electrum

Rapidly Implementing a QR Code Payment Method for Shoprite

> *As retailers, we must meet the challenge of the new shopping environment to deliver outstanding product research and buying experiences. Rolling this payment method out enhances our customers' shopping experience with more options and greater convenience.*
>
> Jean Olivier, General Manager: Financial Services for the Shoprite Group.

Creating a Dynamic, Interoperable, and Merchant-Presented Solution

Shoprite approached Electrum in 2019 to introduce QR code payments and expand contactless options. The project, initiated before COVID-19, became especially relevant when lockdowns caused retail sales to drop by 53%, and development had to be accelerated to provide no-touch payments. Shoprite wanted to protect and give their customers peace of mind during this uncertain period and needed a solution to be finalised as quickly as possible.

Following the project acceleration, Electrum deployed a reliable QR code system in three months, allowing Shoprite to become the first major retailer in South Africa to offer contactless payments via QR codes.

The Challenge

Shoprite needed to update their payment offerings to meet customer demand for safer ways of paying.

They required a QR code payment system that would allow customers to complete transactions using their phones, reducing physical contact.

Static QR codes require the transaction amounts to be entered for each payment, so to reduce friction at the point of sale (POS), a dynamic QR code needed to be developed to hold the monetary amounts for each purchase.

The solution had to connect to Masterpass which facilitated open-loop payments, as well as future-proof for closed-loop scheme. Another challenge was that consumers may use different QR code-reading applications to pay, so a solution was needed to address this issue.

An additional requirement was to ensure the solution worked with Shoprite's existing reconciliation and settlement processes to effectively track sales information, provide appropriate refunds, and identify issues as they arose.

SHOPRITE

THE REQUEST
Offer consumers touchless payments through QR code.

THE BENEFIT
Shoprite provided their customers with a safe payment method and implemented QR code payments ahead of other retailers.

THE RESULTS
Electrum implemented QR code payments within **three months**.

Shoprite became the **first major retailer** to implement QR code payments at point of sale.

The QR codes were interoperable, dynamic, and merchant-presented at POS.
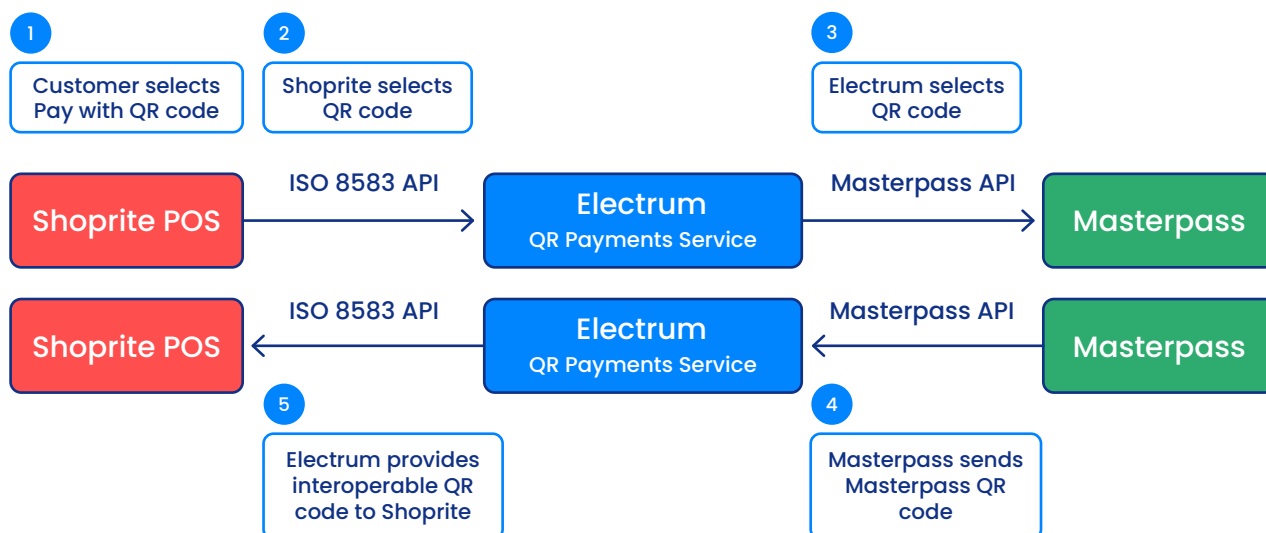
THE SOLUTION
- ✓ QR Payments Service Interface
- ✓ MasterPass API Integration
- ✓ Dynamic EMVCo QR codes

ABOUT SHOPRITE
Shoprite is the largest retailer in South Africa by sales, market capitalisation, customers, and number of employees. Their mission is to provide their customers with affordable groceries and household goods, while uplifting the South African economy and maintaining environmentally friendly practices. Shoprite has worked with Electrum since 2019 when they required a solution for single-use vouchers.

QR Code Payments Process at POS

1 Customer selects Pay with QR code

2 Shoprite selects QR code

3 Electrum selects QR code

Shoprite POS — ISO 8583 API → Electrum QR Payments Service — Masterpass API → Masterpass

Shoprite POS ← ISO 8583 API — Electrum QR Payments Service ← Masterpass API — Masterpass

5 Electrum provides interoperable QR code to Shoprite

4 Masterpass sends Masterpass QR code

The Solution

Electrum provided a dynamic QR code payment solution that worked at POS within a few months, enabling fast, contactless payment options across Shoprite Group stores.

Electrum's solution consisted of:

- The QR Payments Service Interface, including creation of EMVCo standard QR codes and authorisation of the transaction on behalf of Shoprite
- Integration to Masterpass
- Integration to Shoprite (using ISO 8583 API)
- Daily transaction reports (in Shoprite's format)

To allow Shoprite to accept QR code payments as rapidly as possible while maintaining stability, Electrum integrated with the ISO 8583-compliant API used by Shoprite. This allowed a rapid deployment of the QR code payment option while ensuring security and stability. The Electrum QR Payment Service Interface played the crucial role of authorising the QR code payment transactions on behalf of Shoprite's POS.

Shoprite chose Masterpass as their open-loop card payment provider for QR code transactions.

Electrum integrated with Masterpass to implement this solution, providing access to major banks, supporting more ways to pay at POS.

EMVCo-compliant QR codes were obtained via Electrum's QR Payments Service Interface, allowing different payment providers to be supported using the same QR code.

This also ensured QR code interoperability and that they could be read by the customer's app of choice. Giving consumers greater options for their specific QR code payment method. The codes were dynamic, presenting a unique code per transaction, making payments smoother and eliminating the need to enter amounts manually.

Importantly, this interoperability means the solution is future-proofed and ready for the possibility of other payment types, like closed-loop wallets or PayShap for retailers.

Lastly, Electrum produced a daily transaction file, seamlessly feeding into Shoprite's reconciliation process. This daily reconciliation served as a control mechanism to confirm that transactions matched as expected and to flag any discrepancies.

Electrum helped Shoprite create QR code POS payments option within three months. This allowed Shoprite to become the first major retailer to offer the payment method and provide customers with a safe, contactless way to pay during the uncertainty of the COVID-19 pandemic.

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