

MasterCard® Government Services & Solutions Case Study
South African Social Security Agency

How product innovation and a people-centered approach transformed payments in South Africa



“It always seems impossible until it’s done.”

— Nelson Mandela

Summary

In 2012, the South African Social Security Agency (SASSA) and its private sector partners, including Net1 and MasterCard, were able to rapidly and radically reform the distribution of social security benefits nationwide. Together, they designed and built a payments network capable of delivering social security grant payments in a new way that benefits both the government and its citizens. The scale, speed and impact of the project were enabled through an exciting new combination of product innovation, deep partnership and a very human-centered approach to rolling it out to the market.

For the government, the new nationwide social payment standard combines high efficiency with accuracy and transparency, dramatically lowering the costs of delivering payments by reducing fraud and by improving operational efficiency at significant scale¹. For citizens, payments are delivered swiftly, accurately and securely no matter where they live—achieving near universal inclusion in the financial system and new economic potential. The social payments card has already become an iconic brand and the emblem of financial freedom. Even when requesting a non-government card from any bank, customers will often say: “ I want a SASSA ”.

Source

1 SASSA Annual Report, 2013.

The new payments system brought a greater level of security to the world of government payments through the introduction of new biometric technology for cardholder authentication. Both the speed and innovation were accomplished through the highly collaborative teamwork and creative ingenuity of government officials and private-industry partners including Net1, Grindrod Bank, and MasterCard, who certified the UEPS EMV product construct.

The program went from RFP award to public launch in 3 months, allowing SASSA to move 10 million people from nearly all cash to electronic social disbursement delivery in a little over one year, meeting every RFP criteria ahead of schedule.



Source

1 SASSA Annual Report, 2013.

SASSA Solution Highlights

Government Savings

- Reduced expected administrative costs by at least \$375 million over five years¹
- Reduced cost per grant from an average of \$3.33 to only \$1.66 flat¹
- Found 7,734 cases of fraud and corruption, recovering nearly \$6 million in a third of tried cases¹
- Uncovered 150,000 bogus receipts, and saved \$15 million with agency's campaign to have beneficiaries re-register recipients in person for grants¹

Efficiencies of Scale and Reach

- Streamlined the entire social grant distribution process and consolidated 7 social programs into one consistent payment program
- Registered and distributed 150,000 cards per day at program peak
- Delivered payments faster and more accurately, whether in urban centers or in rural areas, throughout the country's nine provinces
- Offered instant issuance of the card, saving registration and waiting time

Program Transparency

- Created the first comprehensive national Social Security database
- Dramatically reduced waste, fraud and abuse by incorporating biometric registration

Social Impact

- Brought financial inclusion to one-in-three adults—a 50% increase—as of 2013.¹

The Situation

“Paying the right social grant, to the right person at the right time and place.”

— SASSA Mission

The mandate of SASSA is to ensure the provision of comprehensive social security services to South African citizens who are vulnerable or living in poverty. In 2011, the organization recognized that delivery against their mission was compromised by a variety of resource and logistical limitations that made them vulnerable to widespread waste, fraud and abuse.

Due to the reliance on cash and the manual nature of payment disbursements, SASSA's system for paying government grants was historically rife with corruption and fraud. Of South Africa's 48 million citizens, 21 million—almost half—were receiving some form of social grant. Because benefits were processed by individual agencies without a centralized database for tracking disbursements in real time, fraudsters could easily apply for and collect benefits from each separate agency across nine provinces without being detected. Additionally, families were continuing to claim pensions and benefits after the death of the original beneficiary due to the same lack of accessible data. Finally, children were often registered to multiple families within SASSA's system so that some families could claim inflated benefits. Again, the government had no way of eradicating the duplication of registration.

This substantial abuse of the system led SASSA to issue a tender (RFP) in April 2011 for the disbursement of all social grants for a five-year term to manage all social payments across the nine provinces.

Respondents to the RFP were required to:

- Create a more efficient overall social payments scheme, specifically to:
 - Construct a single grant payment system for the entire country
 - Move disbursements from cash to electronic payments
 - Eliminate the illegal collection of social grants
 - Leverage current financial infrastructure
 - Leverage biometrics experience
- Expand access and financial inclusion by:
 - Including social grant recipients in the formal banking sector
 - Operating in both urban and rural environments and townships—with or without connectivity
 - Registering anyone age 75 or older, sick or disabled in their home
 - Ensuring that registrants would not have to travel more than 5km (2.5 miles) to re-register
- Ensure effective and safe authentication for grant recipients by:
 - Offering multiple types of biometric authentication: voice and fingerprint
 - Introducing a Personal Identification Number (PIN)
 - Performing proof-of-life each month via voice or finger biometric before grant is released
- Implement and roll out the program rapidly:
 - Put the solution in place within 6 months

The Solution

A UEPS/EMV debit MasterCard was developed that authenticates cardholder identity and authorizes spend using a single chip that can be instantly issued. The hybrid chip solution incorporates biometric identification and loading of funds with traditional spending and fund access functionality.

The Partners: A Winning Combination of Talent, Technology and Know-how

In January 2012, the RFP was awarded to Cash Payment Services (a subsidiary of Net1), who partnered with Grindrod Bank. As the designated issuer, Grindrod Bank turned to MasterCard as its payment partner of choice.

Innovation through Technology

Net1 brought 20 years of experience developing the biometric technology that was used in the solution. Together, Net1 and MasterCard were able to integrate Net1's Universal Electronic Payments System (UEPS) biometric technology with MasterCard's EMV chip technology to create a solution that successfully operated in both online and offline environments—and allowed cardholders to complete the entire registration and card issuance process anywhere in less than ten minutes!

Performance Under Pressure

Although the timeframe for project rollout was originally 6 months, the incumbent payment partner who lost the bid insisted that the new solution provider take responsibility for running the SASSA program immediately. This required the new team to assemble the necessary partners, design, develop, certify the new technology and begin registering recipients in only 2 months.



Solution Partnership

No project of this scale and complexity succeeds without dedicated cooperation and organization. Developing the right card construct, ensuring compliance, and seamlessly integrating biometric and EMV technology on a single chip, were just the beginning. Success also required broad-based participation by all stakeholders, especially cardholders and merchants. MasterCard's expertise in developing a balanced and complete ecosystem of participants enabled a successful execution.

In order for the program to be embraced by consumers and to reach scale, education and an expanded acceptance footprint were critical. To expand the merchant network, MasterCard developed new relationships with financial and non-traditional partners that offered new acceptance opportunities. One particular MasterCard-driven initiative will increase acceptance at 22,000 relevant merchants located primarily in rural and near-urban locations.

The program mandate included the requirement that the same, accurate in-home registration be offered to the sick or elderly (with or without Internet connectivity), and that registration locations be available to other citizens within 5km of their homes. With historically few facilities for distribution and the need to queue, every consideration mattered, from the weather to the proximity of food and sanitary facilities. For new or first-time cardholders, biometrically enabled POS terminals were installed at select retailers to allow for PINs to be reset when required, as a convenience. Through organization, collaboration, and communication among all parties, the team was able to identify and solve issues to keep the project within the 2-month timeframe.



New Technology: An Innovative New Debit MasterCard

“The new biometric-based payment system for social grant beneficiaries has already paid off just a year after its implementation.”

— Social Development Minister Bathabile Dlamini in a speech to Parliament (May 8, 2013)

The intersection of three requirements created an opportunity for innovation. The triple demand included:

- Biometric authentication to be integrated into an EMV chip card
- Registration to be immediate and possible without connectivity
- Bank account and MasterCard to be instantly opened and issued

To do this, Net1’s UEPS biometric technology and MasterCard’s EMV technology had to be combined onto a single chip that supports two sets of instructions: one supports identification and grant approval, the other supports grant access and spend. MasterCard M/Chip 4 technology is being used to facilitate both on and offline transactions.

UEPS Technology

- Supports voice, one-to-many-fingerprint biometrics, including pulse detection (used to confirm proof-of-life each month)

- Prevents duplicate registration and payment
- Allows for the release of funds

EMV Chip Technology

- Enables access to grant funds via retail POS or ATM, including purchase transactions, balance enquiries and cash withdrawals
- Displaces cash and reduces corruption, waste, and fraud
- Leverages existing financial services infrastructure
- Drives financial inclusion
- Facilitates spend at any merchant that accepts MasterCard (access and dignity)
- PIN-enabled EMV card

Lessons Learned

Every day, the world presents new challenges and governments, businesses, and consumers look for new and innovative ways to exchange value for the goods and services they need and want. The SASSA experience represents a new level of success in bringing an exceptional product to market quickly while satisfying the needs of all stakeholders.

We understand better than ever that...

One Size Does Not Fit All

Local and national requirements will continue to drive creative product, technology, and service solutions that can be adapted to the benefit of all.



Get Started

To learn more about the details of MasterCard's work with the SASSA program and to receive other important case studies, please contact your MasterCard representative.

Experience Really Matters

There are common requirements across all national payments systems than can be addressed rapidly by an experienced government payments partner like MasterCard. Our combined knowledge, along with attention to the human element enables success in the market.

It's About More Than Payments

It is necessary to continue engaging with non-conventional partners such as Net1 to bring new solutions and opportunities to governments, citizens, and financial institutions.

Leadership Is Necessary

When the right partners are selected and led by an experienced market leader, launching programs at scale is not only possible but also preferable and leads to greater impact—go for scale.

Balance Leads to Benefit

Our approach to carefully balancing government cost requirements with the natural market incentives of solution providers generates the greatest sustainable benefit to societies.

It Pays To Be Down-To-Earth

Local customs and conditions on the ground, from family dynamics to weather and customs regulations, all play a role in the successful implementation of payment programs at national scale.

We Are Adding Value

Our role as a point of connection and collaborative leader between public sector stakeholders and private industry partners contributes significantly to holistic solutions that make a national impact.



About MasterCard Government Services & Solutions

MasterCard is a global payments partner that understands the significant impact market-viable electronic payment solutions can have on governments, when designed to encourage the fullest participation of each stakeholder—issuer, merchant, consumer, and government.

Electronic payment systems present an immense opportunity for governments to better serve their

citizens, while reducing costs and increasing transparency. But there are risks and challenges in the design and implementation of these solutions. As a globally-integrated payments network, MasterCard is in a unique position to help governments, working as an advisor and market facilitator to bring governments together with the private sector to create a flexible and secure payments ecosystem—while driving the greatest efficiency, social progress, and value to all stakeholders.

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