integrate emerging technologies in their operations, the BSP issued prudential measures that included licensing requirements for institutions intending to offer electronic services; outsourcing policy for those that engage third party services such as infrastructure providers; as well as business continuity management and information security management for all BSP-supervised institutions in

⁶ The PESONet or the Philippine EFT System and Operations Network is the first ACH created under the NRPS. It is a batched electronic funds transfer (EFT) credit payment stream, which can be considered as an electronic alternative to the paper-based check system. Under the PESONet ACH, the payment instructions are processed in bulk and cleared in batches. Each payee receives the full value that is transferred to his account within the same banking day, provided the payment instruction was sent within the cut-off time of the payor's bank or e-money issuer.

⁷ The InstaPay is a real-time EFT credit payment stream for retail transactions up to fifty thousand pesos (Php50,000). Under the InstaPay ACH, the payment instructions are processed in real-time, thereby allowing a payee to immediately receive the full amount transferred to his account. With this pioneering feature, the InstaPay EFT facility is designed to facilitate small value and urgent payment needs.

light of the vulnerabilities of electronic facilities to disruption brought about by cyber attacks, electronic fraud, malicious penetration, and other internal and external threats.

The BSP also issued regulations that support an innovative, sound, and proportionately-regulated e-money ecosystem where e-money issuers and their networks are given flexibilities to achieve a massive reach to Filipinos, particularly the rural area dwellers.

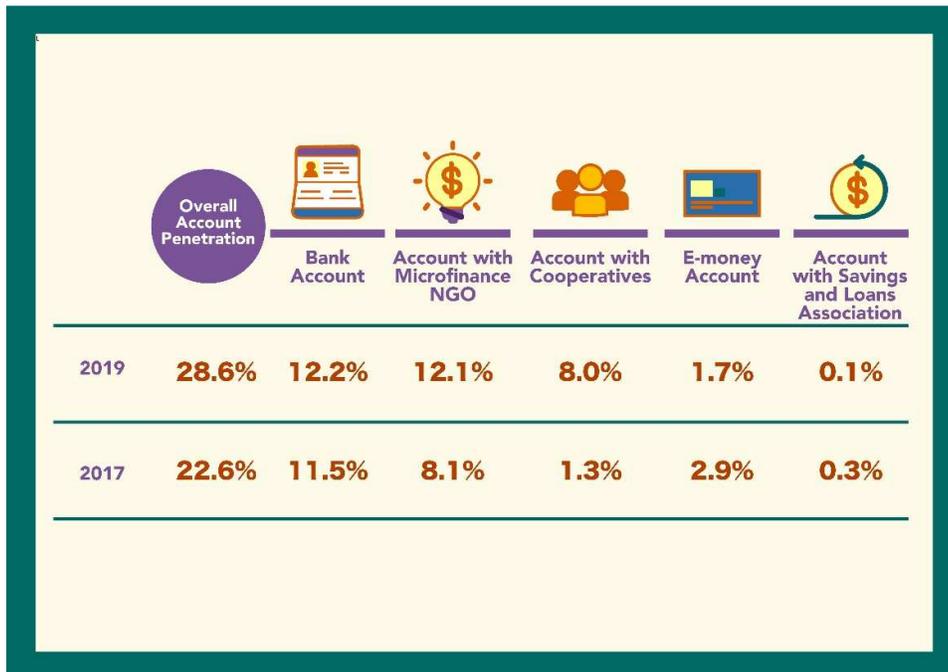
Early Gains in Digital Payments

More people are now doing transactions online

The recent pandemic has drastically increased the Filipino’s usage of the internet for e-commerce transactions, owing to the community quarantine policies enforced by the government to prevent the spread of the virus. The April 2020 Digital Statshot report of We Social and Hootsuite found that 64% of Filipino internet users reported spending more time on social media, while 23% of users shared that they are spending more time shopping online.⁸ These developments indicate that digital payments have a huge potential for acceptance as the primary mode of payment, with majority of the population already internet savvy and the noted preference in using the internet for purchasing goods and services.

Among all types of accounts, e-money account penetration posted the most remarkable growth, increasing to 8% in 2019 from 1.3% in 2017. In comparison, bank account penetration barely grew to 12.2% in 2019 from 11.5% in 2017. On par with banks are microfinance NGOs where account ownership stood at 12.1%, a considerable increase from 8.1% in 2017.

Figure 12.



Source: 2019 FIS Report

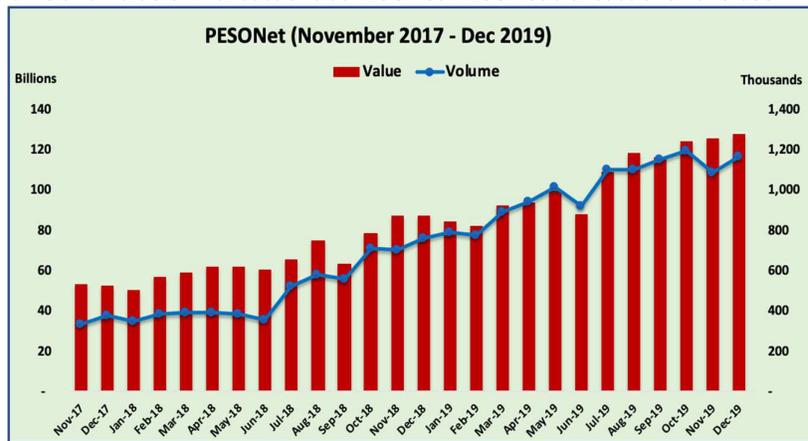
⁸ COVID-19 accelerates digital adoption in PH, 13 May 2020, Inquirer.Net

More people owning an account are using them for payment transactions

Although account ownership remains limited, more of those owning an account have used their account for making payment transactions. While saving remains the primary reason for opening and using an account, the share of accountholders who use their account for doing payment transactions more than doubled to 39% in 2019 from 18% in 2017.

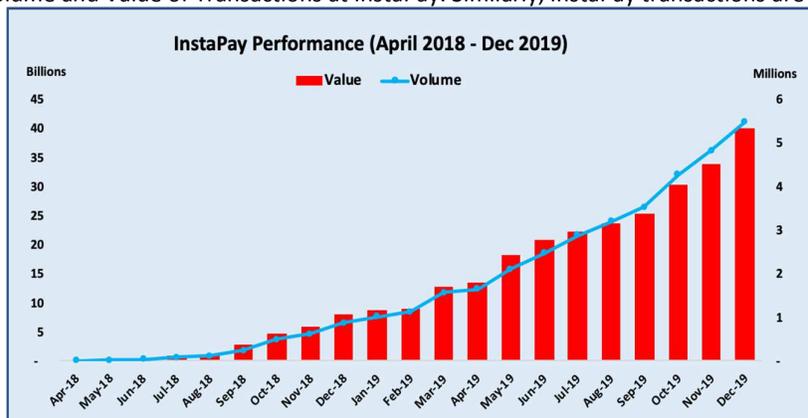
There are already initial gains under the NRPS framework as can be gleaned from the increase in transactions under PESONet and InstaPay. As of end-December 2019, the volume of PESONet transactions was up by 253% from November 2017. In terms of value, PESONet transactions have increased to ₱127.21 billion for the month of December 2019, higher by 141% compared to November 2017 (see Figure 13). As of end-2019, there are 55 financial institutions participating in the PESONet. Similarly, the volume and value of transactions are on the rise in the InstaPay ACH. As of December 2019, the volume of InstaPay transactions had increased exponentially to 5.47 million from just 1,740 in April 2018. The total value of InstaPay transactions reached ₱40.1 billion in December 2019 from ₱20,000 in April 2018 (see Figure 14). As of end-2019, there were 45 financial institutions participating in the InstaPay that allow their clients to send and receive funds, of which 13 financial institutions initially offered to only receive funds for their clients.

Figure 13. Volume and Value of Transactions at PESONet: PESONet transactions have been increasing.



Source: BSP-PSOD

Figure 14. Volume and Value of Transactions at InstaPay: Similarly, InstaPay transactions are on the rise.



Source: BSP-PSOD

At the forefront of digitalizing payments to government is the EGov Pay, an electronic payment facility that allows individuals and businesses to pay taxes, permits, fees, and other obligations to the government. This facility makes use of the PESONet as the payment rail. To use the EGov Pay, the payers have to access “Linkbiz”, a payment portal which is hosted by the Land Bank of the Philippines (LBP).

By participating in the EGov Pay as billers, government institutions can efficiently collect revenues, which are crucial to their delivery of public and social services. Moreover, the government in general can curb revenue leaks through efficient collection means, better audit trail, and enhanced transparency.

From only two (2) government institutions enrolled in the facility when it was launched last November 2019, the list has substantially expanded to 60, with the Bureau of Internal Revenue (BIR), Department of Trade and Industry (DTI), Philippine National Police, Overseas Workers Welfare Administration, Environment Management Bureau, and various local government units (LGUs) leading the roster. A substantial number of government institutions are expected to be on board the EGov Pay in the near to medium term.

The BSP’s issuance of a policy requiring adoption of a National QR Code Standard was a turning point in the country’s digital transformation journey. Leveraging on the efficiency, safety, and affordability of the QR technology, this regulation bears far-reaching benefits by enabling micro and small merchants to accept digital payments which were meant for well-established businesses for the longest time.

The National QR Code Standard dubbed “QR Ph” was launched in November 2019, with the Person-to-Person (P2P) use case made available first, to be followed by the Person-to-Merchant (P2M) use case which is scheduled to go live in the year 2021. The QR Ph-enabled P2P transactions almost doubled in just over a month from its inception. While the volume and value of the P2P transactions are still building up, both demand and supply of QR-enabled payment services show promising trends.

On the other hand, the P2M QR Ph will empower small economic actors to take part in the digital payments ecosystem, and more importantly, in the formal financial system. They can build financial profiles with their recurring digital payment transactions, enabling their banks and electronic money issuers to design further financial services such as savings, loan products, and investments that suit their specific needs.

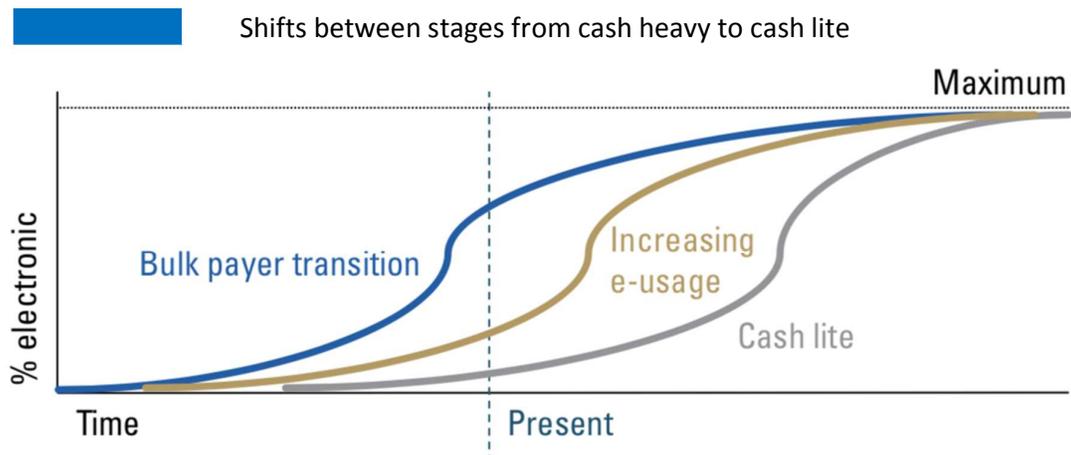
Broader Challenges to the Development of a Digital Payment Ecosystem and Financial Inclusion

Shifting mindsets towards utilizing digital payments

A 2015 BTCA country diagnostic using 2013 data found that of the 2.5 billion payments, corresponding to USD74 billion, made by Filipino adults in a month, the share of digital retail payments by volume and value was only 1% and 8%, respectively. While several e-channels had been made available for payment transactions at the time, it was notable that the country continued to be cash- and cheque-dependent.

The study explained that the shift to a mainly cash-lite economy undergoes three stages: (1) first is the shift of one-to-many or bulk payments given the persistence of the use of checks for salary payments and government payments; (2) second is the shift of many-to-one or remote bill payments, which was being used for high value pension and insurance contributions and loan repayments but not yet for tax or supplier payments; (3) third is the shift of one-to-one payments, including person-to-business payments, which needed a lot of progress in the formal and informal sectors. Figure 15 below illustrates how a country may progress through these different trajectories which in the Philippines need not occur sequentially, as the three stages may even happen simultaneously.

Figure 15.



Source: BTCA Philippine Country Diagnostic (July 2015)

Key lessons from the same report identified several barriers to e-payments adoption in the Philippines, as follows: (a) inadequate legal infrastructure and/or regulatory framework that would provide certainty for stakeholders and underpin the digital ecosystem investments needed for digital payments to take hold, particularly in the private sector; (b) utilization of e-banking as a foundation to further digitization, considering that many Philippine banks offer e-banking services, and are building infrastructure and confidence in digital transactions; (c) high barriers to enter the banking system, such as high fees for e-banking services relative to cash and paper-based services, requirements to maintain minimum account balances, and onerous identification requirements that individuals from lower socio-economic backgrounds may struggle to meet; (d) lack of trust and concerns about fraud that revealed the need for education and confidence-building measures, as well as accessible and effective recourse mechanisms

for retail payments; (e) large retailers can potentially play a leading role in encouraging and educating consumers about the benefits of digital payments.

The Digital Divide

While locality and geography do not seem to be a major barrier to the usage of financial services, they do create a digital divide in terms of smartphone ownership and access to the internet. Disparities in income is another major contributor to the digital divide, as those residing in rural areas and regions outside Metro Manila and belonging to lower socio-economic classes are at a disadvantage. In fact, the 2019 FIS found that for those who do not have an account, lack of enough money, remains a recurrent and the topmost reason for not having an account, as reported by almost half (45%) of the unbanked.

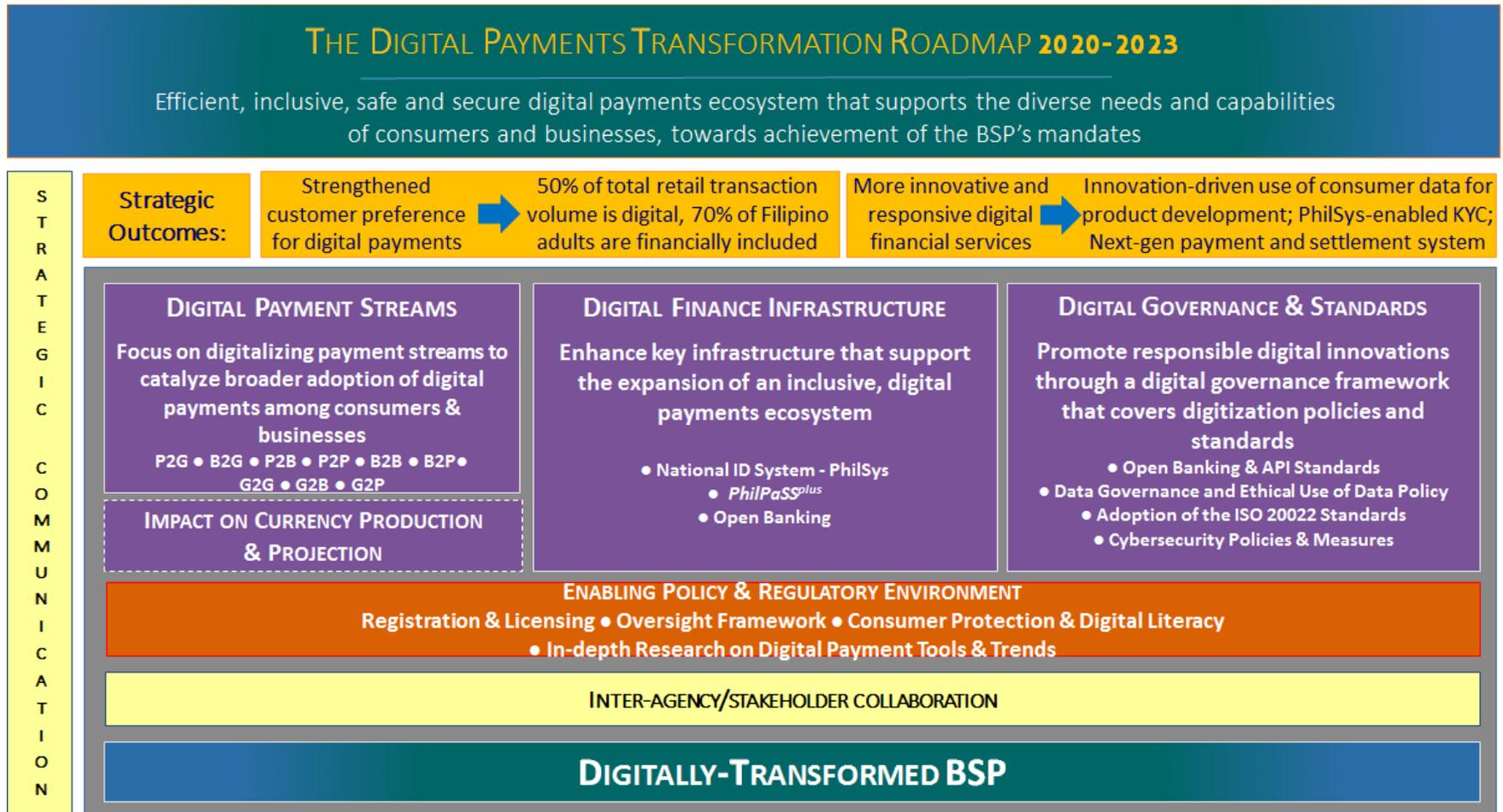
These findings suggest that economic growth and bringing economic development to the countryside are crucial elements to achieving a digital payment ecosystem that works towards financial inclusion. Economic growth raises incomes, and this is important to addressing the affordability issue to owning an account. In turn, having the money to open and maintain an account is the first step towards getting into digital payments. As such, digital connectivity is crucial to realize the potential of digital financial services. Poor internet connection and infrastructure, if left unaddressed, will continue to hinder advances in digital finance. This suggests that making fast internet connection affordable and widely available is a crucial enabler for digital financial services to flourish.

State of access and quality of internet connectivity

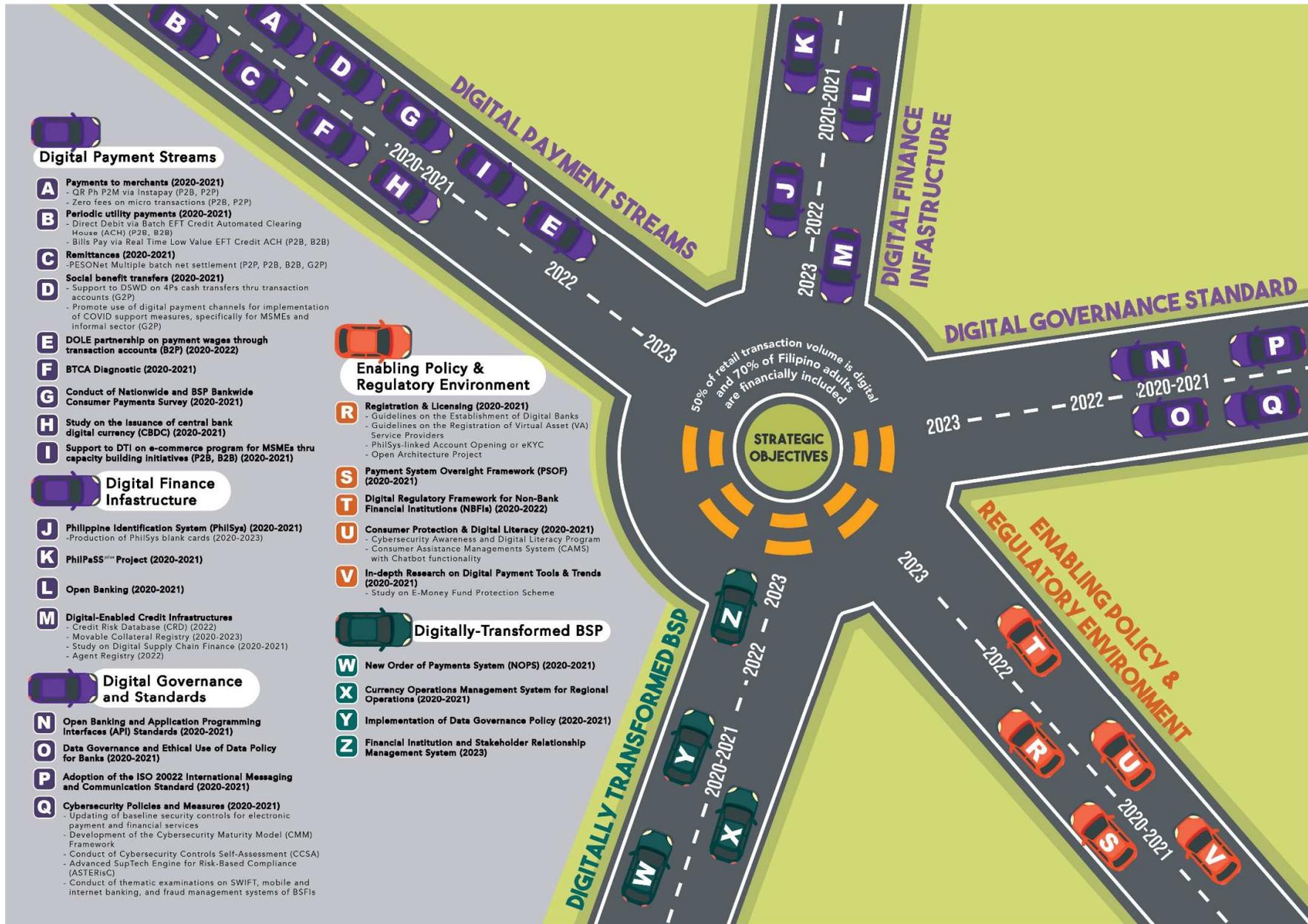
With digital payment transactions expected to gain traction, the structural support necessary to its seamless application should be provided by an infrastructure network that ensures security, reliability and efficiency. These infrastructure support, similar to roads and bridges, will facilitate the interconnection and inter-adoption of digital payments as the payment of choice in our growing economy. A recurrent and key challenge to the mainstreaming of digital payments is the broader challenge of lacking fast and reliable internet connectivity in the country.

In a recent study, the 4G speed in the Philippines ranked 4th slowest of 88 countries in OpenSignal's 2018 State of LTE and recorded the poorest overall mobile video experience of 69 countries in OpenSignal's 2018 State of Mobile Video. At the same time the fixed broadband service costs consumers 7.1% of gross national income per capita per month—well above the 5% affordability threshold recommended by the International Telecommunications Union. Based on the same study, three technologies appear to be appropriate and possible for the Philippines to have fast and reliable internet, mainly: 1) Fiber to the Premises with Gigabit Passive Optical Network; 2) Fixed mobile substitution with 5G; and 3) Low earth orbit satellite networks.

III. The Digital Payments Transformation Roadmap⁹



⁹ The key milestones set for the Roadmap initiatives are attached as Annex A.



IV. The Three Pillars of Digital Payments Transformation

The rationale for the goal to boost e-payments usage in the country is not only intuitive but also based on empirical evidence. Different studies have shown that an increase in e-payments translated to economic growth.

An APEC study, the “APEC E-Payment Readiness Index: Ecosystem Assessment and Status Report,”¹⁰ was undertaken to assess the level of readiness and determine the potential of the 21 APEC economies to engage in, adopt and reap the broad range of economic and societal benefits that e-payments hold. The report illustrated the linkages between e-payment penetration and economic growth. Using sample data from five (5) APEC economies, the study showed that a 1% change in online retail sales is associated with at least a 0.1% growth in GDP per capita among the five (5) APEC economies.

In another study of a cross-section of 50 countries,¹¹ it was shown that increasing the existing share of e-payments in a country by a margin of just 10% will generate an increase of 0.5% in consumer spending. The study also showed that e-payment networks have the potential to provide cost savings of at least 1% of GDP annually over paper-based systems through increased velocity, reduced friction and lower costs.

With the valuable insights from these studies and customizing these to the unique payment ecosystem of the country, we have identified the three (3) critical areas that the Philippines should focus on to successfully bring the cash-heavy Philippine economy to a cash-lite economy. The BSP Digital Payments Transformation Roadmap is thus anchored on these three pillars: (i) digital payment streams, (ii) digital finance infrastructure, (iii) digital governance standards.

First, the **digital payment streams** embody the BSP’s key initiatives of creating compelling, large scale digital payments use cases. These priority streams act as catalysts for building an inclusive digital finance ecosystem by demonstrating the benefits, safety, and reliability of the country’s retail payment system. Enabling consumer use cases will boost consumer awareness, thereby increasing the acceptance and use of digital payment platforms.

The further development of **digital finance infrastructure** is critical as secure, reliable, efficient, and interconnected systems are necessary to facilitate smooth payment transactions. The adoption of new platforms and solutions that will bring down the cost of providing varied digital products and services and allow for their wider distribution across the archipelago will speed up the digital payments transformation process. Reductions in cost and improvements in the speed of delivery are key to enhancing customer preference for adopting digital modes of payment across the various use cases.

¹⁰ The report was developed through the support of PayPal and was a joint study by the Australian APEC Study Centre at RMIT University and TRPC, a technology consulting and research firm based in Singapore.

¹¹ *The Virtuous Circle: Electronic Payments and Economic Growth*, based in part on research performed by Global Insight, an econometric forecasting agency. The paper may be accessed at http://www.visacemea.com/av/pdf/eg_virtuouscircle.pdf.

Of course, innovation is not without risk. For this reason, the growth in payment streams and the creation of new systems must be underpinned by sound **digital governance standards** that are aligned with global best practices and standards. An appropriate regulatory framework should be in place to ensure that the provision of digital products and services is covered by an adequate governance process, meets minimum technical expectations, and safeguards the integrity, security and privacy of customer data.

A. Digital Payment Streams

Five years ago, the BSP officially launched the NRPS as the foundational regulatory framework for modernizing the country’s retail payment system which led to the creation of the Instapay and PESONet, the critical rails of digital payments. With NRPS having laid the groundwork for interoperable and real-time small value fund transfers, the next imperative for promoting adoption of digital payment is to build its use cases for transactions between individuals, businesses and the government. With payors and payees being persons, businesses and the government, a wide range of digital payment use cases may be envisioned (see Figure 16).

Figure 16.

		PAYEE		
		GOVERNMENT	BUSINESS	PERSONS
PAYER	GOVERNMENT 1.31%	0.69% <ul style="list-style-type: none"> • Transfers from national government to LGUs • Social welfare contributions • Common use item procurements 	0.01% <ul style="list-style-type: none"> • Procurments and supplier payments • Utilities 	0.62% <ul style="list-style-type: none"> • Social welfare contributions • Salaries and wages
	BUSINESS 23.7%	0.23% <ul style="list-style-type: none"> • National and local taxes • National and local fees • Social welfare contributions 	21.37% <ul style="list-style-type: none"> • Supplier payments • Business lending • Interest payments 	2.14% <ul style="list-style-type: none"> • Salaries and wages • Social welfare contributions • Consumer lending
	PERSONS 75.98%	0.36% <ul style="list-style-type: none"> • National and local taxes • Government fees levied for services • Social welfare contributions 	72.1% <ul style="list-style-type: none"> • Utilities • Monthly merchant transactions • Interest and loan repayments 	3.1% <ul style="list-style-type: none"> • Domestic remittances • International remittances • P2P lending

Source: BTCA Philippine Country Diagnostic (December 2019)

To determine which payment use cases can potentially be the drivers for digital payment growth in the country, the largest and most relevant payment use cases were identified. The following section describes the identified payment use cases and how their digitization can positively contribute to wider digital payment adoption.

i. Person to Government (P2G) and Business to Government (B2G)

Significant savings in cost, time and effort can be had from the digitalization of payments of persons and business to the government. These transfers of funds cover payments of taxes, fees, loan amortizations and social welfare contributions, representing a key area for potential growth in digital payments. While digital business tax payments have risen significantly due to the mandatory use of the Electronic Filing and Payment System by big businesses, only 1% of payments of taxes and fees to local governments are made through digital means. Various government units are currently at different levels of readiness in terms of being able to accept digital payments, and there is a need for stronger coordination among agencies to increase capacity.

ii. Person to Business (P2B)

P2B payments hold much potential for digitalization. There are over 100,000 merchants and millions of individuals who are equipped to pay digitally. However, digital payments in this area represent only up to 12% of the transactions, and are particularly negligible among micro, small and medium enterprises (MSMEs), which comprise the majority of merchants. Moreover, the BTCA estimates that Filipinos make around 65-75 million utility payments every month, yet less than 5% of these are made digitally, with the rest done OTC in cash. Moreover, given the small average utility payment value (USD 10-30), transaction costs may be higher than the bill amount. There is thus a compelling argument for making the shift to digital P2B payments using digital wallets and online banking.

iii. Person to Person (P2P)

P2P payments such as remittances and payments to sole commercial proprietors have hugely benefited from recent digital payment innovations brought about by the NRPS, agent-banking and online banking solutions. These innovations have generated efficiencies in cost, time, and effort, as well as security from theft and fund leakages. However, the BTCA study shows that 80% of all remittances continue to be made OTC in cash, resulting in high cost and lower productivity brought about by the manual payment process.

iv. Business to Business (B2B)

B2B payments, or supplier payments, hold much promise given their large volume and high transaction value, yet almost 85% of all supplier payments by volume are made in cash. Digitalization of B2B payments through payment gateways presents an opportunity for tremendous efficiency gains, and may encourage business expansion and innovations.

v. Business to Person (B2P)

There is still much room for growth in the B2P payment stream, as only large and formal industries pay salaries and wages digitally. Up to 82% of salary payments by volume are still made through cash and checks. Much greater progress has been made in the digital disbursement of consumer loans, which accounts for 96% of disbursements by volume.

vi. Government to Government (G2G)

As one of the biggest payors in the economy, the government is in a strategic position to transfer payments digitally. Indeed, the government currently leads the way in digital payments, with those in the G2X stream having risen from 54% in 2013 to 64% in 2018. The further digitization of transfers from the national government to LGUs, as well as of social welfare contributions and payments for the procurement of common use items, can lead to a reduction in cost and the more efficient flow of funds.

vii. Government to Business (G2B)

G2B payments, consisting of procurement and supplier payments, as well as payments for utilities, are already largely digital in nature, with an estimated 90% of both the volume and value of monthly transactions made through digital means. The further digitalization of government payments for the purchase of goods and services can lead to savings of up to an estimated USD100 million annually.

viii. Government to Person (G2P)

Digital payment services help the government to promptly deliver social services through the quick and safe means of disbursement of funds to concerned stakeholders. While salary payments by the government are currently already largely digital in nature, further strides can be made in the digitalization of social transfer payments such as pensions, social security benefits, housing loan proceeds, and the conditional cash transfer program Pantawid Pamilyang Pilipino Program (4Ps). Although 45% of social benefit transfers are currently digitized, majority of these transfers are carried out through limited-purpose cash cards that can only be used by beneficiaries to withdraw funds from an ATM. These cards cannot be used directly for payments or transfers.

The BTCA estimates that digitizing welfare payments and converting cash cards into basic accounts would already provide up to 11 million individuals with their first digital store of value. In fact, with the implementation of various levels of community quarantine over the country, the Social Security System (SSS) was able to disburse through PESONet the financial assistance under the SSS Small Business Wage Subsidy Program to over 3 million employees of MSMEs that have been affected by the pandemic.

In making digital payments available, affordable and convenient for any of the above transactions, owning an account – which is a basic requirement for digital payments – becomes a necessity not only for those with extra money to save but for anyone who sends, receives and pays money, no matter how small.

The BSP is involved in a wide range of initiatives that aim to improve the digital payment experience and grow the payment streams. These initiatives are largely supportive of the priority payment use cases identified in the BTCA, which include:

Figure 17.



Existing initiatives that support each of these payment streams¹² are as follows:

Payments to merchants (P2B)

QR Ph P2M via InstaPay. QR Ph is the national QR code standard designed to transform the fragmented QR-driven payment services into interoperable payment solutions. The P2M QR is the second part of QR implementation in the country. By scanning the biller or merchant's QR which shall conform to the national QR code standard, customers can make payments without going through the hassle of keying in the account details of the biller/merchant. The use of QR Ph for payments to businesses (**P2B**) will eliminate the need for merchants and customers to maintain several accounts and for merchants to display numerous QRs. The rulebook for the implementation of the standard is currently under development. The initiative is likewise expected to bolster periodic utility payments.

¹² Several initiatives are not limited to expanding one specific payment stream, but also support other use cases.

The initiative shall also include a pilot implementation of QR codes for tricycle drivers and market vendors. The program will help digitalize **P2P** payments in the transport sector. It will also facilitate financial inclusion, as participation will necessitate the creation of transaction accounts that users can employ for personal digital payment transactions.

Zero fees on micro transactions. The BSP is working with the Philippine Payments Management, Inc (PPMI), the recognized payment system management body, to reduce the costs of doing digital payments to incentivize the consumers to convert cash-based transactions into digital form. The nature and amount of transactions that would qualify as micro shall be determined by the BSP in consultation with the industry. This initiative shall make payments to micro enterprises more appealing (**P2B**), and also support remittances (**P2P**).

Periodic utility payments (P2B)

Direct Debit via Batch EFT Credit ACH. At present, bills payments are largely push transactions, with funds manually transferred by the payors as due dates arrive. Enabling direct debit will allow customers to better manage their recurring payments by simply authorizing the payees to pull funds from the account of the payors. On the part of the payees, meanwhile, having a direct debit arrangement would help streamline collection efforts and provide assurance that expected cash inflows are realized on time. The BSP is working with the PPMI on the implementation of the initiative, which will also facilitate payments to suppliers (**B2B**).

Bills Pay via Real Time Low Value EFT Credit Automated Clearing House (ACH). At present, fragmentation and inefficiencies are observed in the bills collection process. This initiative aims to ensure that a biller can collect from payers with different payment service providers, increasing convenience for all involved. The BSP is working with the PPMI on the implementation of the initiative. The Bills Pay initiative shall not only facilitate utility payments, but shall also support the expansion of payments to merchants (**P2B**) and payments to suppliers (**B2B**).

Remittances (P2P)

Multiple batch net settlement (MBNS) of PESONet transfers. This initiative will allow for faster clearing and settlement of PESONet transactions. With multiple multilateral net clearing and settlement cycles within a banking day, users need not wait for the end-of-day batch processing of the transactions to receive fund transfers. This represents a significant improvement in efficiency and will increase the convenience for users. The BSP is collaborating with the industry on the development of rules and operating guidelines for the implementation of MBNS. This initiative will provide significant benefits in other payment streams as well, increasing the efficiency of periodic utility payments (**P2B**), payments to suppliers (**B2B**), and social benefit transfers (**G2P**).

Social benefit transfers (G2P)

The BSP is providing technical assistance to the Department of Social Welfare and Development (DSWD) to ensure the use of **full-service transaction accounts for the distribution of cash grants under the 4Ps**. The digitalization of these cash transfers will further expand **G2P** streams. While the DSWD currently distributes the cash aid through a cash card, this cash card does not represent a transaction account that may be used for saving, making retail and bills payments, and transferring funds for other purposes.

The initiative aims to replace the existing 4Ps cash cards with full-fledged transaction accounts and provide beneficiaries with increased security, lower transaction costs, and access to retail and utilities payment options. The transaction accounts will also provide beneficiaries with an account that can be used to save and invest, thus promoting responsible use of money. Apart from broadening the use cases for digital payments, the coming to fruition of this initiative will increase the number of Filipino adults with bank accounts, as the Program currently covers 5 million households.

The BSP is also promoting **the use of digital payments channels for the implementation of COVID-19 support measures**, specifically for MSMEs and the informal sector. Among the activities in this area are the engagement of legislators, the Department of Finance, the National Economic and Development Authority and the Department of Budget and Management on the institutionalization of the use of transaction accounts for COVID-19 measures. The initiative also involves the provision and facilitation of technical assistance for the government agencies that may use the transaction accounts in the distribution of cash assistance and loan proceeds to target beneficiaries.

This initiative will promote the digitalization of **G2P** payments and establish a secure, transparent and cost-efficient way to distribute cash assistance to MSMEs and workers in the informal sector. It will also facilitate financial inclusion among MSMEs, workers and poor household beneficiaries targeted for COVID-19 financial relief/assistance efforts, since the receipt of the said monetary proceeds will entail the opening and owning of a transaction account. The second tranche of the Social Amelioration Program (SAP) subsidy is targeted to cover approximately 12 million families.

Apart from the above initiatives, the BSP is also engaged in other projects that are geared toward the expansion of various use cases for digital payments, and the growth of digital payment streams more generally.

A partnership has been established with the Department of Labor and Employment (DOLE) on the **payment of wages through transaction accounts**. This partnership aims to leverage organized labor and employer groups for the promotion of payment of private sector wages thru transaction accounts and the implementation of an awareness campaign to educate wage earners on the uses and benefits of having a transaction account . On 3 August 2020, the DOLE issued Labor Advisory No. 26 series

of 2020 encouraging employers to pay wages and other monetary benefits via transaction accounts.

The initiative shall increase the digitalization of **B2P** payments, lowering transaction costs and payment leakages, ensuring mutual protection for both employer and worker, and promoting an easier and more convenient method of transferring funds. The ownership of accounts by workers will also pave the way for the creation of a rich digital footprint that can be referenced by formal lenders. This will aid workers in establishing a record of payment and obtaining credit. Given the large number of wage earners and salaried workers in the Philippines (26.5 million based on 2018 Current Labor Statistics), the shift to the payment of wages through transaction accounts will help increase the share of Filipino adults with accounts and broaden the use of digital payments.

The BSP is also working with the BTCA to **update previous diagnostic studies** through enhancements to the measurement models to allow a more efficient and timely measurement and monitoring of e-payments targets (i.e., volume and value), as well as forecast the structural changes resulting from the COVID-19 pandemic.

Finally, the BSP will launch a **nationwide Consumer Payments Survey**¹³ that will be helpful in monitoring the progress of the NRPS initiatives, for macrofinancial surveillance, financial inclusion research and any future empirical study on the impact of digital payments on the macroeconomy and the banking system. The objectives of the initiative include the: (1) collection of information on the awareness, ownership and usage of the different payment instruments by Filipino consumers; (2) identification of factors that influence their preference for these payment instruments/methods; (3) establishment of the baseline for tracking the impact of NRPS framework, particularly the volume and value of consumers' retail payments; and (4) provision of inputs for policy formulation in the area of digital payments.

Impact on Currency Production and Projection

Physical currency has associated production and storage costs. Apart from the cost of printing/minting, storage cost is also significant, as vaults are necessary to secure cash. In contrast, e-cash is convenient and can be stored in digital form without the need for physical storage facilities. Moreover, rising demand for physical currency has outpaced the BSP's production capacity, leading to the acquisition of outsourced finished currency to meet the economy's requirements.

In view of recent developments, the BSP has embarked on an **in-depth study on the issuance of central bank digital currency (CBDC)**¹⁴ and its effect on monetary policy and money supply. Literature suggests that CBDC could provide an avenue for a stable unit of account, efficient medium of exchange, and a secured store of value. It could

¹³ A BSP-wide *Consumer Payments Survey* (independent of the nationwide Survey) will also soon be rolled out. The results will be used as inputs for the formulation of policies and programs to further boost the knowledge and use of digital payments of BSP employees.

¹⁴ CBDC refers to the digital form of fiat currency issued by country's monetary authority.

also offer significant savings in printing/minting physical currencies, as well as minimize the possible spread of bacteria/viruses (e.g., COVID-19). The issuance of CBDC may lead to the reduction in the demand for physical currency, consistent with the BSP's thrust towards a cash-lite economy. This would lead to a reduction in the production of physical currency and a decline in related costs.

B. Digital Finance Infrastructure

The BSP recognizes that building a more robust digital finance infrastructure is crucial for financial inclusion. Strengthening the financial infrastructure is central to increasing cost-efficiencies and managing risks to enable new means of innovative financial services delivery capable of reaching the vulnerable sectors of economy. In this regard, the BSP is pursuing key infrastructure development initiatives towards sustainable expansion of the scope, scale and reach of digital financial services.

- **Philippine Identification System (PhilSys).** The BSP continues to support the development and implementation of PhilSys to promote financial inclusion and innovate digital financial services. Pursuant to Republic Act (R.A.) No. 11055 or the Philippine Identification System Act, the National ID is a unique, biometric-based, non-transferrable ID that will help ease know-your-customer (KYC) rules and ensure fool-proof identity in opening a transaction account. The PhilSys can drive financial inclusion by streamlining and helping reduce customer onboarding costs.

The BSP, as the chair of the PhilSys Policy and Coordination Council (PPSC) Inter-Agency Committee Sub-Group on Use Cases and Authentication, spearheads the crafting of strategy to facilitate the conduct of PhilSys enabled electronic-KYC or e-KYC. The PPSC also ensures that financial service providers (FSPs) including banks and other financial institutions will form part of the PhilSys ecosystem. This will allow the FSPs to lower onboarding and factor authentication costs by leveraging on the National ID's digital authentication features such as biometrics. In addition, building on this digital identity, FSPs can develop other applications to offer payments, savings and micro-credit services to underserved clients.

Moreover, the BSP will be producing the blank cards for the National ID for five years¹⁵.

- **PhilPaSS^{plus}.** To better service more and more financial transactions, the BSP has endeavored to replace the 17-year old *PhilPaSS* with a next generation system. With comprehensive functionalities, the *PhilPaSS^{plus}* shall settle larger numbers, varying types and complexities of financial transactions using a single platform. Using the latest technology, *PhilPaSS^{plus}* shall significantly enhance risk reduction, security levels, business continuity provisions, liquidity

¹⁵ Pursuant to the Memorandum of Agreement entered into between the BSP and the Philippine Statistics Authority (PSA) in October 2019.

management, and the generation of data and information. As the communication message format is standardized using the ISO 20022 international standard, the country's payment systems shall be more interoperable across the country and even with payment systems in other jurisdictions.

- **Open Banking.** The BSP is cognizant of the benefits of moving towards an open banking ecosystem, a data-sharing scheme, which espouses consent-driven data portability, interoperability and collaborative partnerships among incumbent financial institutions and new third party players. Through open banking, third parties such as fintechs will be allowed access to financial information needed for developing innovative applications and services.

The BSP recognizes the importance of establishing credit infrastructures in addressing information asymmetries between providers and users of financial services. Credit information sharing presents opportunities for reduced cost of lending and improved service delivery thereby benefiting the low-income market segments. Since the design and development of these infrastructures will explore a platform-based implementation strategy, these can connect to the country's digital identity and payment systems.

- **Credit Risk Database (CRD).** The CRD, a credit enhancement tool pioneered in Japan, uses financial statement information, non-financial data (e.g., industry/sector, location) as well as default data of borrowers to build a statistical scoring model predicting the creditworthiness of small and medium enterprises (SMEs). It allows for the flexible use of analytical output based on anonymized data to be provided by the participating members. This development in credit infrastructure is expected to lower the cost of lending and improve speed of service delivery. The CRD initiative is seen to broaden SME access to finance by promoting the shift from collateral based to risk-based lending.
- **Movable Collateral Registry.** The BSP is actively supporting the implementation of the Philippine Property Security Act (PPSA), particularly the online movable collateral registry. Under the PPSA, the Land Registration Authority is mandated to develop and implement such registry as part of the secured transactions framework. The PPSA aims to promote access to MSME finance by facilitating the acceptance of movable assets as collateral for loans. The BSP is set to issue supporting policies and guidelines to promote adoption of the PPSA. The online collateral registry is viewed as an important credit and digital infrastructure to support broader inclusion goals for MSMEs.
- **Study on Digital Supply Chain Finance (SCF).** Another initiative which aims to promote greater financial inclusion among MSMEs is the development of a dynamic SCF market through digital platforms. The use of digital platforms is recognized as a critical piece for a successful SCF program, along with an enabling regulatory environment around electronic invoicing, electronic signatures, and secured transactions, among others. The digital platforms can

be developed and run by different actors, including a lead firm, a lending bank, a third party player, the government, and business associations.

- **Agent Registry.** Agents are considered critical enablers of an inclusive digital finance ecosystem, facilitating onboarding of the unbanked and their transition to digital payments. The agent registry is a digital solution which aims to capture all types of agents (e.g., bank cash agent, remittance agent, electronic money issuers, and cash-out/in partners) in one consolidated database. The said platform will be capable of (i) assessing the depth of geographic penetration and concentration of agents, (ii) monitoring agent activity in terms of volume and value of transactions, and (iii) producing a web-based directory of authorized agents that will be made accessible to the public through the BSP website.

Once built and developed, the agent registry's rich data collection may be used in the future as part of a data stack which may be flexibly combined to build useful digital platforms. These platforms may further enable the evolution of various innovative digital finance solutions.

To address the broader challenge on the state of critical digital connectivity in the country, the BSP strongly supports the **Information and Communication Technology Policy (ICT) policy reforms** that aim to address digital connectivity gaps, as well as broad efforts to promote fast and reliable internet connectivity fostering further financial inclusion. In particular, the BSP sees strong potential in the use of satellite communications technology in delivering internet connectivity. This is being explored as a potential solution for improved financial access particularly in hard-to-reach rural areas. Toward this end, the BSP is supporting the following proposed reforms:

- **Open Access in Data Transmission Act.** The bill aims to modernize the country's telecoms regime which is still governed by a law that was enacted at a time when internet and data services were not yet commercially available. Among others, a major amendment of the proposed bill is to remove the requirement to obtain congressional franchise and streamline the registration process to open up the broadband industry to more players and attract much needed investment in data transmission infrastructure.
- **Amendment to Executive Order (EO) No. 467.** Signed by former President Fidel V. Ramos as a national policy for the operation and use of international satellite communications in the country, the EO is found to be restrictive as it only allows enfranchised entities duly authorized by the National Telecommunications Commission (NTC) to access international satellite systems. The amendment aims to liberalize access to satellites for internet connectivity which will help address digital infrastructure gap in the countryside. Currently, only telecom companies with congressional franchises can provide satellite technology services.

C. Digital Governance and Standards

Digital governance and standards aim to promote responsible and strategic use of digital assets by BSP-supervised entities to ensure optimal benefit for the financial system and the transacting public. Industry-level standards aim to ensure regulated entities deliver minimum expectations for consumer data protection, cyber resilience, and interoperability.

The BSP is undertaking the following initiatives to support increasing payment digitalization:

Open Banking and Application Programming Interfaces (API) Standards. As the BSP works toward enabling an open banking ecosystem, it likewise understands the associated risks, particularly with respect to data security and privacy. In this regard, a policy on open banking will be developed to lay down the technical, security, and governance standards to be observed by supervised entities intending to publish open data APIs.

The adoption of open banking regulations is expected to boost consumer confidence in sharing their data with BSP-supervised financial institutions (BSFIs) and accredited third party providers/partners. Enabling responsible data sharing schemes will facilitate collaborations to enhance the design of financial products and services, as well as alleviate some of the pain points experienced by low-income customers. In particular, such arrangement can address the high costs associated with onerous customer due diligence procedures that serve as a barrier to financial services access.

Data Governance and Ethical Use of Data Policy. The BSP is cognizant of the importance of data as an asset and a fundamental component of its capabilities in providing data-driven policies and decisions. In this regard, a policy on data governance for and the ethical use of data by supervised entities will be crafted. The issuance will be geared toward ensuring that all data and information obtained and passing through different digital channels will be handled ethically and that all participants will be bound by key data governance principles. The policy will also incorporate BCBS principles on effective risk data aggregation and risk reporting to support decision making for enterprise-wide risk management.

Adoption of the ISO 20022 International Messaging and Communication Standard. In 2019, the BSP's Monetary Board approved to mandate the required adoption of the ISO 20022 standard to be implemented by all financial institutions and third party payment service providers that transmit to the RTGS electronic instructions in their systems and/ or infrastructures used to transmit such payment instructions. The adoption of the ISO 20022 shall support the following strategic goals of the BSP: (1) To allow rich and well-defined structures for important and more detailed data that will facilitate and promote the safe and efficient use of electronic payment systems; (2) To allow messaging to be expanded or changed in the future, enabling systems to support current as well as forthcoming technological developments; (3) To provide for the same messaging standards used for domestic and cross-border financial transactions, thereby facilitating interconnectivity, interoperability and financial integration; and

(4) To adhere to the BSP regulations, including, among others, the NRPS Framework, that require the BSP-supervised financial institutions and retail payment systems to demonstrate sound risk management, and effective and efficient interoperability.

Cybersecurity Policies and Measures. Financial technologies have revolutionized the way customers transact their financial needs in a manner that offers interoperability, ease and availability. Alongside these developments, the threats posed by notorious cyber actors have magnified as well. The increased interconnectivity and accessibility of systems, customers, and institutions inevitably lure more malicious actors as potential attack surfaces continue to widen.

In 2017, the BSP issued Circular No. 982 to address rapidly evolving cyber threats. The Circular espouses a holistic, risk-based and cyclical approach to managing cybersecurity risks. It highlights the role of the board and senior management in spearheading sound information security governance and strong security culture within their respective networks. Also, with the issuance of Circular No. 1019, the BSP tightened the reporting regime of supervised institutions with respect to cyber-related incidents and operational disruptions. From ten calendar days to within two hours from discovery of the incident, faster reporting timelines aim to further enhance the industry's situational awareness and cyber resilience.

The BSP continues to be vigilant of how financial institutions and markets respond to the volume and pace of digital transformation. This allows the BSP to formulate appropriate **policies to promptly manage the potentially heightened cybersecurity risks** along with the greater use of digital payments and financial services. To further strengthen the cybersecurity capabilities of BSFIs, the BSP will be issuing amendments to the electronic banking guidelines **to update the baseline security controls for electronic payment and financial services (EPFS)** .

Complementary to these policy initiatives, the BSP is developing supervisory tools such as the **Cybersecurity Maturity Model (CMM) Framework** and the **Cybersecurity Controls Self-Assessment (CCSA)** template, which are aimed at assessing cybersecurity maturity and posture, on both individual BSFI and industry-wide bases, as well as addressing gaps in regulatory compliance. These tools will better calibrate the BSP's supervisory responses and guide future policy direction on cyber-resilience. Moreover, the planned acquisition of the **Advanced SupTech Engine for Risk-Based Compliance (ASTERisC)**, a Governance, Risk Management, and Compliance (GRC) system, will facilitate monitoring of cybersecurity compliance of BSFIs. In particular, the system will enable cyber profiling, reporting and self-assessments.

Meanwhile, the BSP is developing the work program in preparation for the conduct of **thematic examinations on SWIFT, mobile and internet banking, and fraud management systems of BSFIs.**

V. Enabling Policy and Regulatory Environment

The BSP is committed to provide an enabling regulatory environment that fosters digital innovation and transformation while ensuring that attendant risks are effectively managed. In line with this, the BSP espouses the “test-and-learn” or “regulatory sandbox” approach, which provides a testing ground for new business models and technologies. This approach also encourages multi-stakeholder dialogue and collaboration among the various players across the financial sector to harmonize policies and prevent regulatory arbitrage. Imperative to this approach is close monitoring of BSP-supervised institutions to better understand the risks involved and to deploy mitigating actions in a timely manner, when warranted.

a. Registration & Licensing

The registration and licensing framework of the BSP aims to promote a level playing field and provide equal opportunities for all participants in the digital ecosystem, regardless of their size and services offered. Such regulatory stance welcomes new and emerging business models and services, and ensures that new sources of risk are identified and managed. In this regard, the BSP develops, reviews and streamlines its registration and licensing procedures, capital requirements, and other regulations affecting the entry and exit of financial service providers to ensure contestability and competition in the financial sector.

As part of the BSP’s reform agenda of supporting digital innovations and increasing access to secure and efficient channels for banking, payment, remittance and other financial services, Circular No. 1033 was issued in February 2019 to streamline the electronic payments licensing process of supervised institutions. The BSP also simplified the registration requirements for money service businesses and pawnshop operators with the issuance of Circular No. 1039 in May 2019.

To further promote expansion of the digital finance ecosystem in support of finance inclusion, the BSP is undertaking the following policy initiatives:

Establishment of Digital Banks. The BSP is developing a regulatory framework on the establishment of digital banks in the country. This policy initiative aims to provide a cost-effective and convenient banking experience especially to retail clients and MSMEs. The BSP envisions that the issuance of such regulation will support its thrust of developing an inclusive, safe and stable financial ecosystem.

Banks applying for a digital banking license are expected, among others, to have robust, secure and resilient technology infrastructure, effective data management strategy and practices, and sound digital governance. The BSP’s corporate governance and risk management standards for banks will apply to digital banks following the principle of proportionality.

Registration of Virtual Asset (VA) Service Providers. VA systems have the potential to revolutionize the delivery of financial services by providing faster and more economical means for transferring funds, both domestic and international, thereby

supporting financial inclusion. These benefits, however, should be considered alongside the attendant risks in view of the higher degree of anonymity involved, velocity of transactions, volatility of prices and global accessibility. The BSP will be providing guidance to prevent the misuse of VAs for money laundering and terrorist financing, and to mitigate information technology (IT) and consumer protection-related risks, among others.

PhilSys-linked Account Opening or e-KYC. The BSP is set to develop guidance on the use of digital identification and verification as part of the customer onboarding process for supervised financial institutions. This initiative aims to facilitate seamless and remote online identity verification by leveraging on the PhilSys rollout. The use of e-KYC will support the acceleration of digital financial inclusion by making ownership of a transaction account easier and more accessible.

Open Architecture Project. This initiative aims to expand the range of institutions that can serve as touch points for financial products and services offered by different providers. The issuance on a regulatory framework on open architecture is expected to support the propagation of digital financial products and services, and help bolster the increased use of digital payments by a wider set of customers.

b. **Oversight Framework**

The adoption of the **Payment System Oversight Framework (PSOF)** with the issuance of Circular No. 1089 forms part of the second leg of the phased-in implementation of Republic Act (R.A.) No. 11127 or the National Payment Systems Act (NPSA). It may be recalled that under Circular No. 1049, operators of payment systems (OPS) that are operating at the time of the effectivity of R.A. No. 11127 are required to register with the BSP. All succeeding regulatory issuances to further implement the NPSA will be anchored on the PSOF.

The Oversight Framework sets out the policy objectives, the scope of the oversight function and the oversight activities to exercise the said function, as well as the cooperative oversight arrangements that may prospectively be entered into with other regulators (domestic and foreign). The Oversight Framework likewise focuses on the designation of a payment system which provides the description of the criteria and process to be followed for designation, and the general oversight expectations as a consequence of the designation of a payment system. The Oversight Framework recognizes that the safety, efficiency, and reliability of a designated payment system may be at risk as a result of weaknesses in governance by the operator of a designated payment system. To prevent disruption in such a payment system and the country's payments ecosystem in general, the Oversight Framework provides for the appointment by the BSP of a manager to administer the operation of the designated payment system operator.

The adoption of the Payment System Oversight Framework forms part of the BSP's reform agenda of strengthening governance over payment systems, especially in these times when the smooth functioning of these systems has been challenged by the COVID-19 pandemic.

The BSP is also closely working with the PPMI to ensure that its members which are offering digital payment services through PESONet and InstaPay employ a responsive consumer redress framework. This framework entails a standardized complaint handling among ACH participants where baseline requirements, guidelines and expectations on fraud handling and resolution are clearly laid out and documented. This ensures that the roles and responsibilities of all parties involved are well defined and standard performance measures are properly established. To promote transparency, such redress mechanism shall be made publicly available. This is among the priority initiatives of the PPMI considering the relevance of consumer protection in preserving the public's trust and confidence in digital payment services.

Meanwhile, the BSP is developing the **Digital Regulatory Framework for Non-Bank Financial Institutions (NBFIs)** which aims to rationalize and streamline the varying rules and regulations applicable to NBFIs. With this initiative, the BSP will be implementing a single, unified framework for non-bank players. This shall level the playing field for market participants and foster an enabling environment for digital payment services by diverse providers. Such framework will set out the minimum regulatory standards that all NBFIs will be required to meet in order to participate and offer digital payment services in the Philippine market.

c. **Consumer Protection & Digital Literacy**

The BSP, in collaboration with industry associations and selected stakeholders, will implement a **program to enhance cybersecurity awareness and digital literacy** in the Philippines. Such a program supports the BSP's policy priority of expanding the digital finance ecosystem by encouraging massive usage by consumers across all sectors. The underlying objective of the program is to increase trust and confidence in the security of digital payments and other technology-enabled financial transactions, especially in light of increasing options made available by varied financial institutions.

This initiative will further promote and support the growth of digital financial services by raising the public's digital finance literacy and cybersecurity awareness. This will ensure the public's trust and confidence in the availment of digital financial services, allowing it to flourish and lead to greater financial inclusion.

The BSP has also launched its **Consumer Assistance Managements System (CAMS) with Chatbot functionality**, which is now named BSP Online Buddy (BOB). Equipped with artificial intelligence and Native Language Processing (NLP), the said platform mainly provides the BSP with an automated supervisory capability for complaints against its supervised financial institutions.

This initiative supports the BSP's own digitization initiative by allowing an easier and faster way to gather complaints from the public. The Chatbot also allows for automated complaints resolution, which translates to improved efficiency. Ultimately, this initiative will help increase public trust and confidence in the BSP as a financial regulator. This will hopefully serve as encouragement for the public to get onboard the formal financial system and further financial inclusion.

d. **In-depth Research on Digital Payment Tools & Trends**

In addition to the risk of the bankruptcy of the electronic money issuer (EMI), e-money accounts also face the risk of bankruptcy of the deposit-taking institution holding the trust account with the e-money float. In this regard, the BSP is undertaking a **study on e-money fund protection scheme**.

The study aims to determine the appropriate risk management mechanisms that can be implemented to protect end-user funds held by EMIs in the same way that bank deposit accounts are secured by deposit insurance schemes. This initiative on end-user fund protection aims to promote public trust in and uptake of e-money accounts toward greater financial inclusion and digitalization of payments.

VI. Inter-agency/Stakeholder Collaboration

The exponential growth of e-payments in the country can be best achieved through multi-stakeholder collaboration, a concept employed by the BSP in developing policies and enforcing regulations. This whole-of-society approach entails the engagement of key stakeholders facilitating holistic actions to achieve the shared vision of an efficient, inclusive, safe and secure digital payments ecosystem. Guided by this approach, the BSP has forged various strategic institutional partnerships with both government agencies and the private sector to ensure alignment, coordination and optimization of efforts. Among these key collaborative platforms are:

- **Financial Inclusion Steering Committee (FISC).** The FISC is an inter-agency coordinating body that serves as a platform for public-private coordination and cooperation. The FISC likewise pursues the harmonization of policies and programs that drive the implementation of the National Strategy for Financial Inclusion (NSFI) and help attain an inclusive digital finance ecosystem. Under the FISC, collaboration is underway on efforts to fast-track the National ID System, as well as the payment of wages and transport fares and the distribution of cash transfers under the 4Ps and the recent Bayanihan Act SAP through the use of transaction accounts and by digital means. These initiatives will help build compelling use cases for shifting to digital payments.
- **Cooperation with the DTI to craft the Philippine E-Commerce Roadmap 2022.** The BSP is among 28 government agencies and more than 80 private sector entities involved in crafting the country's E-Commerce Roadmap 2022. Currently in its consultation and formulation stage, the said initiative aims to undertake a baseline study of the current digitalization state of Philippine MSMEs and come up with measurable targets, strategies, metrics, and policy initiatives.

In particular, the BSP is providing assistance in designing and facilitating capacity building for MSMEs pivoting to online selling, specifically regarding the use of digital payments. This supports the strategic objective of raising the share of digital payments, particularly along the P2B and B2B streams.

- **Financial Sector Forum Financial Technology Committee (FinTech Committee).** The Committee was created in August 2018 in response to the rapid expansion of fintech and the related issues cutting across financial sector jurisdictions. The Committee is tasked to, among others, ensure that fintech innovation fulfills the regulatory goals of maintaining financial stability; upholding consumer protection, cyber security and data privacy; and preventing money laundering and other illicit activities. A Cooperative Oversight Framework is currently being developed to institutionalize collaboration among the regulatory agencies.

Under the FinTech Committee, the Financial Sector Forum (FSF)¹⁶ aims to establish a cohesive and consistent approach to fintech innovation in the areas of regulation, supervision, and policy making. With this objective, the Committee undertook the first step of identifying the various fintech use cases and the scope of authorities of each regulator. As part of its next steps to harmonize regulatory responses to fintech innovations across the sector, the Committee is working on the adoption of common standards on information security governance. This initiative will address the regulatory gaps identified by the Committee, including, among others, on enforcement actions.

The Committee is also engaging fintech players to build capacity of the regulatory authorities for enhanced supervision and oversight readiness. The Committee continuously monitors developments in the fintech landscape and seeks ways to enhance its surveillance capabilities to strengthen its situational awareness of new technological trends and potential regulatory concerns.

- **Task Force on the Adoption of ISO 20022 on Philippine Payments (TF-ISO 20022).** In 2018, the BSP established the TF-ISO 20022 as the driving force of the BSP and of the Philippine financial industry in ensuring the adoption of the ISO 20022 standard, in synch with the upgrading of the *PhilPaSS*. The TF is comprised of representatives both from the BSP and participants of *PhilPaSS*. In 2020, the TF successfully established the ISO 20022 Rulebook for the Philippine Financial Industry and onboarded stakeholders through various briefings. The TF shall continue to ensure the implementation of the standard, guided by the published Rulebook and compliant with BSP's Roadmap and timelines on the target implementation of the *PhilPaSS^{plus}* in 2021.

VII. Digitally-Transformed BSP

The different initiatives being undertaken by the BSP to support digital payment transformation are underpinned by the BSP's own digital transformation.

Digital transformation is an evolutionary process that synergizes people, processes, and technology to create value. The enablement of digital transformation in the BSP is anchored on the establishment of a digital native enterprise, wherein processes, transactions and interactions are largely technology-enabled. The transformation will be seen in five dimensions, involving an organizational *culture* guided by a robust IT

¹⁶ The FSF is composed of the BSP, Insurance Commission, Philippine Deposit Insurance Corporation and the Securities and Exchange Commission.

governance mechanism, integrated systems to provide the *customer* with an efficient IT ecosystem, *intelligence* in terms of cognitive and artificial intelligence capabilities, improvement in *operations* to optimize work processes to support decision-making, and a shift in *work* mindset to drive the adoption of digital competencies. Successful transformation can only happen if the adoption of new technology is accompanied by a true digital strategy that will create an organization and cultural setting that encourages innovation and supports change.

This digital transformation is well underway and continuing at a fast pace. The impact of the COVID-19 pandemic has accelerated the implementation of the strategic and IT modernization initiatives under the BSP Information Systems Strategic Plan (ISSP) 2020-2023, which demonstrated the BSP's agility to adapt to a Volatile, Uncertain, Complex, and Ambiguous environment. With the establishment of this Roadmap and the New Economy Arrangements, additional focus will be turned to ICT projects that will strengthen the BSP's cyber resilience, support digital innovation, increase cloudification and mobility, and enhance the Bank's IT infrastructure.

In addition to the PhilSys, *PhilPaSS^{plus}* and CAMS initiatives described earlier, there are several other ICT projects that are part of the ISSP and directly support digital payment transformation.

First is the implementation of **the New Order of Payments System (NOPS)**. This application will make payments through internet/mobile banking, and mobile money services available to BSP employees and external clients with no Demand Deposit Accounts maintained in the BSP. The implementation of the NOPS will not only make collections safer, easier, and more reliable, but will also represent a *key development in digital finance infrastructure*. It shall also lead to an increase in the P2G and B2G digital payment streams.

Another is the rollout of an updated **Currency Operations Management System for regional operations**. This system covers currency forecasting, distribution, inventory, and retirement, and will provide regional users with securities management capabilities. This system will be valuable in *enhancing the efficiency of the currency production and projection processes*.

The BSP is likewise gearing up for the **full implementation of the Data Governance Policy** through the issuance of a Data Governance Manual. In December 2019, the BSP Data Governance Policy was issued. The policy aims to ensure data quality and integrity; to drive efficiency and effectiveness in data management processes and the generation of required information; and to strike a reasonable balance between data accessibility and the protection of data privacy and confidentiality. It covers all data collected and used by the BSP in any form. Following the creation of an internal Data Governance Council, work is being undertaken on the codification of internal standards in a Data Governance Manual. The full implementation of the policy is expected to, among others, increase stakeholder confidence in the handling of data and serve as a model for the standards to be adopted by supervised entities.

Finally, the BSP aims to implement a **Financial Institution and Stakeholder Relationship Management System**, which will cater to all BSFIs. The system will include reporting and other related services, in line with each entity's corresponding licenses and authorities. The increasing digitalization of transactions using this system may also serve to further support the transformation toward digital payments.

VIII. The Role of Strategic Communication

The BSP recognizes the critical role of strategic communication in promoting awareness of digital payments and the platforms available, as well as in improving digital financial literacy and consumer protection in support of digital financial inclusion.

In this regard, the BSP is **developing an integrated communication plan** to support the attainment of the Roadmap's strategic outcomes. The said communication framework will clearly outline the digital payment transformation rationale and goals, delineate the roles and responsibilities, and ensure that implementation processes of the Roadmap initiatives are well disseminated to target stakeholders. Moreover, such plan will be carried out in a cost-efficient manner while ensuring the consistency of messaging across all channels.

In the 2019 BTCA report, key stakeholders in the digital payments ecosystem are grouped into three main categories - the Government, Businesses and Persons. The roles of these stakeholders constantly shift, depending on whether they are situated as the Payee or the Payor in the digital payment stream. Thus, in tailoring the integrated communication plan, consideration will be given to the nature of the payment streams and the role/s that each stakeholder plays.

To maximize the impact and recall value to the public of the BSP's push to go digital, there will be **standardization of information collaterals and promotional items**. The BSP is also looking into **expanding its mainstream and social media presence** as a communication channel, especially in the region and provinces.

The **Public Perception Survey (PPS)** will also be expanded to solicit feedback through a wide array of modalities, including digital means, in light of the COVID-19 pandemic. The initiative intends to solicit and gauge the public's trust and confidence level both in the BSP and in its digital payment initiatives. The initiative aims to gather valuable feedback and expand the platforms and frequency through which public sentiment may be captured.

Finally, the BSP, in partnership with the PPMI, will be launching a **stakeholder recognition and awards program** as part of the BSP stakeholder engagement efforts. This program will be in recognition and appreciation of digital payment players in the country (consumers, merchants, PSPs, etc.) for exhibiting exemplary performance and introducing value-adding innovations.

Digital Payments Transformation Roadmap

Schedule of Strategic Initiatives

Strategic Initiative	Priority Actions		
	2020-2021	2022	2023
A. Digital Payment Streams			
QR Ph P2M pilot implementation (P2B, P2P)	<ul style="list-style-type: none"> • Standard Specification • Determine pricing mechanism • On-boarding of InstaPay participants • Presentation of Concept Note to select LGUs and FSPs • Formalize agreement with participating LGUs • Pilot roll-out 		
Zero fees on micro transactions (P2B, P2P)	<ul style="list-style-type: none"> • Consultation with industry 		
Direct Debit (P2B, B2B)	<ul style="list-style-type: none"> • Pilot of direct debit 		
Bills Pay (P2B, B2B)	<ul style="list-style-type: none"> • Pilot of bills pay via real time ACH 		
PESONet Multiple batch settlement (MBS) (P2P, P2B, B2B, G2P)	<ul style="list-style-type: none"> • Amend ACH rules • Draft PhilPaSS Operating Guidelines • Amend policy on settlement guarantee mechanism • Testing by CSO and ACH participants 		
Support to DSWD on 4Ps cash transfers thru transaction accounts (G2P)	<ul style="list-style-type: none"> • Inclusion of BSP definition of transaction accounts in IRR of RA 11310 • Revision of DSWD guidelines and MOA with financial service providers (FSPs) 		

Strategic Initiative	Priority Actions		
	2020-2021	2022	2023
	<ul style="list-style-type: none"> Land Bank 4Ps cash card converted to transaction accounts Financial literacy 		
Promote use of digital payment channels for implementation of COVID support measures, specifically for MSMEs and informal sector (G2P)	<ul style="list-style-type: none"> Issuance of Executive Order or other policy to support use of transaction account and partnership with non-GFI FSPs Agreement between BSP and implementing agencies 		
DOLE partnership on payment of wages thru transaction accounts (B2P)	<ul style="list-style-type: none"> Financial inclusion forums for target industries and worker groups conducted DOLE advisory to employers Monitoring of adoption through employer survey 	<ul style="list-style-type: none"> Financial inclusion forums for target industries and worker groups conducted 	
BTCA diagnostic	<ul style="list-style-type: none"> Public launch of the results of the 2020 BTCA Country Diagnostic 		
Conduct of Nationwide and BSP Bankwide Consumer Payments Survey	<p>Subject to health and government restrictions:</p> <ul style="list-style-type: none"> Pre-survey preparation Reporting of results 		
Study on the issuance of central bank digital currency	<ul style="list-style-type: none"> Completion of study 		
Support to DTI on e-commerce program for MSMEs thru capacity building initiatives (P2B, B2B)	<ul style="list-style-type: none"> Report on the actor-specific actions to drive merchant/MSME acceptance of digital payments 		

Strategic Initiative	Priority Actions		
	2020-2021	2022	2023
B. Digital Finance Infrastructure			
B.1 Key Payments Infrastructure			
Philippine Identification System (PhilSys)	<ul style="list-style-type: none"> Development of strategy and roadmap for PhilSys use case in the financial services sector Development of monitoring tool on adoption of PhilSys in the financial services sector Live implementation 		
PhilSys ID Project	<ul style="list-style-type: none"> Production of blank cards Testing of card personalization by Philippine Statistics Authority (PSA) Full implementation of personalized PhilSys IDs 	<ul style="list-style-type: none"> MOA between PSA and BSP is up to 5 years. 	
PhilPaSS ^{plus} Project	<ul style="list-style-type: none"> Live implementation 		
Open Banking	<ul style="list-style-type: none"> Implementation 		
B.2 Supporting Credit Platforms			
Credit Risk Database (CRD)	<ul style="list-style-type: none"> Creation and hiring of CRD Project Implementation Unit (PIU) CRD model development Turnover of CRD operations to permanent organic unit 	<ul style="list-style-type: none"> Completion of model validation 	
Moveable Collateral Registry	<ul style="list-style-type: none"> Issuance of supporting policies and guidelines to promote adoption of moveable collateral by banks (with inputs from digital SCF study) 		
Study on Digital Supply Chain Financing	<ul style="list-style-type: none"> Technical assistance from development partners Release of results of the study with 		

Strategic Initiative	Priority Actions		
	2020-2021	2022	2023
	recommended approach		
Agent Registry		<ul style="list-style-type: none"> • Development of IT solution • Issuance of implementing policy and harmonization of agent reporting framework 	
B.3 Information and Communication Technology (ICT) Policy Reforms¹⁷			
Open Access in Data Transmission Act	<ul style="list-style-type: none"> • The bill is currently filed with Congress and referred to the Committee on Information and Communications Technology in July 2019 		
Amendment to Executive Order (EO) No. 467	<ul style="list-style-type: none"> • The Financial Inclusion Steering Committee is working with the National Telecommunications Commission (NTC) to ensure that the proposed amendments are in accordance with existing laws, rules and regulations, as well as NTC's policy priorities and views. 		
C. Digital Governance and Standards			
Open Banking and API Standards	<ul style="list-style-type: none"> • Formulation and issuance of policy 		
Data Governance and Ethical Use of Data Policy for Banks	<ul style="list-style-type: none"> • Exposure of discussion paper 		
Adoption of ISO 20222 international messaging and	<ul style="list-style-type: none"> • Full implementation 		

¹⁷ The BSP provides support to these ongoing ICT policy reforms.

Strategic Initiative	Priority Actions		
	2020-2021	2022	2023
communication standard			
Updating of baseline security controls for electronic payment and financial services	<ul style="list-style-type: none"> Formulation and issuance of policy 		
Development of Cybersecurity Maturity Model Framework	<ul style="list-style-type: none"> Formulation and issuance of policy 		
Conduct of Cybersecurity Controls Self-Assessment	<ul style="list-style-type: none"> Updating of CCSA Template based on CCSA Responses 		
Advanced SupTech Engine for Risk-Based Compliance	<ul style="list-style-type: none"> Live implementation 		
Conduct of Thematic Examinations	<ul style="list-style-type: none"> Implementation 		
D. Enabling Policy and Regulatory Environment			
D.1 Registration and Licensing			
Guidelines on Establishment of Digital Banks	<ul style="list-style-type: none"> Formulation and issuance of policy 		
Guidelines on Registration of Virtual Asset Service Providers	<ul style="list-style-type: none"> Formulation and issuance of policy 		
Guidelines on PhilSys-linked Account Opening or eKYC	<ul style="list-style-type: none"> Issuance of guidelines on PhilSys-enabled eKYC <p>Note: Dependent on the timeline of PhilSys ID roll-out</p>		
Open Architecture Project	<ul style="list-style-type: none"> Formulation and issuance of policy 		
D.2 Oversight Framework			
Payment System Oversight Framework	<ul style="list-style-type: none"> Formulation and issuance of policy framework 		

Strategic Initiative	Priority Actions		
	2020-2021	2022	2023
Digital Regulatory Framework for NBFIs	<ul style="list-style-type: none"> Development of conceptual framework 	<ul style="list-style-type: none"> Development and issuance of implementing regulations 	
D.3 Consumer Protection & Literacy			
Cybersecurity Awareness and Digital Literacy Program	<ul style="list-style-type: none"> Full program roll-out 		
Consumer Assistance Managements System (CAMS) with Chatbot functionality	<ul style="list-style-type: none"> Live implementation 		
D.4 In-depth Research on Digital Payment Tools & Trends			
Study on E-money Fund Protection Scheme	<ul style="list-style-type: none"> Release of results of the study with recommendations 		
E. Digitally-Transformed BSP			
New Order of Payments System	<ul style="list-style-type: none"> Live implementation 		
Currency Operations Management System for regional operations	<ul style="list-style-type: none"> Live implementation 	<ul style="list-style-type: none"> Post-Implementation 	
Implementation of Data Governance Policy	<ul style="list-style-type: none"> Issuance of Data Governance Manual 		
Financial Institution and Stakeholder Relationship Management System			<ul style="list-style-type: none"> Live implementation
F. Strategic Communication			
Communication Initiatives	<ul style="list-style-type: none"> Development of Integrated Communication Plan Standardization of information collaterals and promotional items Expansion of the BSP's mainstream and social media presence Expansion of the Public Perception Survey modalities Stakeholder recognition and awards program 		