## AN EXCEPTIONAL PROCESS

JON PURR OF SUNGARD TREASURY SYSTEMS TAKES A BACK OFFICE PERSPECTIVE OF TREASURY MANAGEMENT SYSTEMS, EXAMINING HOW TRANSACTIONS CAN BE PROCESSED WITH A MINIMUM OF PAPER, EFFORT AND ERRORS.

hen I first started work, cheques were written by hand for all sterling payments. Foreign currency was paid via 'tested' telex and confirmations were completed using a word processor. Luckily, by that stage the quill pen had been superceded by the Biro for completing the Nostro ledger. However quaint these business practices may seem nowadays, what is significant is that the back office had a process, which apart from the technology deployed, has remained largely unchanged. Then, as now, a process was defined for standard situations, and additional processes were employed for non-standard or exceptional situations. In some respects, this could be described as straight-through processing (STP) in the sense that a payment went from one manual process straight through to another.

We have come a long way since then, with treasury management systems (TMS) now playing a central role in managing, and sometimes defining, the process in the back office, which we focus on in this article. However, the idea is still the same. The goal of the back office is still to pass standard transactions through the department quickly with little fuss, and to focus on highlighting the exceptions. All of this should be done with the minimum of paper, effort and errors. This is the crux of STP.

**HOW FAR HAVE WE GOT?** Fully integrated front and back office systems are standard in most larger organisations, with increasing levels of communication between departments. A workflow that permits STP within the treasury department should be expected from all TMSs; however, this internal process addresses only a small proportion of the issues facing the back office. In particular, it presents no solution to the problem of integration and automation of communications to external systems, such as matching systems, banking applications for payments, statement upload and reconciliation systems. It is these systems in which external business activity is reflected, and therefore where the greatest risk and costs are incurred.

Communication with these systems is often done via file upload or batch processing from the TMS, creating security loopholes and preventing real-time communication. Frequently, the user has to leave the TMS and switch to a completely new system for cash management and confirmation matching. In this environment, with transaction information littered across multiple data sources, how easily can the transaction status be monitored and, specifically, how can exceptions to the norm be trapped and reported upon? The issues here are not merely ones of efficiency or making users' lives easier. There are very real financial consequences of payments failing, unexpected receipts sitting on low interest accounts overnight and embarrassing bank charges.

**BACK OFFICE OBJECTIVES.** The back office manager of one of the world's largest multinationals told me that it was his staff's ambition to walk into work and already have their bank accounts completely reconciled, all the prior day's confirmations matched and the day's payments ready to authorise. Only once these operational considerations have been made can he go on to think about the more strategic role which the back office could play: multilateral netting, payment centralisation and shared service centre activity. To satisfy these objectives, the TMS would need to provide:

- integrated and automated connections with all external systems: for confirmation matching; for cash management (that is, payments/receipts and statement upload);
- the ability to control the whole process from within the system;
- transparent, comprehensive status management for transactions and cashflows;
- exception reporting;
- integrated information and processes across multiple treasury centres; and
- integration with, or provide within, the TMS system for: liquidity management and multilateral netting.

In reality, most of these items are driven from the central requirement of full STP in its optimum sense, namely integration and automation of communications.

**INTEGRATION AND AUTOMATION.** It is often good to remind ourselves exactly which workflow stages we are looking to address. *Figure 1* illustrates a typical transaction lifecycle not only from the

FIGURE 1



## FIGURE 2



corporate's perspective, but as is often overlooked, the counterparty's process (*shown in red*). The future of the TMS market is to provide or enable this complete lifecycle, in particular connecting the two parties in each type of interaction during a deal process. This article focuses on the back office element of this interaction – namely, payment/receipt transmission and bank statement upload – but there are knock-on effects from front office processes, with online dealing being one of these.

**CONFIRMATIONS AND ONLINE DEALING.** In summary, online dealing involves the client requesting a quote from either a single or multiple banks, the bank(s) supplying a quote, the client accepting the quote and the winning bank confirming acceptance of the transaction. In this process, so long as the transacted deal is integrated directly into the TMS, the current security and efficiency issue of rekeying or uploading the deal is avoided.

Today, however, the whole confirmation process is geared to managing this issue. Is the deal transacted in the market exactly what is in the TMS, and is that same deal understood by both parties? The online trading market is set to gather momentum as the banks follow their own drive towards STP, endeavouring to reduce transaction costs in an increasingly competitive market. It seems entirely logical that the secondary confirmation process as currently undertaken will disappear once online instant verification becomes the market standard for trading. However, as we are all aware, new concepts always take time to adopt.

The past 18 months has witnessed a proliferation of new companies and technologies, often dot.coms vying for our attention by addressing one point in the STP cycle, whether that be online dealing or payment processing and the like. This approach, attempting to bolt together potentially disparate systems into an integrated and cohesive whole, is surely creating the same problems

that we encountered five or seven years ago when companies moved from disparate treasury applications to integrated TMS. Banks, in particular, which have employed the most numerous applications to support the treasury and trading functions, spend huge amounts of money and resources on systems integration on a compounding basis, as initially compatible systems evolve in different directions. Few corporates have the financial or human resources to support such an activity, and rarely can it be justified on the basis of its contribution to core business activity. Bearing in mind that most corporates use a TMS, the answer must lie in ensuring optimum connectivity, versatility and opportunities to evolve within the TMS itself.

**COMMUNICATION ALTERNATIVES.** Continuing to look at the integration need in the back office, consider *Figure 2* showing connectivity between the treasury and its settlement/cash management banks. It shows the current connectivity including the front office and shows how communication is achieved through many media: phone and internet for front office dealing; modems, phone, web and fax for the back office and cash managers. The second part of the diagram illustrates an alternative via streamlined communications. SunGard's approach has been to provide an alternative to these different media with one communication hub, known as <STN> (*Figure 3*), which connects not only the treasury processes, but those between all companies in the financial services chain. <STN> facilitates STP between corporates, banks, asset managers, brokers, exchanges, settlement agents and custodians. One of the key <STN> services is <STN> eTX, which provides a reliable messaging system for transaction processing, cash management and settlement using secure internet links and XMLbased<sup>1</sup> messages to communicate directly from the TMS to external (and internal) counterparties.

**CASH MANAGEMENT.** As we have discussed earlier, means of communication affect the external treasury activity in addition to the internal operations. Why is a multinational organisation only dealing with one or two banks globally for cash management? Very often, as the back office would need to maintain as many systems as they had relationships with banks, a large number of banks means a multitude of modem links and/or web browsers and many passwords and smart cards to authorise payments. A single, bank-independent portal, creating integration across banks provides a technical solution to a typically expensive business problem.

To ensure a solution is viable, two things are required: adequate security and STP workflow within the base TMS; and a central communications portal to the banks' systems. The knock-on effect of this efficiency is that a company could choose to use the most appropriate banking services in every geographical region of its business.

**BANK RECONCILIATION.** Another of the ambitions expressed by the users was to have the reconciliation of the bank accounts done automatically. This can be taken one step further: why wait until the following day to confirm whether a payment has cleared or whether the target balance has been achieved? Rather than the bank 'pushing' information through its EBR system, use of the single portal enables the TMS to request the messages directly from the bank. This should be done via a secure internet link.

Once received, the TMS should automatically apply those messages to the user's bank account, apply an appropriate series of matching rules and then present the exceptions –that is, non-



FIGURE 4





'TODAY'S TECHNOLOGY ENABLES STRAIGHT-THROUGH PROCESSING IN A WAY NOT PREVIOUSLY POSSIBLE OR ANTICIPATED, CREATING NEW OPPORTUNITIES AND INNOVATION'

reconciled bank accounts or cashflows – to the user. This capability enables far greater responsiveness by the traditional back office for treasury transactions and the cash manager, enabling them to manage accounts actively and improve the information flow to front office significantly.

**PAYMENTS AND RECEIPTS.** The execution of payment orders is also an obvious role for the central portal. As with the previous functions, this would be enabled via XML messages over a secure internet connection. But with payments comes additional worry of security. Who governs the security standards from the user's workstation to the banks' systems? The answer is Identrus. Identrus is a community of financial institutions which is setting standards for business-tobusiness (B2B) commerce. It aims to set standards to ensure that trading partners can have confidence that their transactions are only with the intended party; they will be protected in transit; they will be legally binding; and they will have financial recourse should something go wrong (see **www.Identrus.com**). So in order for TMS systems to correctly integrate with the bank they should be Identruscertified to mitigate security concerns.

A CENTRAL COMMUNICATIONS HUB: IMPLICATIONS. The ability to employ a central/secure communication channel across the banking community has considerable implications for the treasury in terms of the way that the business is structured.

A CENTRAL BACK OFFICE. The back office is a prime example of a department that runs a standard process worldwide but is tailored to cope with local idiosyncrasies (for example, currency cut-offs, payment mechanisms). Although treasury centres frequently use the same TMS to manage their information centrally, we still find a back office for every treasury centre. It is surely not the purpose of establishing multiple centres to have to maintain multiple support functions. One of the main reasons has been the need to communicate locally with matching systems and banking systems. With the new opportunities for TMS deployment, there are no technical reasons for maintaining multiple departments.

**PAYMENT HUB AND MULTILATERAL NETTING.** A result of centralisation that is common in the corporate world is the shared service centre (SSC), whose role is to centralise the management of the company's payables and receivables. This in turn leads to the

creation of a 'payment hub': systems to process the whole organisation's salaries, invoices and the like, perform netting of cashflows and provide position data to the TMS. The payments are then managed through one channel instead of many located round the world. Multilateral netting, the process of netting intercompany invoices, is in the same mould. Business units globally input or upload their invoices into a system which is commonly controlled by the SSC or treasury. The system then nets those invoices across currencies to leave the business unit with local currencies to pay to or receive from the treasury.

Again, new opportunities in TMS (*see Figure 4*) enable these functions to be deployed in a single environment. Therefore avoiding the integration and reconciliation issues we have already identified.

TAILORMADE SOLUTIONS. The opportunities described here are not a theoretical position without a practical basis – but rather a framework of inter-related existing operations which are scaleable to an organisation based on business volumes and complexity. This means that their value is not just restricted to the larger treasury. The solutions case-studied allow every treasury to operate on a par, with the opportunity to choose their banking partners based on business drivers as opposed to technology constraints. Today's technology enables STP in a way not previously possible or anticipated, creating new opportunities for efficiencies, business opportunities and innovation. The treasurer's choice of business partner to help realise both the opportunities as well as implement the change is crucial – similarly, careful consideration is required as to how the technical solution is ultimately managed and maintained.

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## NOTE

<sup>1</sup> XML is a standard for text documents containing structured information. Structured information contains both content (such as words and images) and some indication of what role that content plays (for example, content in a section heading has a different meaning from content in a footnote). By adding XML to an MT320 confirmation message, a confirmation can be sent via a secure internet connection to a matching service. The machine at the other end will read the XML, understand that it has received an MT320 message and deal with it appropriately in the same way as email servers read email messages and post them to the correct recipients. (For more information on the standard, visit www.xml.com)