E-commerce – is your bank adding value ?

E-commerce is here to stay and, says Andrew Austin of BRC, treasurers must ensure their bank keeps abreast of developments if they don't want to be left behind.

nternet headlines tend to focus on the benefits of procurement and selling on the net, but e-commerce, if it has not already begun to do so, will also have a profound effect on the treasury functions of many organisations and their bank relationships. E-commerce can fundamentally alter the dynamics of a business and create opportunities for the treasurer to add real value by helping to deliver significant cost savings and business opportunities. Banks potentially have a very key part to play in this process and a lot to lose if they cannot deliver solutions to customers.

The fundamental tenets of treasury managing risk, managing liquidity/ funding, controlling the settlement of payables/receivables and, increasingly, managing working capital requirements - are all served by the products and services offered under the umbrella of bank relationships. Critically, they are all also dependent upon the need for efficient flows of information into, within and out of the business. E-commerce can alter these flows of information as well as change the working capital requirements and the appropriate payment/collection methods. For instance, any move to online selling may result in a need to assess credit risk instantly, reduce the need to fund debtors as payment is received more promptly, and necessitate additional means of payment collection. Procurement via the internet could also reduce stock levels through improved management/transparency of the supply process, reduce the period of credit taken and alter the choice of payment mechanisms by increasing the use of lower value automated clearings (ACH).

All of this challenges the traditional concept of the banking relationship creating both opportunities for, and threats to, banks. The e-enablement of businesses and their treasury functions means that banks must soon offer solutions to customer needs and support The e-enablement of businesses and their treasury functions means that banks must soon offer solutions to customer needs and support the treasurer in his/her pivotal role in these changes

the treasurer in his/her pivotal role in these changes. Those banks that fail in this challenge may find themselves displaced by those that do.

Background – the importance of treasury and banking relationships The treasurer needs to be involved in e-commerce initiatives within the business so that the effect on banking and cash management is properly understood. In the first instance, the treasury department must be able to continue to serve the operating



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companies' changing business requirements as they become e-enabled (changing risk management, payment/ collection and working capital needs). In addition, the treasurer needs to take advantage of opportunities to improve processes within and outside treasury.

Although the underlying processes of payments and collections via clearing systems remain largely unaltered for the time being, we are seeing movement in the way e-enabled organisations collect and disburse funds. Collections by credit/payment card are increasing, as is the use of lower value automated clearing. Clearly, business and consumer payment and collection habits are being tested and, in many cases, altered by the use of the internet.

Additionally, processes within organisations themselves are being modified by the development of e-commerce strategies. The internet offers reduced use of manual paper-driven processes as well as increasingly transparent and quicker communication. Crucially for many businesses, the internet opens new markets and customer bases. These attributes are beginning to fundamentally alter the processes leading up to, and indeed the payment/collection stage itself in the overall value chain.

We are increasingly seeing banks being able to offer solutions to companies' e-commerce needs both in terms of the traditional payment/ collection business and in the value chain leading up to this point. Treasurers as the guardians of the bank relationships therefore hold a valuable key that may help organisations to unlock the challenges of e-commerce.

How can banks help treasurers?

Having discussed in general terms the impact of e-enablement upon organisations, it is worth considering in more detail where there are very real issues for the treasurer to deal with and what banks can do to help.

Risk management

E-commerce requires risk management in terms of managing the integrity of both business-to-business (B2B) and business-to-consumer (B2C) trading partners sourced via the internet, as well as the more obvious issue of the security of communication.

The elements which are required to make up a secure transaction are:

- authentication assurance that the entity (user, host, etc.) requesting access is the entity it claims to be;
- authorisation confirmation that an authenticated entity is permitted to conduct the transactions they are seeking to perform;
- confidentiality access to sensitive information is limited to appropriate individuals;
- integrity protection of information from modification or corruption in transit or whilst in storage between the point of origin to the point of delivery; and
- non-repudiation proof that the originator of a transaction did issue that transaction and that it was received by the intended counterparty. Proof of the integrity and origin of data can be verified by a third party at any time.

Public key infrastructure (PKI) is a leading security infrastructure for internetbased transactions and is based on encryption technology, ie the means by which electronic commerce and file exchange is made secure over an open public network.

With PKI an algorithm operating in a software programme generates 'public' and 'private' keys. One is held securely in a password protected file, the other is made available to a counterparty in order to encrypt data intended for the owner of the public key. Unlike sharedsecret key systems, private keys are never shared and impossible for others to forge; thus it is regarded as more secure. Moreover, although public/private key pairs are mathematically related to each other, the private key cannot be calculated, and thus compromised via knowledge of the associated public key.

PKI definitively identifies a person or an organisation, and employs digital signatures and digital certificates to satisfy the five essential components of internet security. Digital certificates – a kind of virtual passport – are a means of

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guaranteeing the identity of a user by a third party 'certificate authority' such as a bank. Certification authorities administer the public/private key infrastructure and issue digital certificates.

One such solution will be the Identrus bank consortium that provides authentication by digital certification from a definitive number of participating global banks and clients to conduct transactions across open networks. In order to provide additional levels of assurance on the identity of digital trading partners, Identrus will provide real-time authentication and validation of transmission under legally binding contracts. Corporates that participate in the Identrus network through their sponsoring financial institution and agree to Identrus' rules for conducting transactions across open networks will have their identities digitally certified by the consortium's member banks. Thus the member banks vouchsafe the identity of buyers and sellers which do not know each other but which would like to trade. We are beginning to see many initiatives that establish trading 'portals', both from banks and other entities. Here the banks hold a potentially crucial advantage - a wide customer base and experience of secure communication, as well as effecting payments and collections.

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provide extensive support to customers in the arena of managing the risks associated with e-commerce.

Payment and collection mechanisms

The changes in payments and collections referred to earlier place banks in the best position to work with customers to facilitate the changes that are being driven by e-commerce.

For both B2B and B2C trading, the process of 'click and pay' is crucial in establishing a truly e-enabled process. In terms of B2C trading, banks are developing the ability to offer solutions that facilitate direct debit sign-up on the internet and their merchant acquiring subsidiaries can offer solutions for accepting credit card payments.

Electronic bill presentment and payment (EBPP), relatively common in the US for some time, is beginning to show signs of advancing in the UK and mainland Europe. This allows companies to invoice each other and consumers electronically via the internet. Payment in the case of B2B, continues to be effected via normal bank means (ACH, cheque, etc) and is largely triggered by the firm's accountancy system. Solutions can also allow for the collecting party to debit their customers once they have clicked to pay via use of the ACH. The challenge in most cases, therefore, is to integrate ERP systems with the browser technology facilitating the process. As ecommerce gains ground, we may see increased use of complete or partial outsourcing services offered by banks dealing with both payments and collections. This could extend to remittance advice and reconciliation processes.

In terms of B2C business, EBPP allows the entrance of bill aggregators to the market place. Such organisations will aggregate bills sent electronically and allow consumers to pay them as they fall due. Payment can either be by credit card or direct debit, which is preestablished. Banks will need to position themselves in this market and, given their experience of the payments businesses, are in a position to add value to the process.

Managing information flows

With the advance of e-commerce through value chains within businesses, the speed of processes and cash flows will potentially be increased with improvements in efficiency. This will place challenges upon the treasurer in terms of the need for better and faster access to data from banks via browserbased applications. Banks are developing capabilities in this area and treasurers should be able to access more information from a single internet-based window into the bank. Few banks have actually launched internet-based links to supplement their electronic banking services, but this is expected to change.

Through working with their IT partners, banks may also improve vital communication links outside treasury. This may facilitate on-line credit scoring, transaction authorisation, release/ approval of goods and credit limit monitoring.

Questions to ask your bank

As we move forward to an e-enabled business world full of opportunities that help us make quicker decisions, better manage risks and processes, and become more efficient throughout the value chain, banks are in an ideal position to add value to the metamorphosis which is required.

It is important for the treasurer to understand *now* what banks can and will be able to offer in terms of supporting the move to e-commerce. If a change of bank(s) is being contemplated, e-commerce capabilities should become a key issue alongside the more traditional yardsticks employed when selecting banking partners.

Choosing the correct banking partners may be crucial in helping a business to fully achieve its e-commerce ambitions and the associated benefits. As we have seen all too often in the past, banks have a tendency to look for problems within businesses, and thendevelop the services to meet these problems.

Questions that should be asked of banks include:

- what is the bank's e-commerce strategy and what are its current and planned capabilities ? Will it be able to meet the needs of your business and provide solutions to the demands which lie ahead?
- has the bank allied itself to technology and other partners in the development of products and services? If so, who are they and what is their standing in the market place?;
- many banks have needed to work extensively on their older systems and employ the use of middleware to facilitate customer access to their

databases via browser based technology. How well advanced are they in this process?;

- is the bank able to provide bespoke advice and solutions, or does it just offer services that can be purchased?; and
- what advances are the bank making in terms of widening payment and collection alternatives in response to challenges posed by e-commerce?

Companies are beginning to specifically put out to tender their e-commerce support and development needs. Traditionally, such work would have gone to a large consultancy and/or IT company. To protect their market place and generate new revenue streams, banks are developing capabilities with IT partners and in some cases offering complete solutions by supplementing their own skill sets with aggregated capabilities from external e-commerce suppliers. Banks can add value and should increasingly be considered as capable of meeting some or all of a business's ecommerce needs, both inside and outside of treasury.

Don't miss the boat

The banks which fail in the development of e-commerce solutions and on-line access to their databases and services will potentially be left behind. We suggest that a treasury function's core banking partners should be at or near the forefront of e-commerce, and be able to offer solutions to needs which may already exist.

If a change of bank is to be made, e-commerce capabilities have now become a key issue in the selection process. Even if there are no plans to change bank, treasurers should still find out what their banks are doing in the area of e-commerce and web technology solutions.

The e-commerce revolution ought to see treasurers playing a key role in fundamental changes within their businesses. As the critical link to the banking relationship(s), treasurers have a key role in overseeing not only the search for banking services to compliment re-engineered procedures, but also the opportunity for banks to add value to the changes being made to processes.

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