

The Adoption of Web Based Cash Management Systems Technology

- Banks and corporates are moving from corporate Internet banking solutions to web-based cash management systems.
- Web-based cash management systems allow banks to offer a wider range of products and more integrated solutions to their customers.
- For banks to do this successfully, enabling an integrated view of the client relationship is key.
- Standards-based technology and open architectures are enabling banks to address the challenges and provide flexibility.

The Internet and web technologies have already left their indelible mark on the way the world functions. The rise of the Internet towards the end of the 1990s, followed by the dot-com boom and eventually the dot-com bust, was not surprising. After all, in those heady days, strategies were disregarded, business plans were thrown out of the window and the need for business models were redundant. It was tempting to dismiss the Internet as an idea whose time had not come. Fortunately, common sense prevailed. Introspection resulted in one deafening conclusion – we need the Internet. However, we also need business plans, business models and a good understanding of how we can leverage the power of the Internet. Retail customers quickly accepted Internet banking. It was no surprise that it was only a matter of time before banks and their corporate customers began jointly exploring the mutual benefits that could possibly accrue to them by leveraging the Internet.

Evolution of web-based cash management Systems

The central role that financial institutions play in the activities of their corporate customers has never been disputed. From the traditional role of being financiers, to holding cash and investments, to handling payments and settlements, banks today are closely linked with the activities of their corporate clients. While it may be argued that the role of banks as lenders is becoming somewhat diluted, there is no questioning the increasingly important role that they play in managing cash and handling payments. Businesses and treasurers in large corporates like to have control over their cash operations. With businesses being globalised and corporate clients increasingly feeling the need to manage operations efficiently, clients are

placing a much greater emphasis on the need to have access to “anytime” and “anywhere” information. It is not surprising, therefore, that banks and their corporate clients have quickly realised the role that the Internet can play in this regard. Over the years, we have seen a strong shift, in some parts of the world at least, from text-based systems to computer-based solutions and finally to the present situation, namely, web-based cash management systems.

Many of us may be surprised that the rate of growth in the small business segment is higher than that in the large corporate segment. This is not really surprising and there is more than one reason for this – the fast increasing opportunities for small businesses through the globalisation of corporate and business banking, the rapid integration between cash management and trade services, and high-end technology no longer being the exclusive domain of large clients.

What are the benefits from a customer’s point of view?

As the demand to move from a thick-client to a thin-client system increased among corporate clients, and the advantages of doing so were somewhat obvious, no corporate or small business wanted to lose functionality in the bargain. Therefore, it was natural to expect that customers would want to have and retain every bit of functionality around the traditional services of collections, payments and reporting.

The main features typically offered through webbased cash management can be classified into: payment management, liquidity management, electronic collections and information reporting. Other features such as single sign-on and billing engine complete the offering. Interfaces with various payment systems (e.g. local automated clearing house interface, Fedwire and CHIPS in the US, BACS in the UK and Target in Europe), different services associated with fund transfers (stop payments, cheque imaging, positive and reverse positive pay, retail and corporate lockbox facility, etc.) are all considered passé today by corporate clients. Increasingly, customers are demanding cross-border settlements and integration with mainline treasury functions.

Large multinational corporates need multilocal collaborative environments, given

the global nature of their operations. This is especially true for companies with regional treasury centres or the ones operating out of shared service centres, where transactions are initiated in one location and exception approvals are done elsewhere. By web-enabling their cash management service, banks are able to offer them operational flexibility. An obvious advantage that corporate customers want to derive in their adoption of Internet-based systems is the efficient management of funds and risk management. Corporate treasurers are highly conscious of carrying idle cash and want to do everything possible to make judicious use of the funds available. This necessitates the integration between the cash management system deployed within the organisation, and the general ledger, accounts receivables and accounts payables systems within the company. The more seamless the integration between these systems, the more timely and accurate will be the reporting function effective cash management requires integration and availability of information, not just from sources within the organisation but from external sources too. It also demonstrates that cash management today assumes a highly strategic dimension for customers.

What are the benefits from a bank's point of view?

Just as in the case of corporate clients, banks also want to move to web-based solutions but not at the expense of functionality. Large corporates usually concentrate their business with two banks and use a third alternate bank for specialty products. Creating customer "stickiness" through "one-stop-shop" features, such as providing consolidated information, can be very rewarding for banks.

As banks become more familiar with technological advances, they too have become more demanding of their vendors. The crux lies in leveraging technology without compromising on the functionality available. The requirement is to make available tools and services that make the task of the user much easier. There are several new technology features that are demanded by the banks from a web-based cash management systems vendor:

- Single sign-on – integrated information reporting from various back-end systems such as treasury, cash management, commercial loans, trade finance, etc;
- Segmentation of customers – traditionally in the retail area, but now increasingly being used to understand and cater to the needs of the corporate and business banking segments;
- Integration with multiple channels of delivery, as we move into an era of possibly making all functions available to customers across all touch-points; and
- Real-time reporting and others.

The drivers for the adoption of web-based systems may slightly differ between banks and its corporate customers. However, both banks and their corporate and business clients see sufficient value in web-based systems to adopt them.

Banks, to a certain extent, achieved the above benefits by moving their systems from PC banking thick-client solutions to web-based business e-banking solutions. However, what is prompting banks to differentiate by upgrading their solutions into a fully fledged web-based cash management offering? Let's dig a little deeper.

Banks everywhere have been criticised for only seeing a part of the large client relationship picture. Banks are aware of the "total relationship" approach, however they are saddled with antique back offices, complicated by myriad ad hoc surround systems, and they found themselves tied up in a situation where flexibility was hard to come by. Relatively new and flexible business e-banking solutions and advancement in technology offered the hope of integrating silos and the base for extending fully fledged cash management through the web.

Additionally, the changing dynamics of the end-customers' increasing awareness of cost means the margin for error is slowly reducing. Today, it is common for a correspondent bank to levy an "STP-fee" for non-compliance of straight-through processing (STP) standards. Margin and price compression are increasing. The pressure needs to be warded off and web-based cash management is helping the banks to ensure STP compliance at source. This is because web-based cash management engines are ensuring that the

payment and collection data entered by the corporate are STP-ready. Also, it is easier to pass on the charges for a mistake committed by the corporate than an error committed by a bank staff member.

A fully fledged offering in the form of web-based cash management also helps banks to increase fee-based income through value-added offerings and segment customers, through adjustment of the offering base. On the cost side, automatic entry and STP reduce cost. Centralised handling and consolidations help the banks to scale up without significantly increasing headcount.

Technology is the Enabler

Thankfully, the available technology is allowing banks to take giant steps in devising and implementing new business models. The standards-based technology and open architectures are allowing banks to address the challenges and provide more flexibility. So instead of a “rip-and-replace” policy, new standards-based technology is enabling a less painful and smooth transition to a more efficient processing architecture.

Web-based cash management, the direct channel for customers to request payments and collection processing, forced the banks to decouple the back-end payment systems from their operational systems and use web services to connect to the central payment hub. Quickly, banks realised that these web services, designed initially for their cash management system, can be used for multiple operational front-end systems such as customer relationship and branch banking.

Standards have and are emerging at all levels. At the user-interface layer, the standard is thin-client, browser-based interfaces. The adoption of the Internet has made the browser not only the interface for web-based applications, but also for bank back-office applications. At the communication layer, the de facto protocol is Internet protocol (IP). The switch from systems network architecture (SNA) to IP by SWIFT is testimony to this change. At the integration layer, web services are fast gaining ground. While today, the integration-layer space is still in a state of flux, on the development standards front, J2EE3 and .Net4 have emerged as standards. Similarly, standard middlewares have defined the ways of connecting and routing messages, thereby making life easier for banks.

Standards-based open architectures help seamlessly integrate, eliminate duplication and achieve higher STP rates. Component-based architecture allows using multiple sub-systems such as “workflow manager”, “routing rules”, “rule-based repair” and “fraud-detection systems” in an integrated manner. Figure 5 shows how multiple inter-operable sub-systems can work together to achieve STP.

Innovation is Key

A large oil company in Asia uses the web-based cash management framework to effectively manage the logistics of its finished goods. A closed-user group is defined within the oil company and dealers in the web-based cash management system. The corporate’s enterprise resource planning (ERP) system pushes invoices into the system. When a new invoice arrives, an e-mail and an SMS (short messaging service) alert is sent to the dealer. The dealer logs into the system, views and accepts the invoice and performs a payment. When the payment is received, the system pushes the payment details back into the ERP system. The payment triggers the printing of a delivery instruction at the nearest warehouse and the consignment is delivered to the dealer location. This example shows the true potential of a web-based cash management system and the value it can deliver. Banks, therefore, are able to integrate seamlessly the customer’s back office and provide tremendous value. It is easy to imagine that a corporate will be more than willing to pass on a part of the benefits or cost savings achieved, in the form of paying the bank fees.

Integration of the back offices within a bank premises also holds promise of large savings and will require innovative application of the web-based cash management system capabilities. Trends show that elimination of silos not only help banks to create customer stickiness, but also reduce the cost of operations substantially. For example, web-based cash management can help a bank to process payments seamlessly for its corporate customers through centralised handling and distributed payment processing. Banks can take advantage of the capabilities of web-based cash management systems to generate multiple files based on destination countries. Subsequently, they can use either local offices or partner banks to go through the local payment system. This would ensure substantial savings on time and cost. Those banks that manage to implement this successfully through distribution processing will be

one step ahead and will likely become payment processors to other banks.

Asia is Taking Large Strides

Fully fledged web-based cash management offerings are a reality in several countries in Asia. In Saudi Arabia for example, many banks have taken the first steps to offer cash management services through the Internet. The web was the natural choice for Saudi banks as the use of paper instruments is rare, and the central bank has established a robust and advanced payment gateway solution. Banks offer payment services including transfers, direct debits, bill settlement, account aggregation and liquidity management.

The Finacle web-based cash management solution from Infosys Technologies has been deployed to offer these services in several banks including the National Commercial Bank, Banque Saudi Fransi, the Arab National Bank and the Saudi Hollandi Bank. Some of these banks have operations across several countries, specifically in the Gulf, and it is expected that soon, cross-country liquidity management services will also be offered through the Internet.

Direct integration with the corporate ERP systems helps a bank to manage large volumes of corporate payments. Many banks have adopted standards-based technology solutions and are ready to reuse the set-up for multiple applications. In India, ICICI bank has enabled direct interaction with the ERP systems of large corporate clients through Finacle.

Conclusion

The Asia-Pacific region is fast emerging as one of the global nerve-centres in the financial services marketplace. A large number of leading companies from different industries are investing heavily in this region. It stands to reason that banks will not be left behind in ensuring that they work closely with their corporate and business banking customers. Experts foresee heavy technology adoption by banks and corporate customers alike in countries such as China, India, the Philippines and South Korea, to name just a few. Precisely for the reasons that have been highlighted in the article, it is widely expected that web-based cash management systems will be making their mark?

References

- "Web Cash Management Systems – a Survey of the Vendors", TowerGroup, November 2003.
- Thick-client system is a software component deployed at the end-user's terminal. It restricts a user to a specific terminal, while distribution of updates is expensive. A thin-client system (or the browser) does not have these problems.
- J2EE (Java 2 Platform, Enterprise Edition) defines the standard for developing component-based multi-tier enterprise applications.
- Microsoft®.NET, software based on web services for connecting information, systems and devices.

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