

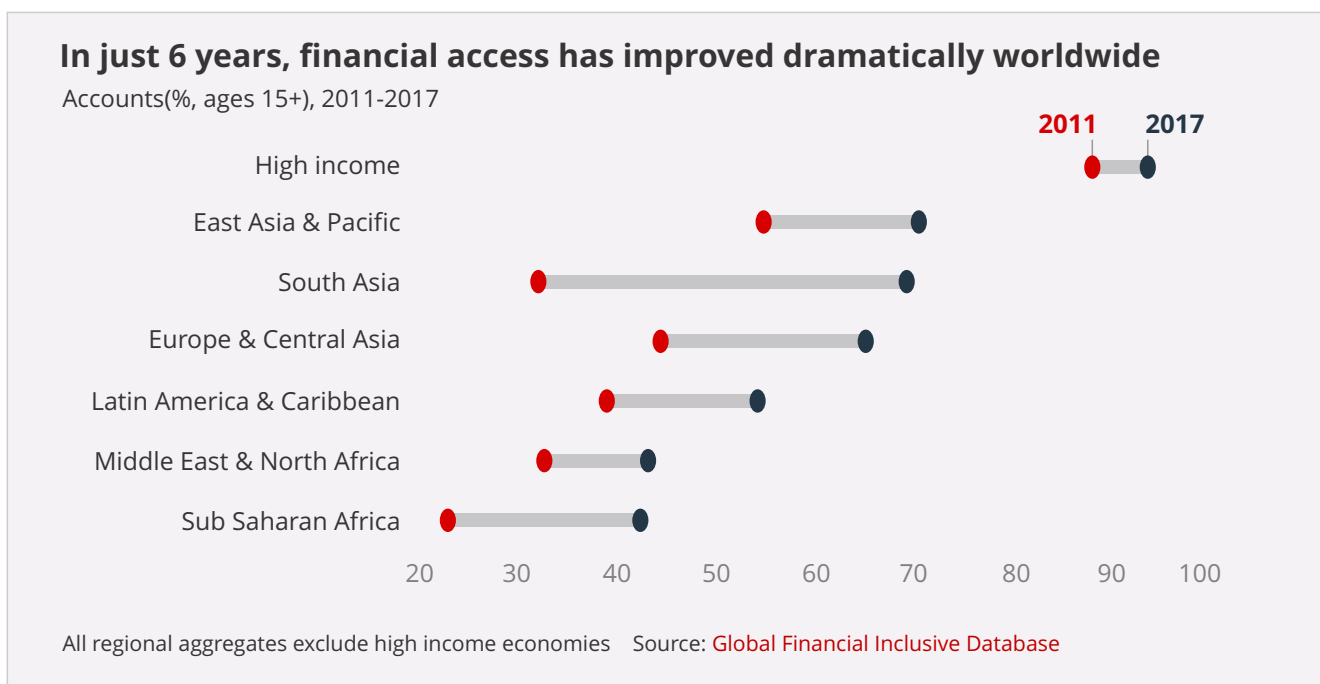
# Deepening **Financial Services** Adoption



# Introduction

Globally, Financial Inclusion initiatives have gained importance, as the focus on reducing income distribution disparities increases. The emphasis on enabling a larger percentage of the world population to be educated on financial services, and providing them access to basic and mainstream services such as accounts, payments, affordable finance and more, has spurred innovation, with technology emerging as a key enabler for Financial Inclusion.

And the outcomes have not been disappointing. According to the World Bank Financial Inclusion Database (Global Findex Database 2017), a study of financial access in low income economies demonstrates the quantum leap that certain economies have taken in providing access to individuals to basic financial services such as accounts. At a regionally aggregated level, the percentage of the population over 15 years having access to a bank account, increased from approximately 32% in 2011 to almost 70% in 2017 in South Asia, from 20% in 2011 to <40% in 2017 in Sub-Saharan Africa and from 40% in 2011 to <65% in Europe and Central Asia, the largest gainers of financial inclusion in this period.



## Successful FinTech Models for Financial Inclusion

The use of technology and the collaboration with Fintechs has seen the emergence of certain successful models that have been adopted to varying degrees of success in the Pacific Islands and across the globe.

# The Pacific Islands Context

The East Asia and the Pacific region started with a relative advantage in terms of financial inclusion, with 55% of the population having access to a bank account in 2011, increasing to 70% in 2017. In 2008, the United Nations Development Program (UNDP) along with the United Nations Capital Development Fund (UNCDF), the governments of Australia, New Zealand and the European Union launched the Pacific Financial Inclusion Program (PFIP) to alleviate poverty and improve financial inclusion for at least 2 Million Pacific Islanders in Fiji, PNG, Samoa, Solomon Islands, Timor-Leste, Tonga and Vanuatu.

The Central Banks of these countries, further collaborate on Pacific Islands Regional Initiative (PIRI), which greatly emphasizes the focus on and importance of

FinTech innovations for improving Financial Inclusion, along with financial education and peer to peer collaboration on regulation on FinTech innovation calls for an evaluation of existing and emerging FinTech models that are paving the path for Financial Inclusion.

## Key Objectives for the Pacific Islands Regional Initiative

-  Implementing Policies to Improve Access, Usage and Quality
-  Utilizing Technology for Financial Service Provision and Access
-  Empowering and Protecting through Financial Literacy and Education
-  Collaborating with Stakeholders to Advance Financial Inclusion in the Region
-  Utilizing Data for Smart Policy Making and Monitoring

Source: The Pacific Islands Regional Initiative Fact Sheet, 2018

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## Digital Financial Services

Digital Financial Services, i.e., the provision of financial services including payments, credit facilities and saving facilities through digital channels are key to financial inclusion programs, where innovative solutions are required to solve grassroots access challenges.



Source: Business-Standard.com

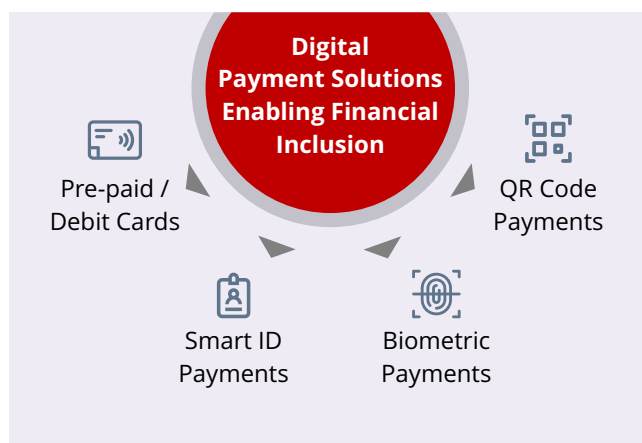
Innovation in digital payments have enabled access to adoption of cashless transactions in remote areas and villages where cash dispensers, ATMs, branches are hard to access.

The adoption of digital technologies in these areas have been facilitated by factors such as improved mobile penetration, the repurposing of local merchants and points of sale as transaction access points, and the innovative value added services such as doorstep banking, provided by traditional government entities such as national postal services.

Successful financial inclusion programs have used innovations in mobile payments, such as wallets, QR code based payments, biometric and Smart ID enabled payments, as well as the launch of secure debit, pre-paid cards through which payments are disbursed.

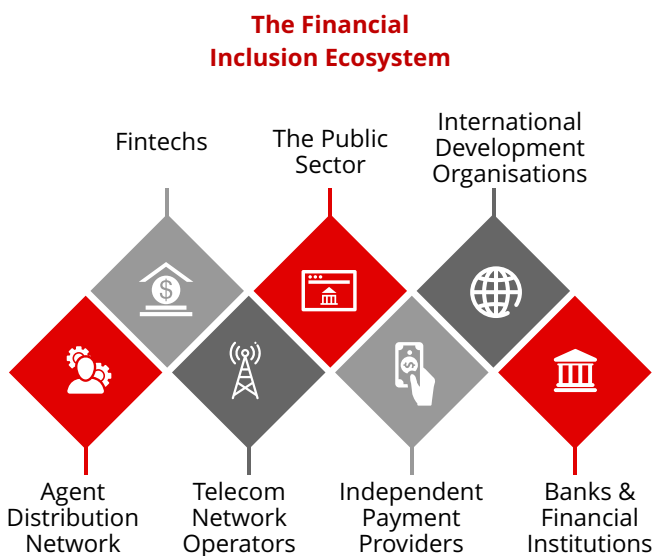
These services are typically provided through a collaboration between Banks, Financial Institutions and/or independent Payment Service Providers, Government Agencies, International Development Organisations, Telecom Network operators, FinTech providers and a distribution network of agents. These entities typically constitute the ecosystem of Digital Financial Services participants.

The participation of these ecosystem constituents adds an element of healthy



competition, which can be beneficial for the end recipients, as participants compete to retain the higher portion of the funding, revenue and value generated through the provision of Digital Financial Services<sup>iii</sup>.

For instance, telecom network providers may launch their own digital wallet and mobilize their sales agents to retain float income and transaction revenue on the mobile wallet, retain transaction fees as network carriers and mobilize their sales network as distribution agents for digital financial services.



# The Role of Banks in Financial Inclusion

The banking sector in any country plays a pivotal role in facilitating access to financial instruments. In the Pacific Islands, this sector comprises a mix of national, international, private, local and regional banks, that have each contributed to financial inclusion initiatives in their countries of operation.

Interestingly, over the past few years, the sector is witnessing a trend of consolidation. In 2015, Westpac sold its banking operations in Samoa, Cook Islands, Solomon Islands, Vanuatu and Tonga to Bank South Pacific, and exited its 120 year presence in the Pacific through the sale of its operations to Kina Bank, PNG in 2021. On a similar note, the ANZ Bank sold its retail, commercial and SME banking portfolio in PNG to Kina Bank in 2018, in a bid to simplify its operations, and to focus on its high value portfolio. The consolidation increase the concentration of financial services in a few large banks in the region.

From a Financial Inclusion perspective, the role of these larger emergent regional banks, becomes more important. with their ability and resources to invest in technology and provide the infrastructure for financial

” Banks play a pivotal role in a country's financial inclusion Initiatives

services, the large regional banks can shoulder the responsibility to improve access of financial products for individuals that do not have access to mainstream financial services.

These banks are further supported by local and microfinance banks. In Papua New Guinea, for instance, the presence of several local banks and microfinance institutions, such as MiBank (an initiative of the Asian Development Bank, Australian Aid, and the Government of Papua New Guinea), Women's Micro Bank and People's Micro Bank (a wholly owned subsidiary of National Development Bank ), lead the way for micro finance based financial inclusion outcomes.

# Successful Financial Inclusion Partnerships in the Pacific Islands



” Private - Public Sector Partnerships are key to long term, successful Financial Inclusion Programs

Public-private partnerships create sustainable, long term solutions to improve the outcomes of financial inclusion initiatives. A few successful instances of such public-private partnerships in the region, include the launch of Mobile Money services through a collaboration between Digicel Fiji and Fiji Post, regulated and supported by the Reserve Bank of Fiji and the UNDP respectively; the launch of LoMobile, an outcome of collaboration between the Samoa National Provident Fund, Solomon Telekom, Bmobile, the Central Bank of Solomon Islands and the Government of Solomon Islands , which allows Samoans to receive a tax refund of 10% on payments made using

airtime credits. Another instance of such a public-private partnership is the fee-free remittances into M-Paisa, a mobile wallet managed by Vodafone – Fiji, to help Fijians affected by the Covid-19 pandemic, in association with the PFIP.

These initiatives indicate some of the stellar work done through public-private partnerships, but in somewhat unique instances. The scalability of these instances across the region, and through replication of these and other global best practices to improve the impact and outcomes of the financial inclusion programs in the region must be conceptualized and launched.

# Financial Inclusion at Scale

A model of scale and demonstrable positive outcomes in Financial Inclusion launched by a country's Postal Service, is the success of India Post Payments Bank (IPPB), set up by the Department of Post, Ministry of Communication with 100% equity owned by Government of India.

With plans to leverage their rural network of 141,018 post offices and 245,141 last mile postal service supporters (Grameen Dak Sevaks), IPPB was launched as a pilot project in 2017, with the mission of **"Spearheading financial inclusion by removing barriers and reducing costs for accessing banking services"**.

As of March 2020, IPPB enabled 110,000 rural post offices across India and over 26,000 urban post offices to provide a complete suite of banking services, supporting a 2.5x increase in the rural banking infrastructure. The solution enabled over 170,000 postmen and Grameen Dak Sevaks, equipped with biometric and smart devices to provide Doorstep Banking Services<sup>iii</sup> to clients in rural areas.

An excellent example of FinTech and public sector collaboration, the underlying Payments Infrastructure for IPPB is provided by FSS Technologies. FSS' Aadhaar enabled



On an average, a post office serves 8,605 people in the country; 6,301 people in the rural areas and 29,299 people in the urban areas.

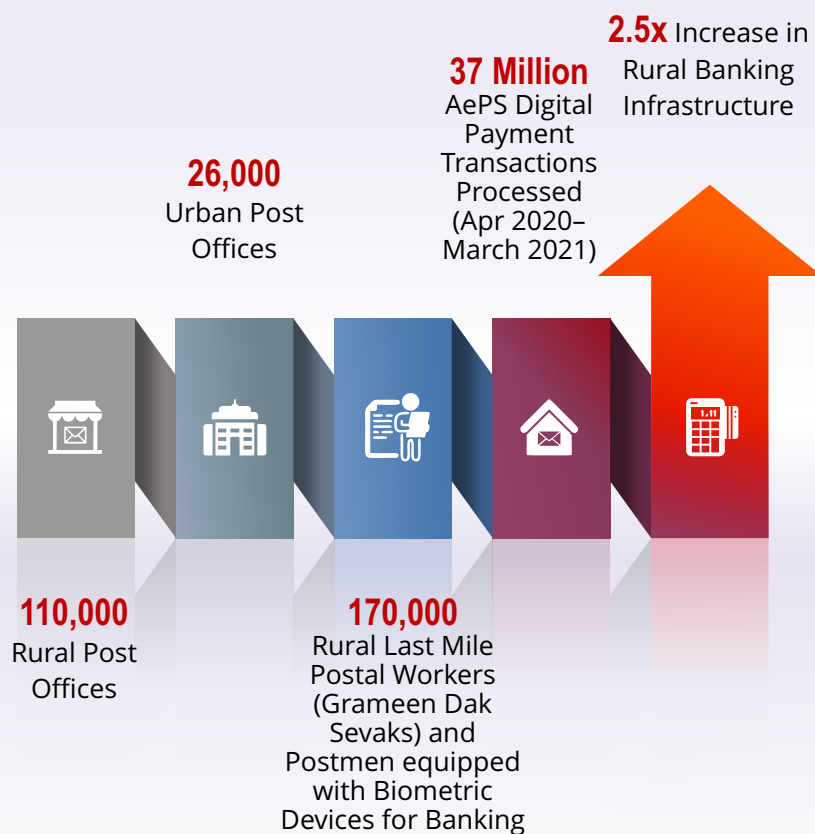
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Average area served by a Post Office: 20.98 sq.km.

**Payment Services (AePS)** that uses the Government issued Smart ID Aadhaar-linked Bank Accounts, along with Biometrics for transaction authentication and routing, to provide doorstep banking where accessing branches is difficult.

The launch of AePS could not have been better timed. Through the Covid-19 pandemic, IPPB witnessed a surge in AePS

transactions – between April 2020 and March 2021, IPPB serviced over 37 million AePS transactions and disbursed INR 10,317 crore (~ USD 1.4 billion) to people in need. IPPB also played a crucial role in the transparent and efficient disbursement of pension payments and other social schemes of the central and state governments such as the Pradhan Mantri Garib Kalyan Yojana.




Source India Post Payment Bank



# FSS AePS Solution: Powering IPPB Payments

## TYPES OF INSTRUMENT









 Debit and PIN |  Aadhaar Id and Biometric |  Virtual Id and Biometric |  Aadhaar and OTP |  QR








## DEVICES AND TERMINALS

 Micro-ATM |  Traditional POS |  Tablet or Mobile |  Kiosks |  Biometric ATM





## OPEN API MANAGEMENT LAYER






## BUSINESS PRODUCTS

 eKYC |  eSign |  Aadhaar Auth Engine |  Aadhaar Pay |  IMPS |  UPI |  BQR |  Petro Money

 AEPS |  Demographic Auth Engine |  Aadhaar Seeding |  Xpress Banking |  eProcurement |  BBPS |  Cash@POS

## CORE MODULES

 Agent Management |  Transaction Processing Engine |  On-Boarding Corp/BC Merchant Agent |  Terminal Management

 QR Code Management |  API Security Module |  Workflow Management |  Reporting |  Risk Management

## SECURITY LAYER

 TOKEN VAULT |  AADHAAR VAULT

## HOST INTERFACE

FSS Recon/Analytics/Merchant | NPCI | NSDL | Bank Host | UIDAI | CCA | BASP | Interchanges

This model demonstrates successful public sector – Fintech collaboration that has been instrumental for the success of one of the world’s largest financial inclusion programs. The adoption of similar collaborations in the Pacific Islands can significantly improve financial inclusion outcomes.

# Secure and Transparent Government Grant Disbursements

Another example of a successful Financial Inclusion initiative to securely and transparently disburse government grants to underprivileged and unbanked, is the collaboration between the South African government, South African Post Office (SAPO) and FSS Technologies.

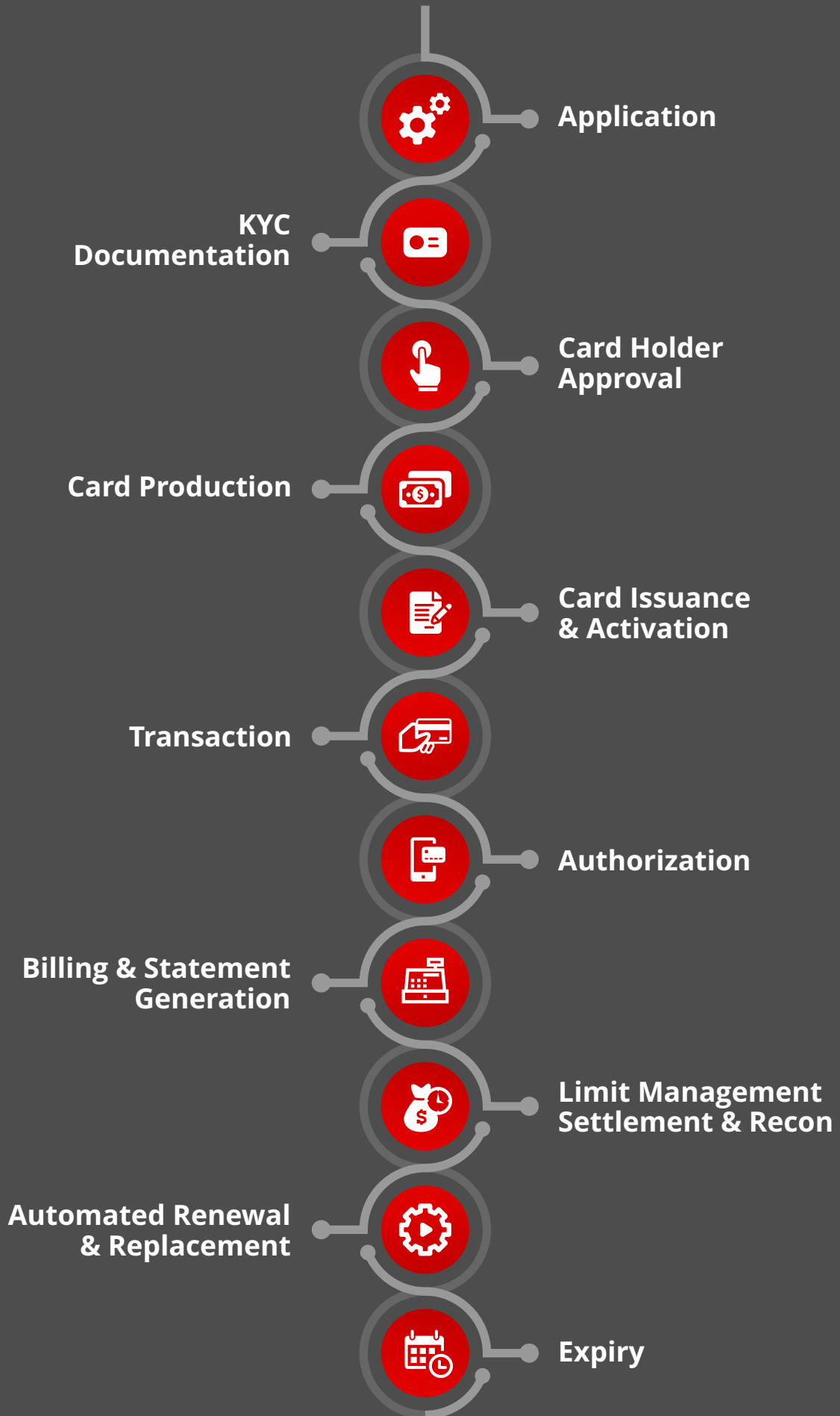
SAPO serves a tenth of South Africa's population, via its extensive distribution network comprising 4,000 outlets, reaching remote hamlets with little existing financial services infrastructure. SAPO's Post Bank, its financial services umbrella, is the largest individual issuer of Mzansi accounts (a simplified savings account with basic transaction capability that a client can access at all branches of participating banks. The Postbank has opened more than 5.7M customer accounts and its total deposits equal R5bn, with assets worth R7.8B.

The Post Bank's track record as a trusted services provider helped it strike a landmark

deal with the South Africa's Social Security Agency (SASSA), an independent government agency that drives the social assistance program, the largest in the African continent. SASSA administers seven long term grants on behalf of the South African government, including grants for the aged, people with disabilities, war veterans grant, foster child grants, child support grants, grant-in-aid for assistance of older and disabled people with physical or mental disabilities and social relief in distress grants for relief during natural disasters such as flooding.

To support SAPO and SASSA in its drive to provide secure and transparent Grant disbursements, FSS implemented its Integrated Grant Payment System (IGPS), a card based disbursement platform, that simplified customer registration through biometric integration, rapid application processing and grantee account management through renewal or account closure.

# FSS Integrated Grant Payment System



## SAASA Customer Onboarding

The solution helped SAASA create a streamlined way of onboarding and activating users onto the Integrated Grant Payment System

New beneficiaries on receiving a letter of award from SASSA are required to register biometrically along with proof of identification and documentation and a national id card

On successful validation, the agent generates the card number and can associate the customer id details with the card

The system forwards the biometric to a third-party system Magix for onward routing to the SASSA vault. This biometric is validated in the SASSA Vault



The SAASA id is captured in the IGPS system.

Customers can instantly activate the card by setting a PIN in an extended secure keypad available at the center



Successful rollout within five weeks



Benefits SAASA rebuild beneficiary trust in the service



800,000 beneficiaries onboarded daily on the new system

## Conclusion


The Pacific Island nation governments, international development bodies and NGOs are deeply invested in creating a secure future for their citizens, through various Financial Inclusion initiatives, aimed at providing access to financial instruments to rural and remote populations.

A collaboration with Fintechs, micro-finance and private sector banks and telecom service providers can spur innovation, and help fast track the pace of inclusion.

An evaluation of the successful use of Digital Financial Services deployed in global financial inclusion initiatives can serve as a base to create sustainable models for financial inclusion. Partners such as FSS Technologies can help bring global best practices in Financial Inclusion to enable the charter of the Pacific Island nation governments and international development bodies.

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## About FSS

Financial Software and System (FSS) is a leader in payments technology and transaction processing. The company offers an integrated portfolio of software products, hosted payment services and software solutions built over 30+ years of experience. FSS, end-to-end payments products suite, powers retail delivery channels including ATM, POS, Internet and Mobile as well as critical back-end functions including cards managements, reconciliation, settlement, merchant management and device monitoring. Headquartered in Chennai, India, FSS services leading global banks, financial institutions, processors, central regulators and governments across North America, Europe, Middle East, Africa and APAC and has 2,500 experts on-board.

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