

Fast Payments for Everyone — CEFTS Implementation in Sri Lanka

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The rapid advancement of digital technologies has transformed the global payments landscape, with fast payment systems becoming a key driver of financial inclusion and economic growth. In Sri Lanka, the implementation in 2015 of its fast payment system, the Common Electronic Fund Transfer Switch (CEFTS), marked a significant milestone that steered the country's payment infrastructure towards enabling interoperability, innovation, and financial inclusion. Today, CEFTS processes the major share of interbank retail transactions, becoming a cornerstone in Sri Lanka's transition to a fully digitalized economy.

While CEFTS has become a major payment system today, it was implemented within a context where state-of-the-art large value and retail interbank payment systems were efficiently providing real-time and same or next business day settlement, respectively for corporate customers, merchants, and individual bank customers. However, two distinctive attributes differentiated CEFTS from other retail payment systems.

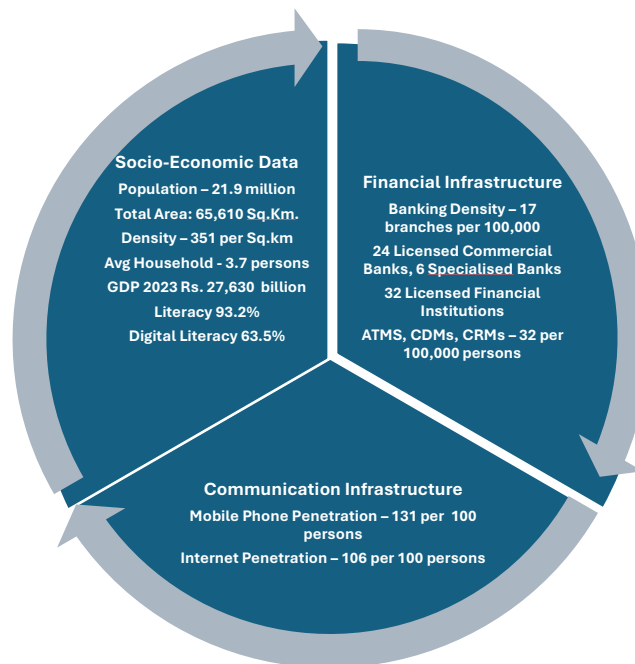
The first distinctive attribute of CEFTS was that it enabled 24/7 real-time fund transfers across banks and other financial institutions. The other was its open, innovation-friendly architecture that supported the infrastructure to be extended into developing dynamic customer-centric payment methods, enhancing customer experience. Thus, by enhancing the accessibility and ubiquity of digital payments, CEFTS effectively addresses underserved and emerging customer needs. As a result, the share of interbank retail transactions through CEFTS increased from a mere 8% in 2018 (three years after implementation) to 67% of total transactions processed through interbank retail payment systems in 2024.

As digital payment adoption is influenced by socio-economic factors as well as the availability and efficiency of other systems in a country's payment infrastructure, this article will first provide a brief overview of these contextual factors before examining the key features, performance, and latest developments of CEFTS. Finally, some key lessons are shared together with the direction for the future.

Key socio-economic indicators and financial infrastructure of Sri Lanka

The population of Sri Lanka is 21.9 million,¹ and financial inclusion exceeds both global and regional averages as 88.9% of Sri Lankans over the age of 15 hold financial institution accounts,² with female account ownership at 89.3%. The literacy rate of the total population is 93.2%³ (within which, literacy of the population below 30 years of age is above 98%) and digital literacy⁴ reached 63.5%⁵ in 2023. These indicators combined with a sound financial and communication infrastructure (as shown in Figure 1) provide a solid foundation for driving digital payments adoption and fostering continuous innovation.

Figure 1: Demographic Trends in Financial and Communication Services⁶



The national payment infrastructure

Sri Lanka's national payment infrastructure (as illustrated in Figure 2) consists of:

¹ Mid- Year Population, Department of Census and Statistics (DCS), Sri Lanka, September 2024

https://www.statistics.gov.lk/Resource/en/Population/Vital_Statistics/web_release2024Sep_En.pdf

² The Global Findex Database 2021: Financial Inclusion, Digital Payments, and Resilience in the Age of COVID-19,

<https://www.worldbank.org/en/publication/globalfindex>

³ Sri Lanka Labour Force Survey Annual Report – 2023, DCS, Sri Lanka.

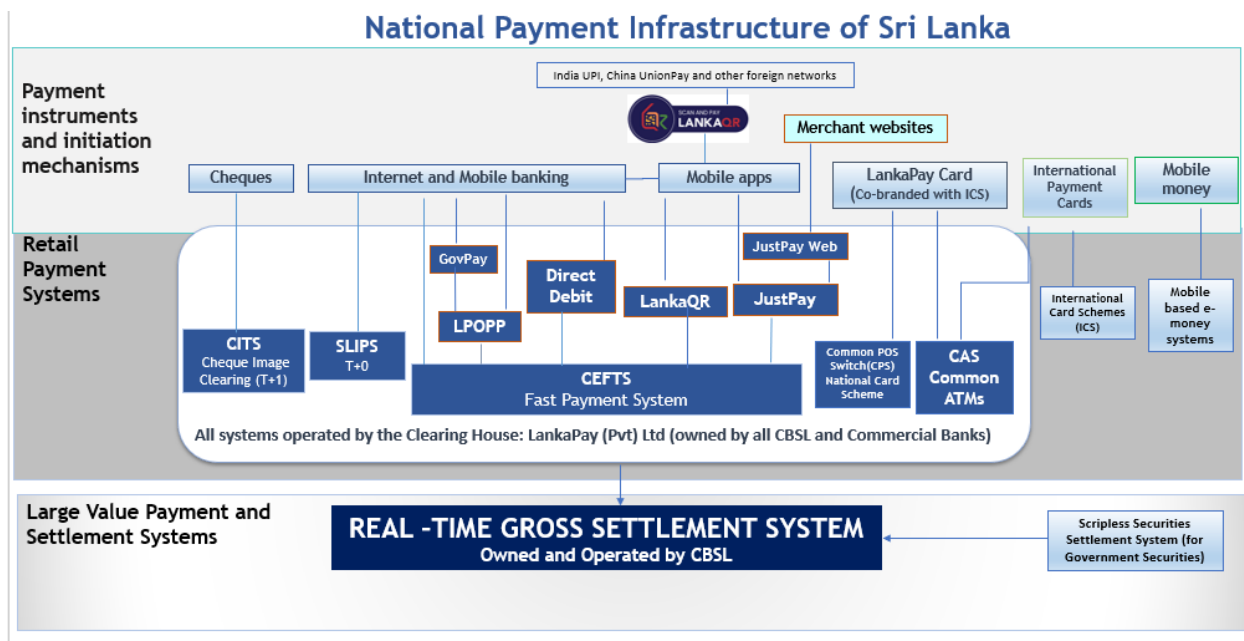
⁴ A person is considered a digitally literate person (aged 5-69) if he/she could use a computer, laptop, tablet or smartphone on his/her own. Digital Literate population is expressed as a percentage of the total population (aged 5 – 69 years) within the respective domain. Computer Literacy Statistics 2023 Annual Bulletin, DCS, Sri Lanka.

⁵ Computer Literacy Statistics 2023 Annual Bulletin, DCS, Sri Lanka.

⁶ Sources: Annual Economic Review 2023, Central Bank of Sri Lanka; Mid-Year Population, DCS, Sri Lanka, September 2024; Computer Literacy Statistics 2023 Annual Bulletin, DCS, Sri Lanka; Telecom Statistics of Sri Lanka – Q4 2024, Telecom Regulatory Commission of Sri Lanka.

1. The Real-Time Gross Settlement (RTGS) System
2. Interbank retail payment and clearing systems operated by LankaPay (Pvt) Ltd (LankaPay)⁷
3. Payment instruments and initiation mechanisms including,
 - Cheques cleared through CITS;
 - Payment cards facilitated by LankaPay and international card networks;
 - Mobile phone-based e-money systems operated by telecommunication service providers;
 - Mobile payment apps connected to CEFTS-based systems — LANKAQR and JustPay; and
 - Internet and mobile banking.

Figure 2: National Payment Infrastructure of Sri Lanka



Abbreviations in Figure 2	
CAS	Common Automation Teller Machine Switch
CEFTS	Common Electronic Fund Transfer Switch
CITS	Cheque Imaging and Truncation System
CPS	Common Point-of-Sale Switch
GovPay	Government Digital Payment Platform
ICS	International Card Scheme
LPOPP	LankaPay Online Payment Platform
UPI	Unified Payment Interface

⁷ LankaPay (Private)Limited is owned by the Central Bank of Sri Lanka (CBSL) and all Licensed Commercial Banks. It maintains and operates the national retail payment infrastructure and acts as the clearing house for interbank retail payments. It also develops infrastructure-related products based on market developments and requirements.

SLIPS	Sri Lanka Interbank Payment System
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The RTGS System facilitates real-time large value transfers, including fund settlements relating to government securities, and settlement of all interbank payment obligations cleared through infrastructure operated by LankaPay, including CEFTS. Initially launched in 2003, it was upgraded in 2024 with a state-of-the-art ISO20022-compliant RTGS system. Owned and operated by the Central Bank of Sri Lanka (CBSL), the RTGS System has 35 direct participants, including all Licensed Commercial Banks (LCBs), and the largest Licensed Specialised Bank (LSB).⁸ These direct participant banks can facilitate fund transfers and settlement of interbank payment obligations within RTGS, including settlement on behalf of other members of retail payment systems that are not RTGS participants.

The retail interbank payment systems operated by LankaPay include:

- Sri Lanka Interbank Payment System (SLIPS) (since 1994),
- Cheque Imaging and Truncation System (CITS) (since 2006), and
- Common Card and Payment Switch (CCAPS), which includes:
 - Common ATM Switch (CAS) (since 2013),
 - Common Electronic Fund Transfer Switch (CEFTS) (since 2015),
 - Common POS Switch (CPS) (since 2018).

SLIPS facilitates low-value, bulk retail payments such as salaries, utility payments, and other scheduled transactions. Customers receive funds within the same day (T+0) or scheduled for up to 14 days. SLIPS remains popular for salary payments by many employers including government institutions.

The implementation of CITS was the first in South Asia and second in the world of an infrastructure which enables nationwide cheque image-based clearing.⁹ All interbank cheques and drafts are cleared through CITS and settled by the next business day (T+1).

The transaction limit for SLIPS payments is currently Rs 5 million, and cheques must be below Rs 100 million. The relatively short processing time, reasonably high transaction limits, and customer familiarity have contributed to cheques and SLIPS transfers together amounting to more than 50% of the retail interbank transactions until 2022.

Transition to interoperable retail payment systems

To establish a fully interoperable payment infrastructure with 24/7 availability, CBSL and the payments industry implemented the Common Card and Payment Switch (CCAPS) for different

⁸ Other RTGS direct participants are CBSL, primary dealers, Central Depository System (Private) Limited of the Colombo Stock Exchange (CDS) and the largest superannuation fund of the country.

⁹ Cheque Clearing (CITS): [https://www.lankapay.net/en/for-financial/cheque-clearing-\(cits\)](https://www.lankapay.net/en/for-financial/cheque-clearing-(cits))

payment channels including ATMs, Electronic Fund Transfer Systems, and POS networks. As the first phase, CAS was launched in 2013, linking domestic ATMs across the country, enabling customers to use any bank's ATM for balance inquiries and cash withdrawals. CAS reduces banks' ATM maintenance costs and increases access to cash. However, it is envisaged that as digital payment methods become more accessible and popular, the demand for cash will gradually reduce.

CPS facilitates transaction routing and clearing facilities for POS transactions between members of the CPS and the National Card Scheme, which is issued under the brand name "LankaPay," and is operated through the CPS. The LankaPay card routes domestic currency payments locally and is co-branded with an International Card Scheme for foreign currency payments. It has a lower merchant discount rate (MDR) and aims to encourage small and medium-sized businesses to adopt digital payment methods. This is further supported by CEFTS and low-cost CEFTS products such as LANKAQR, which are described in the following sections.

Operational aspects relating to CEFTS

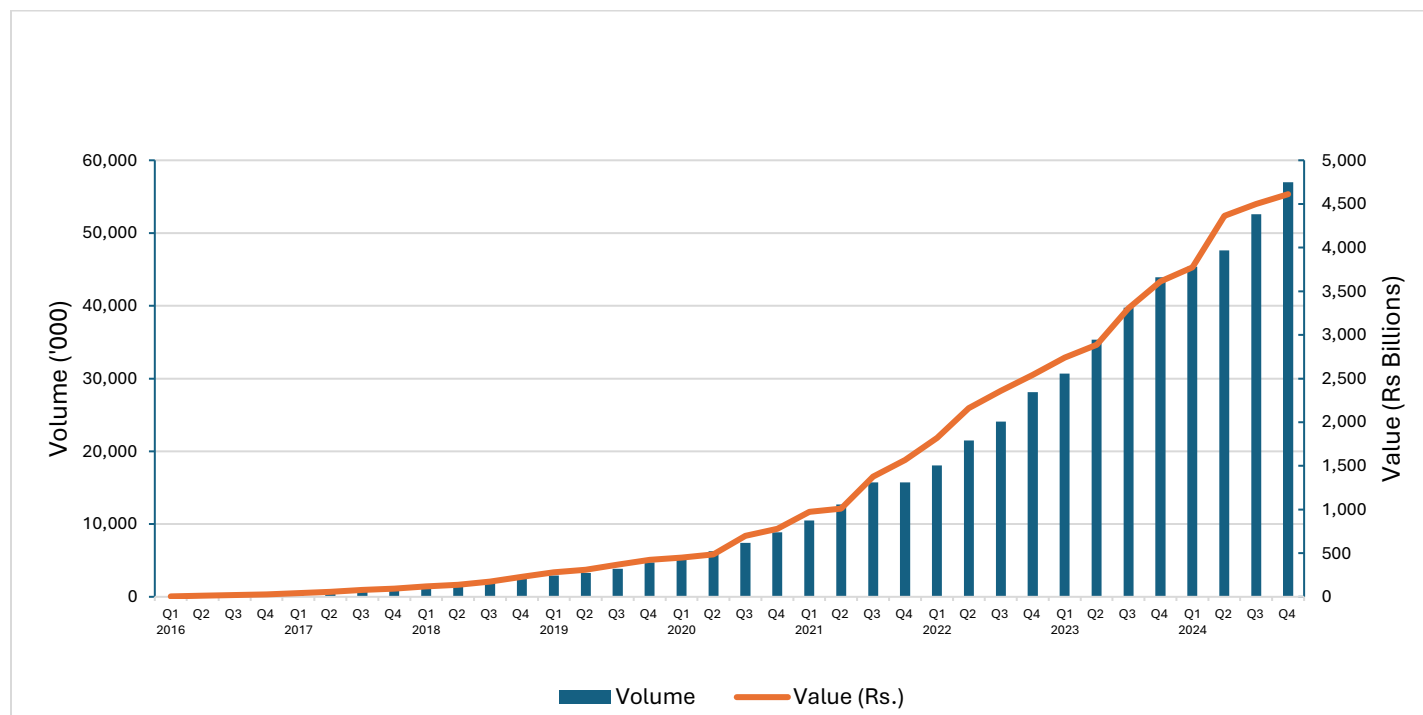
CEFTS enables switching and clearing of fund transfers initiated through multiple channels that provide online connectivity, whereby the recipient's bank settles the recipient before the interbank settlement takes place, facilitating real-time or instant fund transfers for its customers. Minimum Liability Manager limits are mandated by CBSL to ensure the smooth and efficient operation of the system while managing liquidity risks. Interbank obligations are settled as multiple multilateral net settlement batches (MNSB) through the RTGS system, similar to all other retail payment systems.

Currently, CEFTS facilitates payments initiated via mobile apps and Internet banking, and customers without mobile apps or Internet banking facilities could use kiosks or over-the-counter facilities at bank branches. The individual fund transfer transaction limit is currently Rs 5 million. However, transaction limits for different CEFTS products are specified by CBSL after considering relevant risks and customer requirements. These limits range from Rs 50,000 for peer-to-peer transfers initiated via third-party apps in the JustPay environment to Rs 20 billion for large payments to the government through the LankaPay Online Payment Platform (LPOPP). Further, it also can process bulk and scheduled payments similar to SLIPS, however, many customers continue to use SLIPS for bulk payments.

Efficiency and customer confidence in the system are reflected by the steady increase in the volume and value of transactions processed through CEFTS in the past six years as shown in Figure 3. Similar to many other countries, digital payment adoption accelerated during the Covid-19 pandemic in Sri Lanka. This momentum was sustained even post-pandemic, where transaction volumes and values continued to increase as customers enjoyed the convenience of 24/7 payments from their devices. Further, payment service providers have been improving their product offerings to thrive in a competitive market. With the interaction of these factors, CEFTS recorded 203 million transactions initiated through all channels at a total value of Rs 17 trillion in 2024, which is more than 50% of GDP.¹⁰

¹⁰ Based on 2023 GDP of Sri Lanka.

Figure 3: CEFTS Transactions — Quarterly Volume and Value 2016–2024



CEFTS ecosystem and latest developments

By 2017, more than 75% of licensed commercial banks and several finance companies had joined CEFTS, providing a critical mass of participants to develop innovative CEFTS-based products and meet the diverse needs of customers and the economy. These developments have supported fintech innovation and inclusiveness, changing the country’s payments landscape.

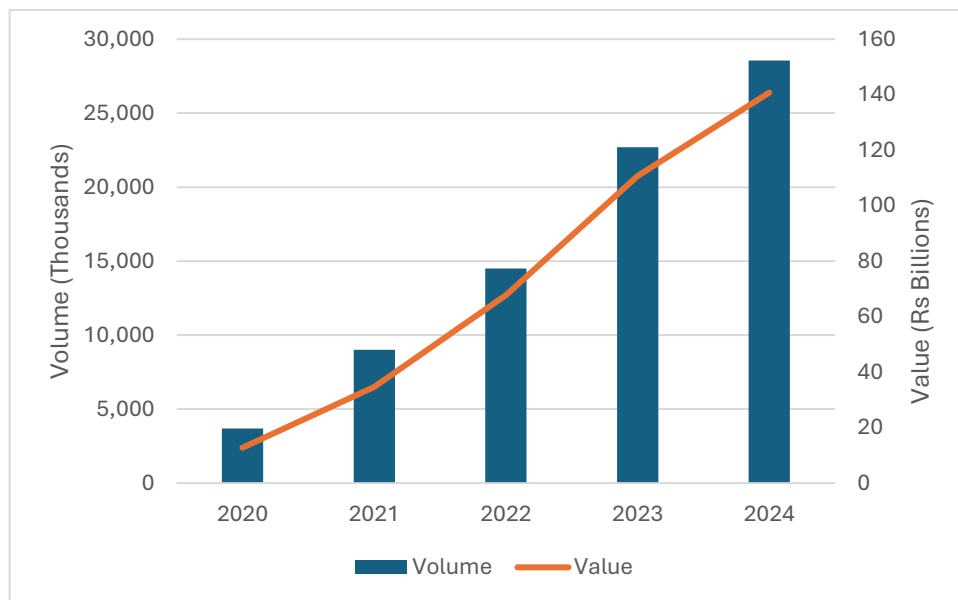
Supporting fintech innovation and competition

With the advancement of mobile payment technologies globally, two significant developments based on the CEFTS architecture in 2018 augmented the potential of mobile payment apps and opened a new market for innovation and competition. These developments were the introduction of the national QR code, LANKAQR, and JustPay, which enabled customers to link multiple bank accounts to any third-party payment app to make QR and in-app payments. Concurrently, to ensure the security of interoperable apps, CBSL issued the Guidelines on Minimum Compliance Standards for Payment-Related Mobile Applications in 2018 and revised the same in 2020. All payment-related apps require LANKAQR and JustPay certification from LankaPay to join these systems. This environment spurred a rapid introduction of apps with 31 LANKAQR-enabled apps and 30 JustPay-enabled apps, of which seven are by non-bank fintech companies, providing third-party payment initiation services. Given the size of the population, this number of apps leads to a highly competitive environment.

JustPay enables certified mobile apps to link multiple bank accounts for CEFTS-based pull transactions.¹¹ This allows JustPay-enabled apps to directly transfer funds or pay merchants either in-app or through LANKAQR using funds in linked accounts.

Extending the value chain beyond payment apps and payment service providers, JustPay Web was introduced in 2024 allowing customers to link their bank accounts on browser-based applications of merchants such as e-commerce sites. JustPay has seen significant growth in adoption, with transaction volumes and values increasing continuously each year since 2020, as illustrated in Figure 4. This sustained upward trend highlights the platform's expanding reach and growing trust among users.

Figure 4: JustPay — Annual Volume and Value of Transactions



Inclusive digital payments — LANKAQR

The LANKAQR national QR code standard was introduced in 2018 to provide low-cost digital payment acceptance capabilities to merchants, especially small businesses. The LANKAQR standard is based on “EMV Merchant Presented QR Code Specification for Payment Systems”¹² and all payment QR codes in Sri Lanka must be LANKAQR compliant.

¹¹ Pull transactions allow merchants or a service provider authorized by the customer to pull money from the customer’s account. In push transactions, customers instruct their banks to initiate a payment or fund transfer to the merchant.

¹² EMV QR Codes: <https://www.emvco.com/emv-technologies/qr-codes/>

As LANKAQR payments are channeled through JustPay, it processes Off-us and On-us transactions so that any LANKAQR-enabled app could scan and pay through any LANKAQR code.

To promote financial inclusion and maintain low costs, both static and dynamic LANKAQR codes are available, and merchants only require a feature phone to receive payment confirmations via SMS. Any person could obtain a LANKAQR code to receive payments with no set-up cost. Due to the numerous benefits of LANKAQR, the payment industry has been continuously promoting LANKAQR at a national level, especially to shift merchants away from cash. There is a gradual increase in QR payments, which needs to be further expanded.

Linking LANKAQR with international networks

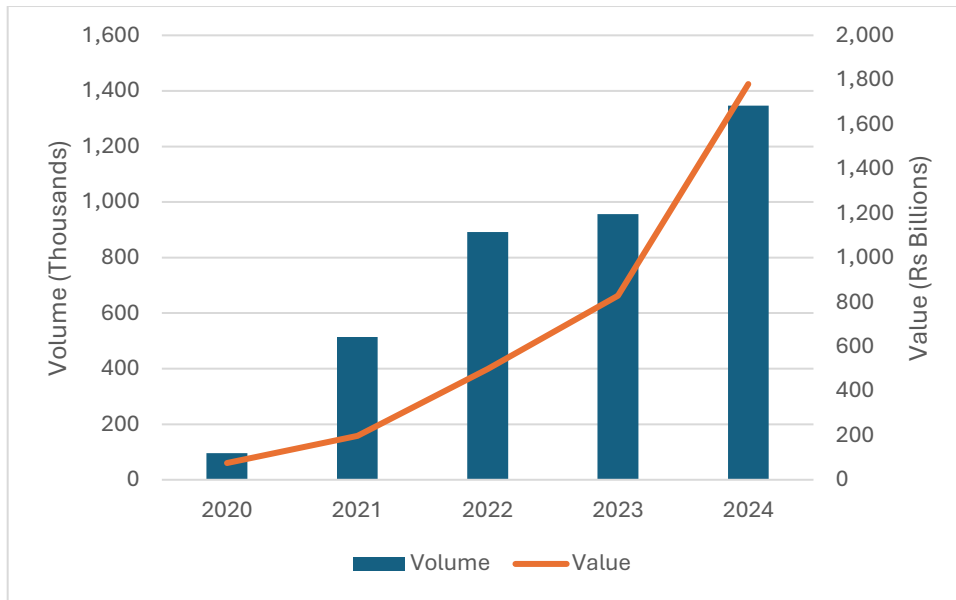
Extending its reach beyond domestic payments, LANKAQR was integrated with UnionPay China in 2023 and subsequently with India's NPCI International Payments Limited (NIPL) to enable tourists from these countries to pay through LANKAQR with their home country payment apps. Further, similar to domestic LANKAQR transactions, the merchants receive funds instantly into their accounts. To provide tourists from more countries with the same convenience, as well as Sri Lankans who travel abroad, LANKAQR continues to integrate with other countries and regional networks to enhance existing partnerships.

Instant government payments

Cheques or bank deposits were the main methods to pay government agencies until the introduction of LPOPP in 2017. LPOPP was developed on CEFTS infrastructure to enable agencies that had automated systems to receive and instantly reconcile payments against the payer's reference number in the institution's database. LPOPP eliminated the need for a payment instrument as customers paid directly through online banking portals. Nine major government institutions have joined LPOPP thus far, including Sri Lanka Customs and the Inland Revenue Department. LPOPP supports transaction limits exceeding normal CEFTS limits depending on the requirements of the recipient agency. In recent years, LPOPP has been pivotal for government revenue collection as over 40% of government revenue has been collected through LPOPP in 2024.

To spur the economy towards rapid digitalisation, the government has prioritized driving government institutions to adopt digital payments. Accordingly, the GovPay platform was launched on 7 February 2025. GovPay is built on the LPOPP infrastructure and is intended mainly for institutions that are yet to digitalise their databases and systems. Despite the absence of a database for real-time updates, the payer's transfer is recorded in real-time and reconciled manually at the end of the day. It is expected that once institutions digitalize their processes, they will utilize the instant reconciliation mechanism of LPOPP which provides more efficient payment processing. GovPay went live with 16 government institutions that have commenced accepting online payments for its services. It is expected that other institutions will join later this year.

Figure 5: LPOPP Transaction Value and Volume 2020–2024



Increasing the convenience of fund transfers

CEFTS also enabled Direct Debit facilities to customers for recurring payments based on pre-approved mandates. Direct Debit is gradually gaining popularity, especially among merchants and businesses. As customers have other payment options, awareness is required to shift payment preferences towards the benefits of Direct Debit.

Further, the use of aliases instead of bank account details for funds transfer is a popular method used in many countries to increase the privacy of account details, accuracy, as well as convenience when transferring funds. The Payment Exchange Name (PEN) introduced in 2020 enables customers to provide a unique ID instead of bank account details to receive payments. Launched in 2022, the PayMe — Request to Pay feature enables payees to send payment links or in-app requests, aiding bill presentment and increasing mobile payment awareness.

Conclusion

Sri Lanka’s fast payment system, CEFTS, has significantly transformed the payment landscape of the country, as it has increased access to digital payments by opening multiple channels to diverse customers and sectors in the economy. Such a range of access points is expected to further improve financial inclusion and digital participation in economic activities. Despite the growing popularity of fast digital payments, cash usage remains relatively high in the economy. Therefore, to accelerate digital adoption, ongoing innovations to improve accessibility, together with greater awareness among merchants and customers, are essential.

While each country's payment infrastructure development journey is unique, the success of CEFTS was largely driven by its strategy to address unmet and emerging customer needs. CEFTS-based products focused on enhancing the ubiquity and efficiency of digital payments rather than focusing on replacing existing payment instruments and systems. Therefore, any shifts in payments previously carried out through other systems to CEFTS could be mostly seen as an organic transition where customers choose the most effective option for their purpose.

Banks and other financial institutions leveraged CEFTS's versatile architecture amidst the growing presence of internet-connected devices, especially mobile devices, increasing accessibility to digital payments. Timely regulatory guidance and oversight ensured that the CEFTS environment, including mobile apps, was safe and reliable, which contributed to increased trust as well as the safeguarding of customers' interests. As a result, customers had access to competitive and efficient services, encouraging them to continue using digital payments.

Given the dynamic nature of digital technologies, payment infrastructure must adapt to changing customer expectations and global trends. These expectations now transcend national borders, as customers expect fast cross-border payments or while travelling. Accordingly, Sri Lanka is strengthening CEFTS's integration with international payment networks while promoting local adoption to maximize its economic impact.

The benefits of fast payments have already become evident in several areas of the economy, driven by enhanced efficiency and accessibility. Moving forward, the role of fast payments is expected to continue growing as a catalyst for innovation, fostering greater economic integration and accelerating Sri Lanka's journey towards becoming a fully digital economy.

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