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# **Hyper-Management of Working Capital:** Technology supports the work of corporate treasury

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## Abstract

Multinational corporations manage assets and cash across time zones, currencies, exchange rates and banking relationships. In a climate of unprecedented business contraction, corporate treasurers must now, more than ever, accurately understand point-in-time cash position. In order to have a minute-by-minute understanding of costs, obligations and the institutional flow of funds that will facilitate decision making and swift action, corporate treasurers are shifting to 'hyper-management' of capital. In times of growth and surplus, corporations could accept delays in information and asset transfer due to staggered times for the open or close of business in different markets and the time required to aggregate data manually. However, in this era of micro-margins and volatile market swings, such delays only serve to introduce or increase risk. Corporate treasurers must rethink the processes, technologies and partners they have relied upon historically. Treasurers now need to add web-based tools, dashboards and globally-integrated data management in order to facilitate cash forecasting, manage bank relationships, make sound investment decisions and leverage credit, with the accuracy, flexibility and security that their companies demand.

## Introduction

The corporate treasurer's first priority has always been to ensure that the corporation has the liquidity to meet seamlessly its purchase obligations, facilitate cash flow and make investment decisions. In an increasingly global market and electronic transaction environment, this means managing assets and cash across time zones, currencies, exchange rates and banking relationships. The complexities of managing corporate treasuries are now compounded by the difficulties in the global financial markets, including restricted access to credit, disruptions in the supply chain and the potential insolvency of banks.

With the change in interest rates and the flow of funds, the decline in spending and collapse of securities markets, many corporations have had to switch gears from managing surplus to managing debt. In order to preserve capital, safeguard investments and reduce expenses, corporate treasurers must be more nimble. It is time for corporate treasurers to rethink the processes and technologies used to facilitate cash forecasting, manage bank relationships, make sound investment decisions and leverage credit.

## A LARGE CORPORATION'S VIEW OF THE TREASURY FUNCTION

Serving 16,000 financial industry businesses in the USA, Canada, Europe, Latin America, the Caribbean, and the Asia-Pacific region, Fiserv is a leading provider of internet banking, bill presentment, account processing, risk and fraud protection, loan processing, item processing, ATM and credit processing, as well as remote and consumer capture technology solutions and services.

In 2008, Fiserv revenue totalled US\$4.74bn, earning it the 438th position in the Fortune 500. Like other large multinational corporations, its distributed client base, trading partners and workforce necessitate managing account and credit relationships with a multitude of financial institutions.

Within Fiserv, free cash flow is viewed as one of the most critical operating measures of business strength. It takes intensive day-to-day, minute-by-minute management of capital to oversee the institutional flow of funds. Primarily a provider to financial institutions, Fiserv does not supply a corporate treasury solution. As such, it had to look externally to create a solution set to facilitate the 'hyper-management' of working capital.

### CAPITAL PRESERVATION MODE

Since the current economic contraction was precipitated by the rapid market expansion of 2001-07, it is no wonder that the fall seems so abrupt. This is not familiar territory — everything is in flux. The landscape of regulatory requirements, reporting, trading partner health, bank solvency and ownership, and the approach to managing capital are undergoing a turbulent evolution. The economic outlook is changing every day and sometimes several times a day.

Corporations are now focused on survival and are increasingly concerned about preservation and protection of capital — a complete reversal from the recent practices of using cash to expand and invest. There is also a mass deleveraging process underway as companies are diverting cash flow into servicing debt.

This crisis has demonstrated that the conventional wisdom about safe investing is now folly. It is now clear that the lack of transparency in the quality of securities caused the collapse of the financial markets. This crisis has permeated virtually every investment vehicle. Even the most conservative forms of investment have become unpredictable since money market returns 'broke the buck'

and the rate for a four-week treasury bill fell to -0.01 per cent late last year. The market still continues its struggle to restore more predictable rates of return.

With such a curtailed return on investment, corporate treasurers must be vigilant in their pursuit of quality investment instruments that provide even a minimal interest advantage. This requires having real-time information to stay abreast of rapidly-changing interest rates while the market remains so volatile.

## CORPORATE TREASURERS MUST HAVE POINT-IN-TIME UNDERSTANDING OF CASH POSITION

In the not-too-distant past, the smallest interval of time used to assess cash position was one day. Depending upon the location of operating centres, subsidiaries and markets, balances could be older than a day due to transmission and overnight batch cycle delays. As this information was supplied by several banking institutions and multiple systems, corporate treasurers had to aggregate the information manually to derive an idea of the corporation's cash position.

It is outdated for multinational corporations to accept delays in information and asset transfer due to batch technology and the staggered open and close of markets in different time zones. In this era of micro-margins and volatile market swings, such delays only serve to introduce or increase risk. It is a 24/7 world of commerce, so financial activities, regardless of different banks, bank accounts, transaction types, technology platforms, currencies, exchange rates and longitude must be choreographed to flow in real time.

To manage funds better, corporate treasurers must have instant access to integrated global information, including point-in-time access to all bank balances, outstanding debt and customer activity. This information must provide a thorough understanding of not only corporate cash flow and reserves, but also the cash flow and reserves of all subsidiaries. Being aware of maturing investments, anticipated payments, obligations due and scheduled disbursements for all operating centres and subsidiaries around the globe, enables corporations best to ensure that their capital is not only working to its greatest advantage but also providing the data required to forecast their cash position accurately.

Having centralised knowledge of funds that are expected versus funds that are committed helps prevent money from idling or incurring fees due to unnecessary credit

draws or other transactions. With a clear picture of the ebb and flow of liquidity needs, corporate treasurers can put surplus funds to work via short-term, long-term and/or overnight cash-sweep opportunities that offer the most advantageous exchange and interest rates. Having an up-to-the-minute understanding of global obligations in terms of due dates, fees and interest rates simplifies repayment of loans and credit lines and enhances the corporate balance sheet.

## THE FISERV APPROACH: MANAGE FROM THE MIDDLE OF THE VALUE CHAIN WITH REAL-TIME DATA

As Fiserv sees it, in the chain of capital allocation the corporation sits in the middle. This means that having a true point-in-time understanding of cash position requires visibility into financial transactions both upstream and downstream. In this age of fluctuating markets, transactions must be synchronised in real time to maintain uninterrupted cash flow.

As a global leader in financial industry technology and processing, Fiserv provides fiduciary services for payments processing, debit card transactions, electronic bill presentment, and automotive finance collections and settlement for its financial institution clients. This results in the management of transaction volumes that go well beyond those of most other corporations. For example, in 2008, Fiserv processed 1.3 billion online bill payment transactions and 6 billion ATM and debit transactions. Last year, the total of subscriber funds Fiserv managed on behalf of its clients on a daily basis was approximately \$1.1bn.

These relationships, combined with Fiserv's own corporate finance requirements, result in the ongoing management of more than 300 bank relationships in 10 countries. To add further complexity, as a member of the financial services supply chain, Fiserv is subject to some of the same regulatory requirements as banks and contractually obliged to provide intra-day reporting at 11 am, 2 pm and 5 pm. As such, real-time technology is critically important for managing compliance.

Typically, treasury workstation charges are priced by bank. Therefore, the need to access data from hundreds of banks is a costly proposition. In addition to the vendor costs involved, it is time-intensive to have treasury associates visit hundreds of bank websites, run the online reports and then key in the data for aggregation purposes. Automating the process reduces the need to have dedicated employees to access bank account data,

eliminates manual intervention and enhances decision-making capabilities.

A treasury workstation can certainly be used to push out data feeds on a schedule of 10 am, 2 pm and 4 pm to facilitate reporting compliance turnaround within an hour. But, from a risk perspective, that hour between the arrival of bank data and the outgoing report time is only sufficient to handle potential problems when dealing with a more manageable number of banks. If there is a widespread issue that involves many banks, response time becomes critical. Aggregating data in enough time invites a host of other issues. Due to time pressures and number of bank relationships, the use of treasury services and treasury workstation alone could not solve Fiserv's need to gather data in real time, let alone present the information graphically and in a cost or time-efficient manner. Fiserv therefore sought to create an enterprise-wide view of bank balances, investments, payments, controlled disbursements, covenant compliance and debt service.

To provide real-time access to data and accelerate decision making, Fiserv chose to leverage an automated, web-based data gathering and aggregation tool and a highly-customisable dashboard. The technology will be fully integrated with its general ledger, enterprise resource planning systems, the web and alternate systems. This integration will give the ability to upload accounts payable and accounts receivable transaction data into the general ledger. It will also enable Fiserv to funnel roll forward information into the dashboard tool to provide a more comprehensive view of its cash position. This view will help identify funds for investment and prevent revenue lost due to idle cash.

## USING ROBOTS TO GATHER FINANCIAL DATA

As a world-class provider of web-enabled technology platforms, Fiserv has experience developing open and extensible solutions to overcome the barriers imposed by proprietary systems. Therefore, instead of relying on existing treasury management systems and treasury workstation, Fiserv sought out a web-based solution to facilitate its financial data gathering and integrated that solution with a data aggregation and presentation tool.

To streamline access to bank account data, Fiserv is using Kapow Technologies' Enterprise Web Data Server. Banks that supply customer access to account data via secure websites must program those websites in similar ways using a similar programming language. The Kapow solution enables Fiserv to gain transparency into data

efficiently, despite the intricacies of accessing cross-border balances and transactions.

Robots within the Kapow platform are configured to function as virtual extensions of the Fiserv corporate treasury staff by using process automation to accurately replicate the steps that it takes for an associate to access corporate bank account data. The robots are created using Kapow's visual programming tool, which involves accessing each bank's URL, signing on, and authenticating. Fiserv provides the robots with a unique sign-on and view-only security permissions to access transaction data, including balances, interest rates, maturity dates, due dates, pending and processed transactions and exceptions. The robots do not initiate any transactions; they are only used to return information to Fiserv for aggregation, analysis and action.

The Kapow robots automatically run at scheduled intervals in order to return the data required for compliance reporting. Runtime takes between 20 and 30 minutes. Not only does the speed of data-gathering reduce risk by providing extra time to correct errors or exceptions, but Fiserv is also able to have the robots access the data on demand at any time. In addition, should the robots find an anomaly or barrier to gathering the prescribed data, an alert is immediately sent so that the data access problem can be corrected. If, for example, the bank has changed some aspect of its website, a Fiserv staff member just needs to walk the Kapow robot through its steps on the updated webpages to recreate the automatic gathering of data. This provides the real-time feedback Fiserv requires to manage access to hundreds of bank accounts and to make effective decisions.

## AUTOMATION SIMPLIFIES DATA AGGREGATION, PRESENTATION AND ACTION

Once gathered, the bank account data are passed in real time to a management dashboard. Fiserv uses the Domo executive management platform. The technology customises and brings together the account information gathered by the Kapow robots with data from Fiserv internal systems and data repositories in order to create meaningful business intelligence. Its dashboard enables Fiserv corporate treasury associates to track key performance indicators (KPIs), including debt balances and maturities; interest expense; investment balances and yields; current account balances and cash flow across the company; and net settlements. Use of this aggregation and presentation tool in tandem with Kapow technology reduces the need for Fiserv associates to track and manipulate financial data using spreadsheets. This

has reduced Fiserv staffing requirements by two full-time equivalents.

Domo is able to provide alerts and updates when a KPI moves either into or out of a predefined range. Alerts can be sent to e-mail accounts and mobile devices to facilitate anytime, anywhere access to critical information.

Fiserv is able to set up the alerts to cascade. If an alert remains unanswered beyond a specified period of time, the alert is sent again to the original recipient as well as to backup contacts. This process continues until the issue is resolved. Most often, Fiserv receives an alert if an expected transaction does not clear and/or an account goes out of balance. For example, if a shortfall results when an anticipated wire transaction is inadvertently sent as an automated clearing house (ACH), an e-mail alert is sent to the specified contacts. The alerts can be viewed either on a personal computer or handheld device. The designated person is then able to log securely into the application to resolve the problem anytime and anywhere they have access to a browser. Fiserv has treasury personnel in two US time zones, supplying around-the-clock coverage to address any alerts.

## ELIMINATING IDLE CASH AND UNNECESSARY DRAWS

Fiserv has more than 60 business units with unique checking account and lock-box relationships. The 'hyper-management' of working capital within all of those subsidiaries requires having accurate knowledge of collections, balances and payments to forecast end-of-day cash position. As the cutoff to sweep cash into investments is midday and net settlements happen later in the day, real-time data access, aggregation and alerts provide Fiserv with the information it requires to make investments with confidence. Using the robots in tandem with dashboard reporting has enabled Fiserv to consolidate funds for investment, which generates more revenue/income and reduces the number of draws from its credit facility and related costs.

Use of robots in tandem with dashboard technology provides timely and succinct information without the need for manual intervention. The result is that the Fiserv corporate treasury staff can focus on making decisions that facilitate and maximise the real-time use of capital. Using these best-in-class tools enables Fiserv to eliminate the delays and potential for errors inherent in manual spreadsheet data aggregation. In addition, while treasury staff members are reviewing information presented on the Domo executive management platform, they can drill down into a data

element, sort by characteristics or drill across to another application to make the data actionable.

While the need for domestic compliance reporting was a driving force behind the creation of Fiserv's custom treasury management solution, there are additional opportunities for its use. As Fiserv expands penetration into international markets, the tools will be invaluable for providing visibility into not only local balances, but also transaction-level data for banks in all countries. In addition, beyond the treasury function, other parts of the Fiserv operation are investigating the use of the technology to facilitate data gathering, aggregation and dashboard reporting.

## CONCLUSION

The treasury function has never been more critical to the success of a corporation. As institutional stewards, corporate treasurers must put assets to their best possible use. This includes the time and talent of the treasury staff. Instead of relegating personnel to hunt for data, it

is time to leverage their abilities to find the best use of corporate funds. Using web-based tools to gather data for all bank balances, control disbursements, payments, investments and loan relationships simultaneously, eliminates the time it takes to obtain manually the data via bank services, treasury workstations or visiting bank websites. Instead of requiring staff to aggregate the data into spreadsheets manually, the rollup of information can be automated using dashboard technology. Using old methods to manage corporate assets is time-consuming and less than ideal. Instead, acute awareness of opportunity and operational threat is required to navigate these times of low reward and manage the risk associated with investments and third parties. By replacing manual processes with automated ones, treasurers can focus their efforts on reducing fees, consolidating cash balances, eliminating debt and generating income. It is this combination of process automation, real-time business intelligence and expert analysis that enables the 'hyper-management' of corporate capital.

