

Citibank's payments plans take shape

Citibank is overhauling its payments infrastructure. How far has it progressed to date?

Citibank's move to a single funds transfer platform has been under way for a couple of years, with a considerable time still to go before the dream becomes reality. However, by definition, anything that Citibank does on a global basis is bound to be huge. The volumes, number of users, and cost are all mind-boggling. The potential benefits look worth the effort and investment but can they be realised and, if so, how long will be the wait?

The current state of play will be familiar to many banks, even if there are differences of scale. Citibank has three processing hubs, in Dublin (for Europe), Buffalo (for North America), and Singapore (for Asia Pacific). The volumes per year are 12,000,000, 36,000,000 and 4,000,000 respectively. The daily average values of payments going through the systems are \$120 billion for Europe, \$780 billion for North America, and \$2.5 billion for Asia Pacific. There are almost 1000 users across the three systems, plus up to 2300 'casual users', doing tasks such as balance enquiries.

Feeding into these hubs are disparate payment systems. The mix of systems is most pronounced in Europe, where virtually each country has its own booking and funds transfer platform. There is a single application in the US and there has been some consolidation in Asia Pacific, so that there are now three systems in this region. This set-up brings a host of problems. Each system has its own specific functionality and rules, so it is not easy to move staff between each. Citibank's headcount in payments is probably considerably higher than necessary, says Citibank's European implementation manager, James Quinn. The release of new functionality is time consuming and costly. This means that it has to be done on a phased basis, so that the bigger branches tend to receive changes before the smaller branches. Efforts are duplicated. It would be nice, for instance, to do Swift's MT103 once, he says. This burden, combined with the rate of regulatory and industry-wide change (such as the introduction of the euro and new Swift messages), means that most of the time is spent on these sorts of areas. 'This tends to drive out the tastier stuff that we would like to do for our customers,' says Quinn.

Those customers are often global in nature. They want to do things in Europe that they can do in Asia Pacific, for instance, but find that this is not feasible because of the lack of consistent systems. There are inconsistent transaction codes and limited message types. Citibank is not able to offer a standard set of functions and service levels, nor is it able to provide the customer with a consolidated picture of its activity. Citibank does not have a single view of accounts, nor does it have standard MIS, or billing and charging.

Hence the decision to move to a single, global funds transfer platform. The aim is to have one point of validation, repair and history for payment instructions, and 24-hour, 'follow the sun' processing on a single system, allowing all of the inconsistencies to be ironed out and ensuring that peaks can be handled better, with the load spread

across different regions. There will be a global OFAC and money laundering capability, centred on one database, so that a single set of criteria can be applied to all payments and customers. There should also be improved security, with extensive access controls, electronic message signature encryption, and support for dynamic password security.

There will also be a major focus on message enrichment and an improvement in data quality. 'We want to dramatically increase STP,' says Quinn. The bank wants to reduce the number of investigations. He says that Citibank also wants to reduce the number of internal transactions that it has to do between its branches, just to get a payment from one part of the world to another.

The drawing up of the global business requirements commenced in 1999. The project was dubbed CitiFT. A London-based team was put in place and there were workshops across each geographical region. A global business database was constructed, which brought together around 6000 individual requirements. A search of the market was then undertaken to find a solution. The bank was looking for a flexible, rules-based and scalable system, says Quinn.

In January 2001, the bank signed for Fundtech's PayPlus. It took the Global PayPlus (GPP) version, which is intended to support multi-branch processing. The bank also opted for the repair tools of Viveo (Cognitive Systems, as was), comprising Payfix, Trafrix and Fieldfix. The plan is for incoming messages to hit Trafrix, which will handle conversion and authentication. There will then be an OFAC compliance layer, based on a checking server. On average, about 0.75 per cent of traffic is rejected at this level. Viveo's Payfix will then handle any message enrichment, before the message reaches PayPlus. With Payfix alone, Quinn estimates that the bank should be able to improve STP rates by four to five per cent, 'without really trying hard'. The biggest improvement in STP is expected to come when the bank pushes its customer traffic through the systems. There will also be OFAC checking after PayPlus, as sanctions might change between the start and end of the process. And Trafrix will be applied to outgoing messages to improve their quality.

For London, at the outset, the bank came up with the requirement to process 100,000 transfers per day, equating to twelve messages per second. The bank is now working with Fundtech to increase this to one million transactions per day, at 28 per second. The bank wants instantaneous response times at the GUI and processing levels, as well as instant access to on-line data and five second response times for accessing historical data. It has also stipulated a maximum of 15 minutes recovery time for the system.

The bank looked at how to turn the requirements into a project. There were additional workshops and a definition of the implementation plan, including rough timescales. A project steering committee was put in place, with global and regional management, made up of

senior staff from operations, business and technology. Its remit included global programme and vendor management, and management of global requirements and testing teams. However, there was also a need for regional projects to develop functional and interface requirements, define and manage User Acceptance Testing (UAT), and ensure general regional readiness for the implementations. A key philosophy was to involve the user at an early stage, to try to avoid late changes and reduce user resistance. However, despite the strong regional representation, ultimate control needed to be at the centre, to ensure that the bank did not move away from a standard global solution.

The bank also felt there was a need for a central project management partner and additional development resources. For this it turned to I-flex Solutions. There are long-standing ties with this Indian supplier, as it was originally spun out of Citibank's Indian development resource and is still part-owned by Citigroup. Moreover, I-flex is currently deeply involved elsewhere within the bank. This is within the more advanced, parallel project to move to a single back office system across its Global Corporate business (IBS, May 2002). The project is centred on I-flex's Flexcube and is taking place across three continents, with an ever growing number of live sites.

For CitiFT, the bank decided to start with the hardest operation - in other words, London. This is different from the European Flexcube roll-out, where the bank kicked off with Finland. For payments, it was felt that London would encapsulate all of the standard requirements of the other branches as well as best practice. It is, for instance, four times

the size of Frankfurt in terms of volume. 'We wanted to be able to say to any other branch, we don't care what you have been doing for the last 20 years, this is better,' says Quinn. After London will come Frankfurt, then Amsterdam.

A version of GPP is live in London. This is the Traffic Manager part, with access to Payfix. It is a small implementation and a lot was learnt about project management and working with Fundtech, says Quinn. A cautious approach is sensible when the stakes are so high, he says. 'A lot of time has been spent learning to listen to each other.' It also took time to ensure proper knowledge transfer between Fundtech and I-flex. There has to be a trade-off between process improvement and systems replacement. The philosophy is to implement the system and then reengineer the processes, although such discipline is difficult. More generally, the project methodology should be revised and refined for each implementation.

The expectation is that the full roll-out in London will happen at the end of May. Quinn pronounces himself '95 per cent confident we'll make it'. The requirements for Frankfurt and North America are in place, those for Asia Pacific are in the process of being defined. The bank will standardise on Version 5 of GPP, seeking a more or less off-the-shelf solution.

The size of the task should not be underestimated. There are 14 project teams for London alone. Each has Microsoft Project Plan, with the data from this consolidated weekly. Progress is tracked on a daily basis and there are weekly meetings. 'You cannot talk too much,' says Quinn. The rules-based make-up of PayPlus brings flexibility and is a good attribute, but it is complicated. Over

4000 rules have had to be defined within PayPlus for London. 'This is harder than with good old Cobol,' he says.

UAT will encapsulate 13,500 test conditions and almost 3000 test scripts. A 16 person team in Mumbai is responsible for drawing up the scripts and executing them, but ultimate sign-off will be by business and UAT professionals on-site, to ensure that the system works, and that it works the way the users on the ground expect it to work. There is also an Operational Readiness team. This is something that Citibank learnt from its CitiDirect internet banking project. This team is solely responsible for ensuring that the user is ready to go. It is responsible for ensuring proper configuration of the system, checking that all of the necessary rules and static data are in place, handling defect resolution, and managing security.

CitiFT is viewed as the second most important project within the bank, behind the CitiDirect initiative. Sponsorship is at the level of global heads of operations and global heads of business. In case there was any doubt, the selection of London as the pilot was intended to demonstrate the bank's commitment. There is no doubt that this is a lengthy project and it seems that the role of I-flex has grown as the bank has found a need for more resources. Nevertheless, if the London cut-over is achieved in May, then this will apparently be in line with the originally envisaged timescales. Then the benefits should start to be realised, although the promised land of a single payments infrastructure across the globe is still a considerable way off. □

