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Money Movement Automation: A Case Study

Aditya Simhadri, Relationship Manager, Banking and Capital Markets Practice, Infosys Technologies Ltd

Synopsis:

When a leading Fortune 500 company found that its inefficient money movement function was hindering its ability to implement common changes across lines of business, it decided that a new flexible platform was needed that would allow it to adapt quickly to new market trends and compliance requirements. Infosys implemented a phased solution that addressed the client's need to create a centralised repository of information; improve risk- and fraud-detection capabilities; reduce the time taken to realise customer payments; implement least-cost routing; and build a rule-driven and highly scalable payment scheduler.

Like all industries, the financial sector faces a never-ending challenge to continuously improve and optimise its operations. The effort to improve money movement remains a priority for most financial institutions. However, while some find themselves ahead in the game, most are still stuck at the drawing board. The following case study describes a large financial institution's journey to centralise and enhance its money movement infrastructure.

Client Context

A leading Fortune 500 financial services company was saddled with multiple redundant applications, performing money movement functions across multiple business lines. This impaired its ability to implement common changes across lines of business due to time and cost implications, which created a need for a common money movement platform across all business lines. When implemented, the platform would offer the necessary flexibility to enhance money movement efficiencies and quickly adapt to new market trends and compliance requirements.

Business Drivers

A combination of several factors led the client to implement the multi-year, multi-million-dollar money movement initiative. Key drivers included the need to:

- Create a centralised repository of information for strategic decision-making;
- Improve risk and fraud detection capabilities;
- Reduce the time taken to realise customer payments;
- Implement least-cost routing to optimise the float; and
- Build a rule-driven, highly scalable payment scheduler that could trigger payments automatically, or on an ad-hoc basis.

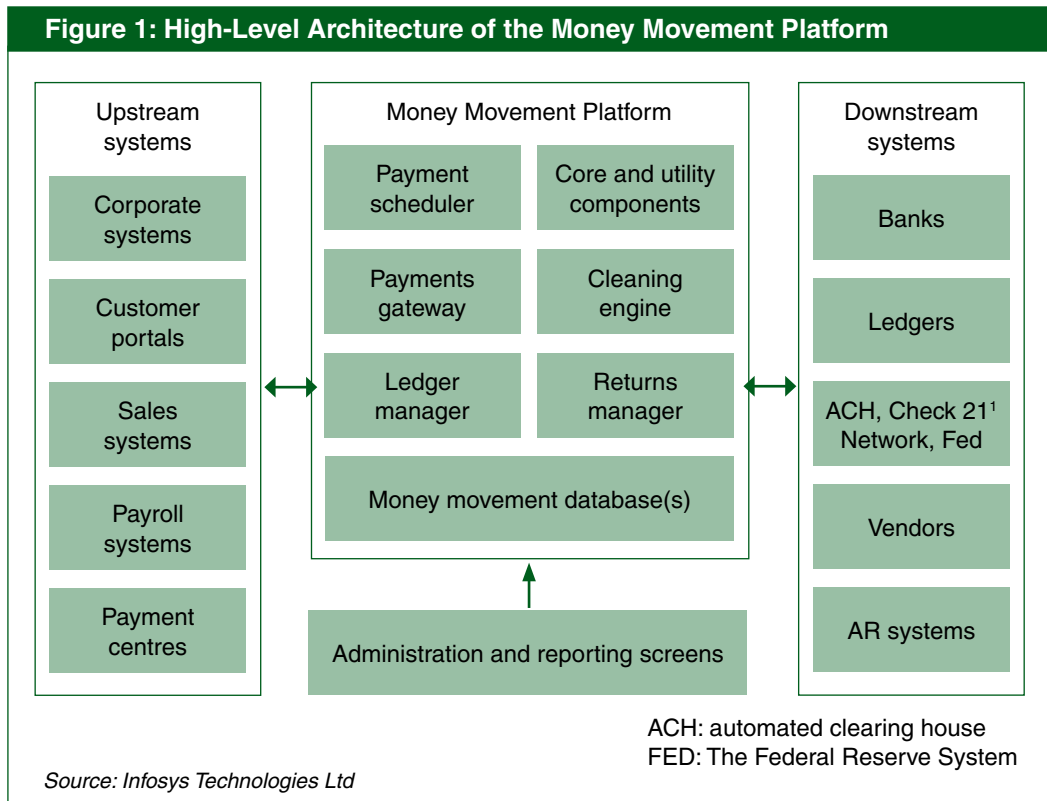
The Solution

Like any other complex programme, the money movement automation project was completed in multiple phases. Each one of these phases was focused on addressing one or more of the business needs described above.

Phase 1: architecture and roadmap definition

During the initial planning stage goals, the architecture and the overall roadmap were defined. At the completion of this phase, the key stakeholders were in agreement: the platform should be designed as a one-stop shop for any line of business to perform any kind of money movement transaction to, from or across the organisation. To accomplish this, the entire architecture was broken down into a few major components, each aimed at addressing one of the high-level business functions identified for the platform. Figure 1 briefly describes the overall architecture for this money movement platform.

Figure 1: High-Level Architecture of the Money Movement Platform



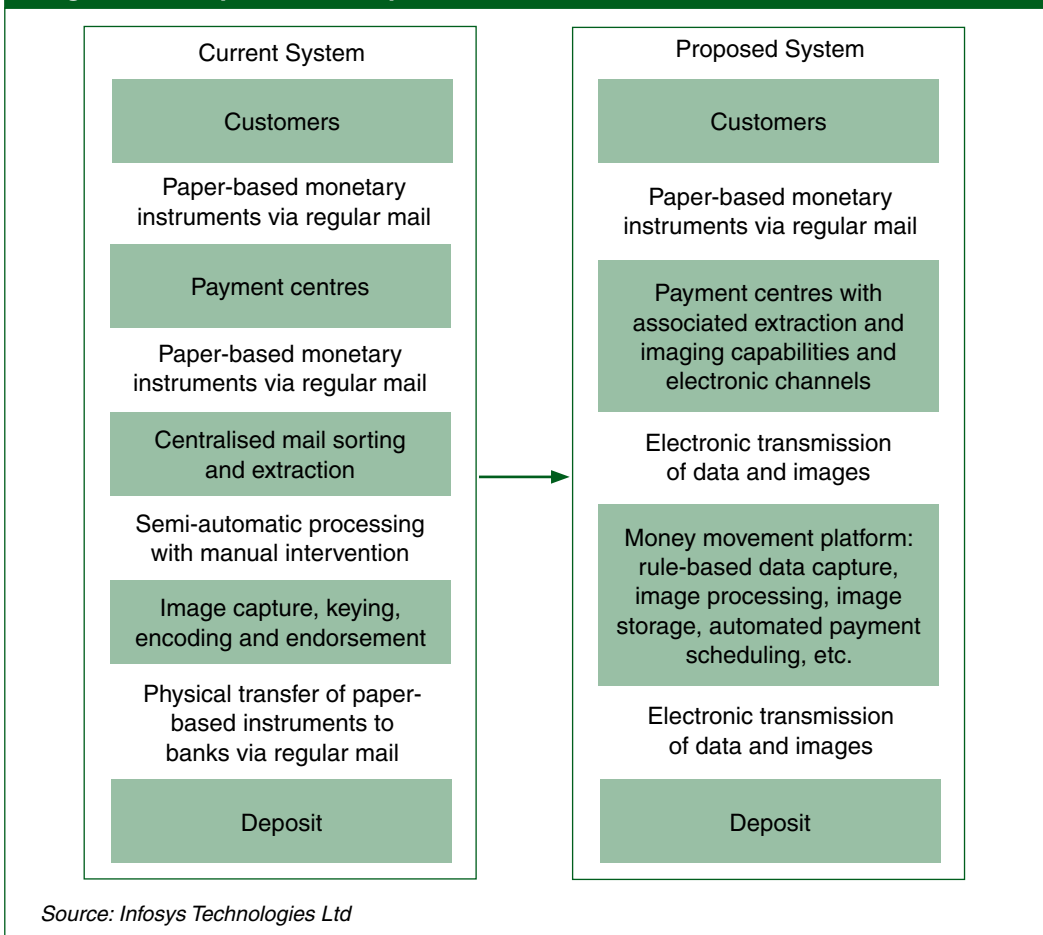
Phase 2: centralised data repository implementation

The database component in the money movement architecture shown in Figure 1 serves as the centralised repository of all the transactions that move through the platform. This master database further feeds information into a data warehouse. Apart from the storage of transaction history, this database also receives feeds from external vendors that provide valuable information related to the risk and fraud history of banks. Wrapper/access components were built around the database. These help users to make decisions relating to the mitigation of dangers arising from risk and fraud. A reporting layer was built around the data warehouse to help with analytics and strategic decision-making – a feature that is especially useful for gauging business performance and growth.

Phase 3: reduction of customer payment realisation times

The third phase of the programme was aimed at addressing the most important business driver: the need to reduce the time taken to realise customer payments. This was achieved by taking advantage of the Check 21¹ law, which allows money previously moved via paper to be moved electronically. This helps financial institutions reduce processing times. Check 21 also allows financial institutions to increase the number of ways they can collect money from their debtors.² Figure 2 shows how operational efficiency was improved by removing dependency of business processes on paper-based mail and moving them to electronic formats.

Figure 2: Comparison of Paper-based and Electronic Mail Formats



1. The Check Clearing for the 21st Century Act is a US federal law that was enacted in 2003 and took effect in 2004. The law allows cheque truncation, whereby the recipient of a paper cheque creates a digital version, eliminating the need for further handling of the original.
2. Alternative collection methods include remote deposit, point of purchase (for retailers) and accounts receivable conversion (for high-volume remittance receivers), where front and rear images of cheques along with information read from the cheques using magnetic ink character recognition are uploaded to depositing institutions and customers accounts are then credited.

Phase 4: least-cost routing implementation

The least-cost routing functionality, along with some other complex functional requirements, was implemented using an existing third-party product. The protocol selected uses a database of rules, built on transaction fee rate cards from various institutions, to route the transactions via the most efficient channel that optimises the float³ for the company.

Phase 5: payment scheduler implementation

The payment scheduler needed to be a highly scalable and robust component that could schedule payments automatically, either on a recurring or ad-hoc basis. This was a rule-driven component that could schedule payments for any line of business that wanted to transfer money from a source to a target account. The rest of the functionality to complete the money movement platform was built in parallel, and as part of one of the above phases. The last part of the development process included enhancing the platform and bringing the lines of business on board.

Challenges Faced

The most significant challenges encountered during the development process were:

- Scaling up multiple new technologies and platforms;
- Managing and coordinating scope, expectations and communication with all business units and infrastructure groups;
- Managing demanding timelines driven by critical business needs; and
- Programme management and integration of various projects to build the overall platform.

Benefits

Money movement automation provided many benefits to the company:

- Reduced cost of operations;
- Reduced the number of manual interventions;
- Optimised the float by effective least cost routing;
- Streamlined business processes;
- Expanded customer-servicing capability;
- Created an ability to offer new feature-rich services or products quicker;
- Improved risk- and fraud-handling capabilities;
- Enhanced legal and regulatory compliance controls;
- Provided earlier notification of problems; and
- Lowered future implementation costs.

Conclusion

Given the benefits and strategic advantages provided by money movement process re-engineering, it is highly likely that other financial institutions will follow suit. It is no longer a question of why, but a question of when.

3. The float is the difference between the value of cheques written and deposited and the value of those cheques or deposits that have cleared.