



From Many To One

The world's largest payment network successfully processes trillions of transactions a year. Yet the complexity of their operation, which involved multiple networks and payment schemes, needed to be reduced. The challenge for RS Software was to consolidate and optimize these networks and schemes into a single, consistent operating environment.

Lost Efficiencies, Higher Costs, Poorer Customer Service

The network operated multiple networks running on legacy infrastructures to process debit and credit card transactions from around the world. Since these networks were acquired or developed at different points of time, their architectures, features and functionalities were often incompatible. This incompatibility compromised scalability and created obstacles related to the introduction of new business services and extension of existing functionalities. Furthermore, the legacy infrastructures being used to support these systems were dated, bulky and very expensive to maintain.

This created the following issues for the network:

- Operational efficiencies were compromised from running parallel networks to delivering similar types of services
- Customer satisfaction had eroded due to the use of different business rules and interfaces for the same service offered through different networks from the same card brand
- Performance latency rose because network member banks were operating using a variety of different systems
- Costs and complexity were rising while the ability to flexibly deploy and improve services was dropping

A Strategy, Plan and Solution for Improvement

The network engaged RS Software to co-architect and deliver a multi-year transformation program. The project is delivered over multiple phases from planning to implementation. A summary of each stage is offered below.

Strategy Phase

- Select the target platform for convergence of the multiple payment schemes [i.e., credit, debit and prepaid]
- Define the intended service offerings to be delivered by the target platform
- Establish strategies to fulfil those gaps and implement the consolidated payment platform
- Develop the migration and rollout strategy for the project with an emphasis on minimizing impact to the end customers and stakeholders

Implementation – Phase-1

- Using the debit system as the target platform:
 - Convert its existing legacy architecture to a SOA-based modular architecture
 - Re-engineer the core and business unit applications to align with the SOA architecture

Implementation – Phase-2

- Enhance the re-architected debit platform to accommodate business services and functions from the credit and prepaid platforms
- Implement a staged migration strategy for member banks that minimize impacts to all systems involved.

Implementation – Phase-3

- Enhance the re-architected debit platform to accommodate business services and functions from other networks
- Bring the parallel debit networks under the same processing platform with network specific customizations

Implementation – Phase-4

- The final stage of the consolidation involves creation of a digital platform designed to expose all network-related services through APIs

The Value Delivered

The consolidation and transformation delivered within the project as proposed by RS Software allowed the client to realize:

- Reduction in the total cost of ownership through the consolidation of different applications and networks which were overlapping in nature
- Creation of an adaptable structure for faster time to market for future services such as tokenization
- Creation of a structure for easy integration with a new network or creation of a sister network
- Enhanced customer satisfaction through uniform service quality
- Creation of a foundation for the future through a micro service based architecture

About RS Software

RS Software is a vertically integrated technology solution provider to the electronic payments industry operating on four continents with its US headquarters in Silicon Valley. RS Software has been in business for more than twenty-five years providing solutions to leading payments brands around the world including payment networks, processors, acquirers, issuers, and ISOs. RS Software has built solutions for the introduction of new standards such as EMV and emerging payment areas like mobile and contactless payments, while enhancing the ability of its clients to manage their legacy systems. The domain focus makes RS Software a partner of choice for its customers and an employer of choice for its employees.