


Building a Future-Ready Billing and Settlement System



Jordan's leading payments processor selects FSS Billing and Settlement System to launch multi-dimensional, billing models to solidify partner relations, optimize settlement efficiency and minimize operating costs

Customer Overview

Our customer is the largest payment processor in Jordan, serving 25 banks in the country. The company is a subsidiary of the largest acquirer in the United Arab Emirates and a leading multi-country processor in Middle East and Africa. The Group currently serves over 170 banks and 35,000 retailers across 45 countries in Africa and the Middle East.

Customer Need

Modernize Legacy Billing and Settlement Systems

Our customer operates an extensive payment ecosystem comprising banks and merchants. The processor hosts ATMs, POS, Internet Payment Gateway, Core Banking Systems and JONET, the national switch, for multiple banks. The processing environment is connected to VISA, MasterCard, JCB, AMEX, Union Pay as well as to an external processor CSC (based in Lebanon). Underpinning this revolution are applications with the power to make businesses more efficient, effective and innovative.

As a processor, our customer, generates the bulk of its revenue from transaction fee. Crucial to its competitive ability is the ability to offer client-specific pricing schemes as well as a streamlined process to clear and settle transactions with customers.

Fast-paced business and regulatory changes are the “new normal” in the payments space and have an impact on the underlying billing and settlement systems. The processor struggled to address emergent requirements, as it had to contend with legacy billing and settlement systems, that are inflexible. Deployed two decades earlier, the billing system developed in Informix-4GL and Informix-SQL to perform clearing and net settlement for banks was ill-designed to adapt to evolving business and regulatory changes. Over the years, additional modules were implemented in an ad-hoc manner to address evolving business needs, outside the core system, with an objective to minimize impact on ongoing billing operations. Whilst this served immediate business requirements, the perpetual quick fixes resulted in a complex, fragmented billing environment. With a growing number of channels, integration with legacy systems became a critical challenge.

Further, fee-related configurations in the current billing ecosystem were hard-coded, resulting in a high level of IT-dependency for effecting any change. This also constrained the processor's ability to introduce sophisticated multi-dimensional, hybrid business models. Other functional limitations included unavailability of a partner portal to view settlement reports, inability to process multi-currency transactions and support for languages beyond Arabic, hindering the processor's global expansion plans.

The processor also incurred high maintenance overheads, as the technology deployed was monolithic and proprietary. Additionally, the legacy system also faced a lack of staffing resources skilled in the technology, further escalating operating costs.

Given the pace of change, the processor needed a billing and settlement system to introduce innovative billing models in anticipation of market needs. Essentially, the system needed to enable business teams add channels, services, and business fees aligned to contract and pricing agreements, with zero code changes. Concurrent with these objectives, the processor needed to upgrade its existent billing and settlement systems to improve agility and create differentiated value for partners and outperform competitors.

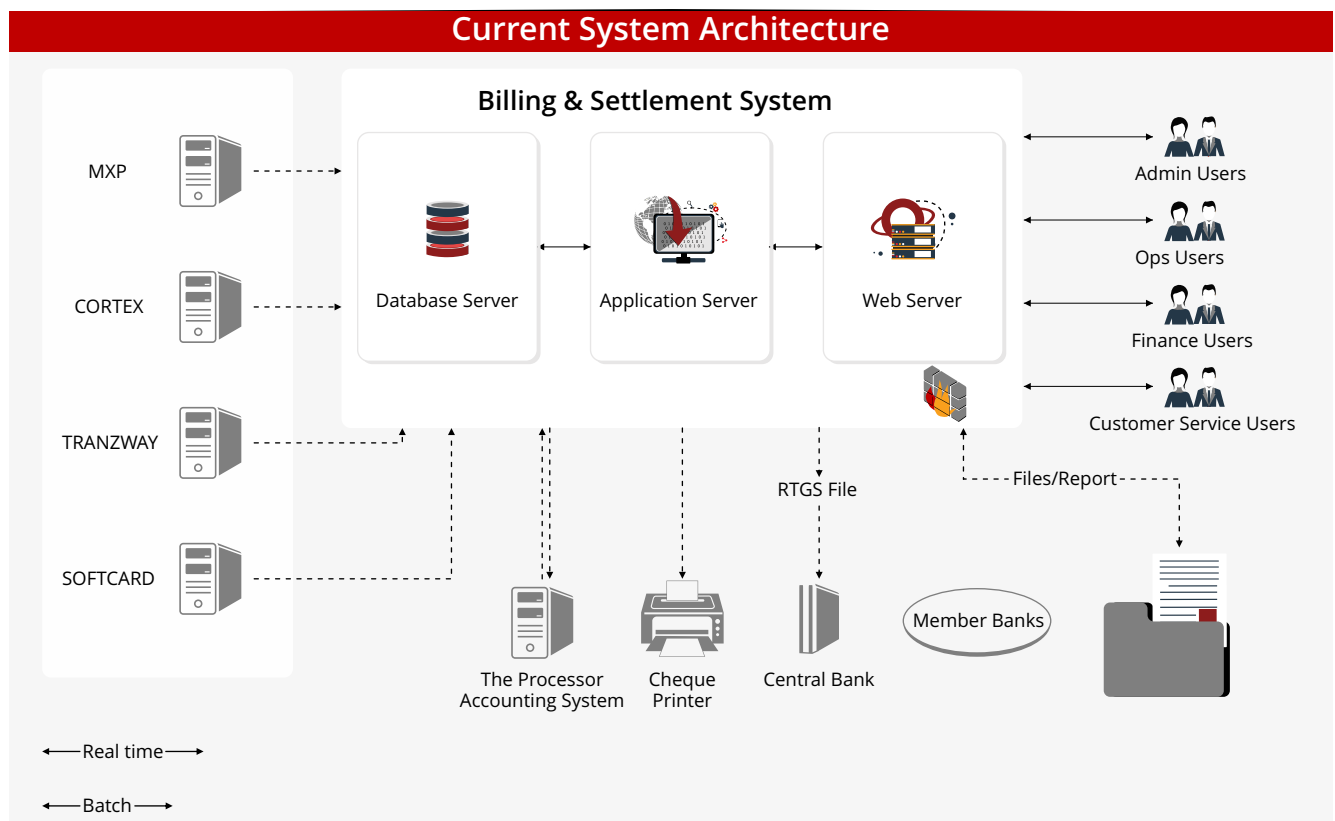


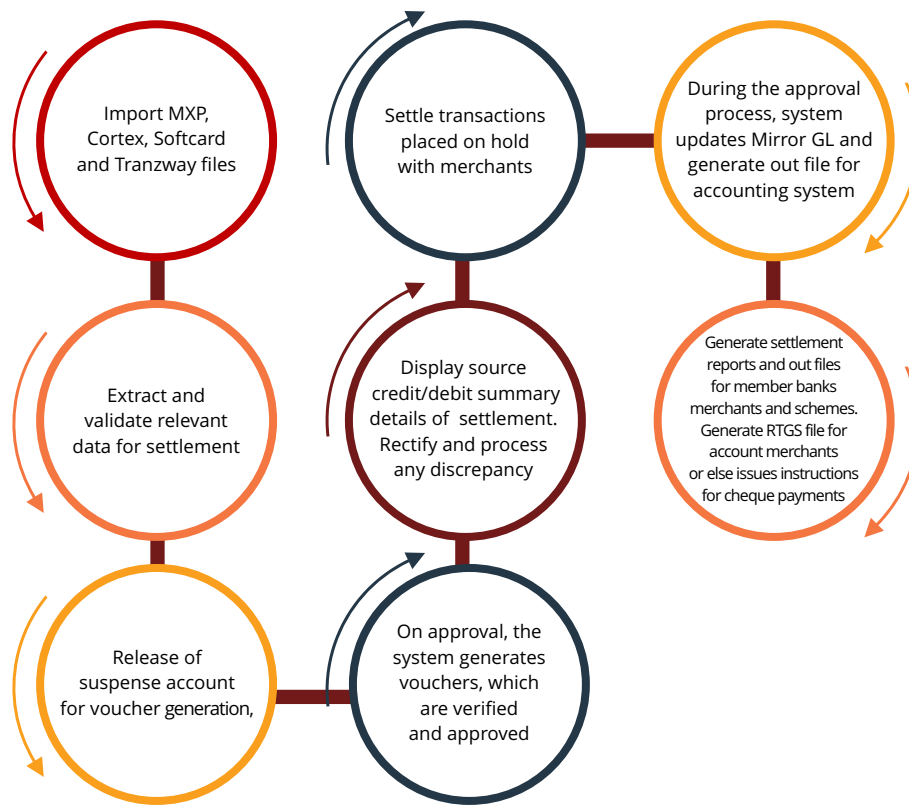
Billing and Settlement Environment

The billing system imports data from multiple source systems for initiating the settlement process:

- ✦ MXP -- Merchant settlement file and bank fee file.
- ✦ Tranzway -- Transactions flowing through POS
- ✦ Cortex – Daily POS and JoNet Files
- ✦ Softcard – Card personalization files

These transactions are netted to generate reports on settlement positions based on a predefined frequency. On generation of settlement reports, the billing system updates the General Ledger and issues fund transfer instructions for debiting or crediting outstanding net balances in line with contractual SLAs for each partner.





Why FSS?

The processor, after a due diligence process, selected FSS to modernize its legacy processes. FSS Billing and Settlement system provides an integrated fee calculation and settlement capability for all customer segments and payments schemes. By centralizing operations, the system brings in operational efficiencies and rationalizes costs associated with operating multiple discrete systems. The FSS system was evaluated on the following critical parameters:

Product Extensibility and Modularity

FSS Billing and Settlement system provides a high degree of flexibility for fee configuration and product life-cycle management (i.e., managing amendments to customer accounts, products or channels). Further, the solution modelled on standard interfaces, assures ease of integration with General Ledger and Accounting systems and is extensible to meet future needs.

Industry Standards

FSS Billing and Settlement system was compliant with international as well as regional industry-standard settlement mechanisms.

Product Strategy and Roadmap

FSS Billing and Settlement System has a well-defined product development roadmap and is extensible to adapt to evolving technical requirements.

Proven Credentials and Post-Production Support

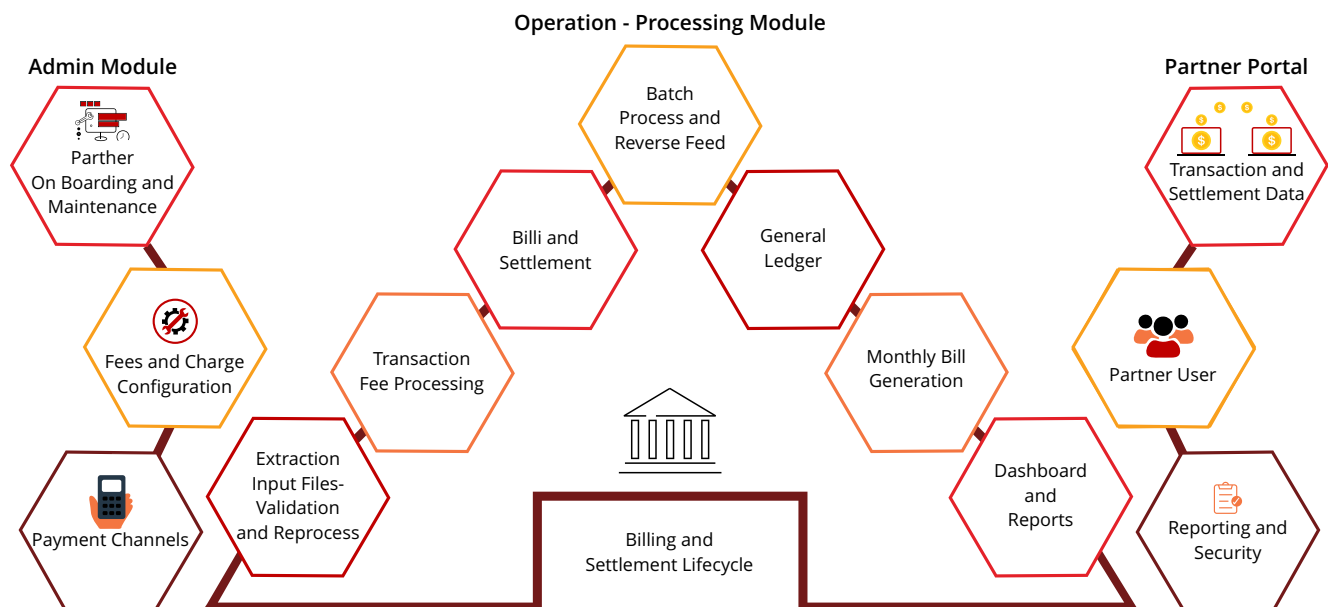
Proven market performance coupled with a strong regional presence assured the processor of continual support, as it embarked on its journey to transform legacy processes.



FSS Solution

Future-Ready Billing and Settlement System

FSS a convergent billing and settlement platform for settlement between partner banks and merchants. The system is highly flexible and supports set-up of complex organizational hierarchies and customer specific pricing and calculation schemes for any level. The Billing and Settlement system can scale to handle growing transaction volumes and can be easily integrated with external systems such as the Switch and General Ledger systems, easily extended through configuration.



- Partner Onboarding and Maintenance - Onboard new partners faster via web-based configuration tools and provide a superior partner relationship experience
- Extraction of Input Files – Imports data from multiple sources and harmonizes file formats
- Fee Processing – Flexibly configure fee based on a range of attributes - flat fees, conditional fee, percentage based amounts, MCC-related fee, time-window based fees as well as fee waivers
- Billing and Settlement – Settles transactions based on a pre-defined frequency

- ✦ Batch Process and Reverse Feed – Data from multiple sources is uploaded into the system using a batch process
- ✦ General Ledger – Manages all partner payable and receivable accounts
- ✦ Bill Generation – Establish settlement finality and generate bills for each partner based on a predefined periodicity daily, weekly and monthly.
- ✦ Dashboards and Reports – Configurable dashboards offer a drilldown view on settlement positions based on multiple attributes – partner, channel and fee type



Implementation Approach

A governance team comprising with representatives from the processor and FSS organizations was formed to drive the project. The core team comprises members from technology, business and operations groups to manage the transition from the legacy to the new system. FSS technical teams conducted functional equivalence tests to map gaps between current and proposed systems. Post-analysis, given the complexity of the system, the project was implemented in a phased manner:

- In Phase 1 -- FSS developed file interfaces for integration with Cortex and Softcard systems
- In Phase 2 -- FSS developed file interfaces for integration with Tranzway and MXP systems

Functional Enhancements

FSS development teams carried out the following customizations:

- Automated approval management (maker and checker principle) for issuance of payment instructions
- Custom dashboards for drilldown visibility into settlement positions using a range of attributes including partner, periodicity as well as source systems such as MXP, Cortex, Tranzway and Softcard
- Manual adjustment to verify and approve the generation of settlement files either at bulk or at a source level
- Flexibility to configure settlement cycles for each merchant. The payments follow a predefined payment cycle, with the amount kept on hold until the payment cycle matures
- Generate cheque file requests for merchants, where transactions need to be settled by cheque

Value Delivered

By deploying FSS Billing and Settlement System, the processor has been able to successfully launch multi-dimensional billing models, solidify partner relations, optimize settlement efficiency and minimize operating costs.

Enhanced Business Opportunities

The Billing and Settlement system has enhanced monetization capabilities by enabling business teams rapidly configure fee models and launch new products and variants for different target customer segments, with minimal IT help. Dynamic fee setting and multiple settlement cycles have helped the processor to differentiate services and on-board new partners, with flexible terms and conditions.

Automation Optimizes Settlement Cycles

Earlier the entire settlement process took 4-5 hours to complete. In event of exceptions, manual interventions, further prolonged the billing process. With the new automated and easy-to-use system, the entire billing and settlement process is completed in one-third the time, without any manual intervention, with the exception for out-file generation.

Improved Partner Satisfaction

Automation and efficiencies in the billing and settlement process has helped our customer achieve a high level of partner satisfaction due to timely billing, streamlined processes and lower volume of disputes.

Optimized Costs

The centralization of billing and use of standard technologies such as Java and J2EE improves access to a wide resource pool and eliminates the need to deploy and train resources in technologies that are fast becoming obsolete, lowering staffing costs.

High Scalability

A multi-tier architecture model allows for independent scaling of each module to accommodate increased workloads.



About FSS

Financial Software and Systems (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 27+ 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 management, 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.

To know more, write to **products@fsstech.com**