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## Strategies for risk and compliance transformation

By Virginia Garcia, Senior Analyst, Financial Services Strategies and IT Investments, TowerGroup

### *Enterprise shifts around risk and compliance: transformation of financial services processes*

A deluge of holistic regulatory mandates, including the USA PATRIOT Act, the new Basel Capital Accord II (Basel II), and the Sarbanes-Oxley Act of 2002, has reinforced the profile of compliance both internally with financial services executives and externally with regulators, shareholders, auditors, customers and solution providers. In addition, a flurry of new accounting standards introduced by the Financial Accounting Standards Board (FASB) and other accounting bodies in Europe and the rest of the world are triggering major headaches to financial services firms' financial control and IT departments.

***TowerGroup estimates that up to 30% of IT spending associated with compliance in the financial services industry consists of wasteful duplication of effort.***

What makes these regulatory mandates so complex is not just the necessary technology investment that must logically occur, but also that they demand a transformation of the risk and compliance culture. The holistic requirements of these new regulations demand involvement across many different business lines and product dimensions, which most firms aren't organizationally or culturally able to accommodate. Historically, firms have dealt with assorted compliance requirements in individual business silos. Each new regulatory mandate forces institutions to modify their technology systems in some form or fashion and assign a taskforce to deal with the issue at hand. Activities in the business silos are not transparent at the enterprise level. If compliance mandates cut across traditional business silos, redundant IT investments and administrative duplication rapidly ensue.

Financial institutions end up spending fortunes in updating their systems again and again, and investing in new technologies that remain buried within the business lines – with non-compliance related business purposes left unexplored. TowerGroup estimates that up to 30% of IT spending associated with compliance in the financial services industry consists of wasteful duplication of effort. This equates a whopping \$10 billion globally per annum in IT waste alone! And this number does not include the much

larger dollar amount affixed to non value added administrative functions that currently form the linchpin of most firms' compliance efforts.

As financial institutions have to cope with the inefficiencies of legacy systems, business operations surrounding these compliance functions may also incur duplicative work. These manual operations involve exception processing, workarounds, reconcilements and adjustments – all of which add up a large amount of unnecessary cost. TowerGroup estimates that up to 60% of the \$10 billion in IT waste is attributable to business processes that are encumbered by inefficient legacy IT assets. The multiplier effect states that for every dollar saved in legacy transformation, there are up to \$7 in business process savings that financial institutions can reasonably hope to achieve. It follows then that process inefficiencies in the compliance process augment the operational cost of pure IT waste by up to four times the operational cost to reach around \$40 billion annually. Operational cost in duplicative overhead and inefficiencies contribute substantially to lackluster efficiency ratios in the financial services industry.

***If ever there were a reason for savvy financial services executives to build a business case for the transformation of compliance processes, around \$40 billion in wasteful expenditures is a good start.***

Instead of viewing this number as room for potential cost savings, financial institutions should redirect this money toward strategically transforming the combining risk and compliance functions and processes, so they cut across all business and product silos, as well as functional disciplines, including IT. This is no easy feat for most firms, particularly large ones. Much like aircraft carriers, financial institutions will have to invest time and effort to turn around and move in a different direction. A critical business purpose is needed to fuel this enterprise shift.

If ever there were a reason for savvy financial services executives to build a business case for the transformation of compliance processes, around \$40 billion in wasteful expenditures is a good start. Furthermore, inefficient and inconsistent processes are also prone to invite errors and are open to fraud, which may eventually contribute to operational losses that total \$50 billion annually in the global financial services industry.

New operational risk requirements of Basel II and Sarbanes-Oxley require firms prescribe directives to cut down on these losses – underscoring the need to merge the functions of compliance and risk management at the enterprise level.

### **Information is the common link between compliance and risk management**

Top-down compliance initiatives, regardless of where they impact the organization, usually entail doing something with different types of information. FSIs are required to protect, store, consolidate, analyze, compare, report, access and cleanse transactional, customer, and/or financial information. In many organizations, the data needed to comply with even a single regulatory mandate resides in disparate data sources scattered across many business lines, geographic locations, third-party providers and technology standards. Ad hoc cobbling together of different views of enterprise information is a burdensome and costly task indeed.

Bottom-up enterprise risk management, especially for operational risk, requires consolidating granular, reliable data or information from disparate products and technology systems across business lines in a more comprehensive and methodical manner. Information is analyzed successively through rules engines, models and quantitative risk analytics. Enterprise risk management remains an elusive business objective in many firms, in large part due to the lack of data integration and data standards – the nemesis of every financial institution. Yet accurate and timely data is the very foundation upon which solid business strategies are built, customers are retained, risk is mitigated, and compliance is achieved. Without accurate and timely data, FSIs are ill equipped to combat the business challenges that they face.

***Bottom-up enterprise risk management, especially for operational risk, requires consolidating granular, reliable data or information from disparate products and technology systems across business lines in a more comprehensive and methodical manner.***

The problem is not the fact that FSIs don't have the information that is required for compliance. Quite the contrary, FSIs have loads of information. The problem is that they don't have the technologies or automated business processes in place to pull the required information together, cleanse it of inconsistencies and report it to whomever is asking for it. Often, firms may not have the wherewithal to do so either, with most business silos unwilling to join in enterprise-wide projects, or unable to do so due to serious resource constraints after a lengthy IT budget freeze. Due to the mandatory nature of compliance work, few FSI silos care about deploying their "must do" resources smartly.

Compounded by lingering budget pressures, stubborn allegiance to antiquated core systems has fostered the attitude, "If it ain't broke, don't fix it." This leaves compliance and risk management departments with workflow paths riddled with defects for valuable and vital data to seep through the cracks.

Much needed change must come from the very top. The cornerstone of the enterprise transformation opportunity is the ability of the CIO and executive leadership to pull together the organizational silos to operate in a new enterprise dimension. Risk management is a core competency of the financial services industry that cuts across traditional business silos, financial products and services, as well as departmental controls and processes.

This horizontal reach enables firms to combine the immediate tactical results of compliance with the long-term strategic value of effective risk management that links to business improvement and competitive advantage. As institutions simplify their business operations and adopt enterprise-wide IT architectures, they can reduce the implementation burden while increasing their process robustness and operational efficiency.

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#### **Transforming the enterprise for holistic risk management and compliance**

FSIs must establish a framework by which incoming regulatory beacons can be deflected either as a tactical IT quick fix or embraced as a strategic business issue within the organization. Importantly, financial institutions should also be set up to deal with regulatory initiatives in a cumulative fashion in order to avoid making redundant IT investments, instead leveraging investments that have already been made or will be made for other compliance initiatives – or leveraging purposeful investments that have been made with other business purposes in mind.

In combining these three views under the umbrella of an enterprise risk management framework, “smart” institutions can reference a strategic roadmap when IT systems and business processes are changed to fulfill a specific business or compliance need.

This roadmap ensures that changes are made consistently and align more closely with an enterprise purpose for greater flexibility and functional value. Elements of a proposed strategic roadmap should enable FSIs to combine tactical and cumulative compliance with other value added opportunities, such as operational efficiency and customer value. They include:

- Enterprise vision that calls for better operational efficiency across all organizational disciplines
- Enterprise business process model that maps cross-functional interdependencies and highlights areas of opportunity for streamlining

- IT investment strategy that identifies what systems play a pivotal role for what business strategies
- Project portfolio management approach that establishes priorities for functional developments
- Multi-year path for strategic transformation in recognition of constancy of purpose principles

**For more information:**

[Risk management solution from IBM and Searchspace](#)

[Visit the IBM Risk Management Web site](#)

[Read the article, "Managing the many faces of risk"](#)

[Visit the TowerGroup Web site](#)

Barring any supernatural capabilities, financial services executives will have a difficult time predicting which future regulatory initiatives will emerge as relevant to their specific business lines, or as is the case in Sarbanes-Oxley, all their business lines. However, if there is one thing they can count on, it is that risk to their business is a permanent concern and that managing that risk effectively is a big part of their business. Ironically, while the financial services industry has made it a core competency to manage risk and avoid costly surprises, it continues to throw out the welcome mat to the unpredictability of regulatory change. Courageous IT and business executives are needed to orchestrate a much-needed reversal of this dichotomy to turn risk and compliance changes into valuable processes and IT features.

## Reality cheque for banks

By Takeo Irie, Banking Industry Director, Financial Services, IBM Asia Pacific

Cheques are a commodity whose usefulness is fading fast. Cost-effectively easing them into history will require a profitable culture change by many banks.

Cheque processing is surely the oldest legacy system left in the financial services sector – apart from money itself. Think about it: in 2004, millions of people and businesses worldwide are still writing billions of pieces of paper to each other, using a payments system that dates back in its “modern” form to the mid-18th century. The system is slow, expensive, cumbersome, open to fraud, wasteful of valuable bank resources – and it is well on the way to extinction. The issue for banks is how to manage the decline and fall of the cheque-passing culture.

The survival of cheques in the face of swift, secure electronic payments systems has been astonishing. Simple inertia explains much of their resilience. Any system of payment that has been around for hundreds of years is bound to be deep-rooted in business and private practice. A cheque stub provides comforting evidence of payment, which many people and companies prefer over cash, especially when easy electronic exchange is not possible.

***In 2000, electronic payments worldwide finally surpassed paper payments: 88.2 billion v. 83 billion.***

The love of cheques has been mutual. Banks have enjoyed the revenue from their customers’ cheque passing (about \$23 billion in the US in 2001). Personal cheque accounts have been a valuable loyalty tool for decades, conveniently offering a safe, non-cash payments method while bearing a bank’s brand name straight into the hands of every payee.

But the cheque culture has been wasting away before our eyes. In 2000, electronic payments worldwide finally surpassed paper payments (88.2 billion v. 83 billion), according to estimates by the Bank for International Settlement and TowerGroup. In market after market, cheque issuing has peaked and entered a steep and terminal decline.

In the UK, the high water mark for cheques was 1990, when 3.5 billion cheques were transacted. By 2009, cheque payments are expected to fall to 1.55 billion, just 44% of the 1990 figure, according to the British Association for Payment Clearing Services. In

the United States, cheque (or check) transactions peaked in 1999-2000, with 43 billion transactions and have been declining at 3-5% each year since then. In Australia, where electronic payments systems are diverse and pervasive, the number of cheques processed has been falling annually by 10% over the past few years.

Despite the declines, however, a cheque confetti still rains down on banks each day, entering an arcane clearing system of deposit, proof, exchange between banks, settlement, transfer, dealing with dishonors/bounced checks and seven years of archiving. Worse still, as cheque volumes fall, the unit cost of processing them rises. Some estimates indicate that a 3-5% fall in cheque volumes can produce a 15-20% rise in per unit processing costs. The infrastructure for processing billions of cheques remains in place even as cheques begin to vanish like so many pools of water in a desert.

***Banks and payments systems face two stark options: either prepare to charge more and earn less from handling cheques, or find ways to truncate the complex process and simplify the handling and processing of cheques.***

That means banks and payments systems face two stark options: either prepare to charge more and earn less from handling cheques, or find ways to truncate the complex process and simplify the handling and processing of cheques.

### **Clearing the processing jungle**

Truncating the cheque processing system is one key to lowering costs. The more steps that can be cut out of the complex transfer of paper between the cheque writer and the funds receiver, the cheaper cheque processing becomes. Central to that pruning process is stopping the movement of paper as soon as possible.

The first paperwork truncation of cheques appeared in the 1700s, when bank couriers in London bearing cheques to other banks stopped off for coffee on their way. At coffee shops, they met couriers from rival banks who also had cheques for delivery. To save time and money and legwork, the couriers began meeting regularly and exchanging their paper over coffee.

The next big stage in paperwork processing has been cheque imaging, transforming cheques from bits of paper into electronic information, making that information easier to access, move and store. And that process is about to get a huge kick forward on October 28, 2004, when the US Check 21 legislation comes into force. With much hesitancy and bowing to the interests of small US regional banks, Check 21 will enforce a requirement to be able to process IRDs or image replacement documents.

The Check 21 legislation does not mandate the use of IRDs. There are too many small regional banks in the US to make every one of them purchase and use the technology. But Check 21 will lead to change and a division between those who are in the technology loop and those who are not. Those who have the technology will be able to process checks more cheaply and provide better service; the rest will steadily shrivel.

Cheque truncation will begin at the business customer's counter, with imaging, identity verification, movement and archiving starting at the point of initiation. The speed of processing will dramatically shorten and banks will be able to offer premium services to customers who need quick information about cheques at presentation or while they are moving through residual back office procedures. Vast archive storage facilities are already becoming easily accessible to those with access.

***Banks no longer issue their own currency so why should they handle cheques?***

Many banks in the US and elsewhere are positioning themselves to take advantage of the possibilities of truncated cheque processing and computing capacity.

#### **Here comes the future**

But the wider issue here is commodification. Cheques provide a perfect test case for three interrelated processes in banking:

- Revenue raising through better, faster and more intelligent service to customers
- Cost-cutting through the applied – and financially measurable – use of technology to set tasks
- The broad cultural shift to outsourcing functions that are little more than commodities.

Cheques are undoubtedly commodities, rather like money, but much more cumbersome to handle. Banks no longer issue their own currency so why should they handle cheques?

Check 21 is also likely to speed a process that has been underway among the big banks for some years: outsourcing and/or pooling of back-office commodity functions. In the US, an image-based cheque processing joint venture – Viewpointe – has brought together banks including Chase Manhattan, Bank of America and others. In Britain, Barclays, HSBC and others set up a pooled cheque processing business, iPSL, in 2000.

In Australia, three of the four main banks (Commonwealth, National Australia Bank and Westpac Banking Corporation) have a proposal before the national competition regulator to set-up a joint venture to process cheques. National Australia Bank estimates that the pooling the back office costs of processing could cut the cost to each bank by more than 30%.

As the unit price of handling a diminishing number of cheques rises, the usefulness of on demand outsourcing also becomes more blatantly obvious. If such a key bank role as residential mortgage origination applications can be effectively outsourced – such as Westpac is doing with EDS in Australia or Eurohypo is doing for the three main German banks – why not cheques? The number of cheques is declining rapidly and technological investment needed to handle them will only increase with Check 21 legislation.

(Interestingly, the only Big Four bank in Australia that is not part of the group looking to joint venture cheque processing, ANZ Banking Group, has formed an alliance with a small listed computer services provider, Kaz Group, to develop a complete electronic image processing and archiving system. Kaz and ANZ plan to sell their system to other banks, indicating their expectations about potential demand from other banks.)

Cheque processing provides a near perfect example of how banks can cut back-office costs and wasted use of personnel in order to pursue what really counts: value-added, revenue producing services to customers. Writing a cheque does not make a customer happy but being able to quickly clear it or confirm that it is valid do make customers happy. Customers do not care who or how a bank processes their cheques. What they want is service: help managing their finance, investing, and expanding.

**For more information:**

[Read the article, “The Catch-22 of Check-21”](#)

[IBM Check Processing solution](#)

[Download the white paper \(PDF\), “From the old world to the new: A smooth, sure road to Check 21”](#)

Check 21 and the whole process of truncation are important cost issues for banks. But they provide a wake-up call about what is really important for banks and shareholders; cost-cutting is important (and truncated cheques systems will cut costs), but they are only half the story. Growth is what the stockmarket wants. That will only come from slipping the legacy burdens of the past and homing in the service offerings that really count: services that add premium value for customers who are prepared to pay for it.

## Discovering the value of stored-value cards

By Sunny Banerjee, Global Banking Industry Leader, IBM Institute for Business Value

### *Restoring credit card opportunities with stored-value cards*

As profitable as the credit card business has been to retail banking over the past 40 years, customer demand, razor-thin margins and pressure for cost-efficiencies have left players in today's field with relatively few reasons to celebrate. They could use a little present right about now, and gift cards and other stored-value cards may be it.

Globally, credit card issuers are feeling the pinch of an increasingly saturated marketplace, rising customer expectations, a squeeze from the supplier side and tightening regulatory scrutiny – all of which have combined to drain profit and force narrow margins. In the 1960s, for example, when credit cards were still a comparative novelty, there were about a million residing in wallets across the United States. Today the US Market is stuffed with cards with an average of 7.8 cards per household (source: Nilson Report, Nov. 2002).

***The top 10 card issuers in the United States account for 86 percent of the market.***

Contributing to the less-than-optimal credit opportunity is this additional tidbit: The top 10 card issuers in the United States account for 86 percent of the market (source: Nilson Report, Nov. 2002). Faced with that kind of concentration, competitive strategies begin to rely heavily on customer service and product and brand differentiation.

At the same time, though, customers are getting harder and harder to please, insisting on new features and lower prices as the base cost of doing business with them. Where balance transfer offers and pretty plastic once did the trick, now low introductory rates and fee waivers are the expectation du jour, and increasingly sophisticated consumers even are beginning to require high-tech add-ons like ID theft protection and integration with cell phones.

Figure in other potential show-stoppers like greater merchant bargaining power, declining interchange fees and the cost of compliance with risk-management requirements posed by Basel II, the Patriot Act and Sarbanes-Oxley, and it becomes clear that profit margins in the highly commoditized credit card business are thinner than the cards themselves.

### **Unexpected presents**

Stored-value cards may be one way for banks to rejuvenate their card activity and offer a competitive advantage over other issuers. The baseline product itself isn't new, of course; use-it-and-lose-it telephone calling cards have been out there for a long time, and most department stores currently offer their own versions of gift cards available at a variety of different dollar levels. What is new, however, is the creative way banks may be able to incorporate stored-value cards into their card business plans to provide add-on services to individual consumers and large companies alike.

***Stored-value cards may be one way for banks to rejuvenate their card activity and offer a competitive advantage over other issuers.***

As established as the market for standard gift cards may be, there remains one pretty obvious pain point, even for die-hard customers: They have to travel to individual outlets to buy the card they want from the merchant they prefer. Wal-mart gift cards aren't available at the Big K, and a gift card to the local multiplex cinema won't buy you a CD at Circuit City. Some retailers even continue to work in an analog gift world, issuing paper coupons. All of that inconvenience goes away with stored-value cards that can be redeemed at multiple retail outlets.

The cards come in two versions: open-loop or closed-loop. An open-loop card is accepted over a wider network and its reach is limited to merchant acceptability. A closed-loop card works only at select merchant sites and usually is launched by a single company. Closed-loop cards, even though accepted only at select locations, most often enjoy a higher convenience rating from customers.

Universal gift cards can be a gift to merchants, too. Because of the tighter security advantages offered by digital processing, the risk of pilferage decreases significantly, for instance. Transaction times at points of sale also get shorter, reduced by digital readers that quickly add to or subtract from the gift card account and send the customer on his or her continued shopping sojourn.

The float on such cards is a major source of cash for merchants, and money not used by a customer ends up being fairly material when the card program is successful. The key, though, is for banks to look beyond up-front fees and increase acceptance of the product, grow its portfolio and make money from scale opportunities. Players willing to partner innovatively, deliver efficiency to users and allow merchants other perks around reporting, cash management and loyalty programs are bound to be the most successful. TowerGroup projects the market for universal gift cards will exceed \$73

billion in 2007 (source: “Pre-paid: Bankcard’s Next Growth Engine?” TowerGroup, Nov. 2003).

### **Makes a latte sense**

To engender additional customer satisfaction, the cards also could be made to link to personal checking or alternate credit card accounts, opening the possibility of store loyalty programs developed through the use of applications that track and analyze individual spending profiles. Starbucks, for example, rewards its gift card users with a free latte for reaching a certain spending level.

In fact, Starbucks’ Duetto™ card goes one step farther. It’s an example of a successfully differentiated product that combines the benefits of both a gift card and a standard credit card. It’s a Visa card and a Starbucks card all in one, providing not only additional customer service, but also an effective marketing tool. Some banks are beginning to offer their own combination cards, opening an opportunity for significant growth.

For retail and commercial banks, though, the real money is in selling stored-value products to large-enterprise businesses as tools to help reduce operational costs, and as benefits for employees. The target: flexible spending plans that are part of employee health benefits. Under current plans, employees gain a tax advantage by setting aside a certain amount of compensation at the beginning of the year to apply against the cost of health insurance and drugs. Receipts are redeemed at the end of the year against cash in the flexible spending account. There’s a catch, though. Whatever is left unused in the account gets forfeited, so employees must be fairly precise in their estimates about how much to withhold.

### **No cash required**

It’s a popular benefit, but an operational quagmire for companies burdened with the additional costs of program management. By linking them directly to funded accounts, companies could distribute their own branded stored-value cards to employees, who then would use them at pharmacies and during visits to the family doctor. Every transaction gets registered in the individual employee account – without the need for receipts or co-pays – and is tallied at the end of the year. The convenience factor for employees goes up manifold, and companies gain the potential to cut program management and transactional costs significantly. IBM’s Benny Card™ is an example

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of a successful application of a stored-value employee card. Tied to the company's benefits plan as "Your card for better benefits," it's issued in conjunction with BANKFIRST.

Banks marketing the cards provide companies with the product and the training on effective use, and take a fee for the service.

Beyond flexible spending opportunities, stored-value cards offer almost limitless ideas for banks, including:

Payroll cards for the unbanked, which can open up a large market and benefit employers by reducing the need to issue replacement checks for lost ones, decreasing average check issuance cost – a very large expense for medium and large corporations  
The reduction of fraud related to government disbursements, including Social Security and Medicare payments

Campus teen cards, travel cards as a replacement for travelers checks, and transportation cards.

Additionally, issuing banks can use stored-value cards to deepen relationships, know more about their customers and satisfy their needs. They represent an opportunity to build a large card portfolio that allows banks to target the unbanked, government agencies, corporations and SME customers – all without being exposed to unmanageable risk.

***For more information:***

[Visit the IBM Banking Operations and Processing Web site](#)

[Read the article, "Recharging the credit card business"](#)

Customers may be expected to take advantage of the cards when provided with the right incentives, such as built-in discounts at POS terminals, loyalty programs and targeted private sales events. Convenience is key, as is the ability to reload easily without the need to use additional devices.

They're just some of the many ways commercial and retail banks can package stored-value and gift cards to take the wraps off the hidden potential of credit cards.

## The changing face of proactive alerting

By Ed Kountz, Senior Analyst, Emerging Technology Solutions,  
TowerGroup

Imagine a situation in which your bank or other financial services provider is clued into your financial needs and actively reaches out with updates and suggested modifications. And that's not all – results from these interactions automatically update user preferences and targets, resulting in more precise interactions in the future, all conducted electronically and with minimal involvement of a human agent.

In today's electronic financial services market, such a scenario may still seem far-fetched. Human agents can provide that support, but the costs and effort associated with proactive human involvement make this difficult to scale beyond a firm's most profitable (usually wealthiest) clients. Even the introduction of automated dialers to enhance proactive outreach was hampered by the cost of human-agent involvement to handle every portion of every call (from consumer authentication to routine problem solving, all the way to solving of consumers' most complex inquiries).

And while the Internet has proven adept at allowing consumers to "pull" their data when and where they choose, it has not thus far been tailored to support proactive delivery of "push-based" electronic information. As a result, in most parts of financial services today, the dominant communication model remains consumer driven and passive – or "request/response." With the exception of telemarketing and the rarified realm of private banking and wealth management, the client must still go "to the firm" to get answers to most types of inquiries.

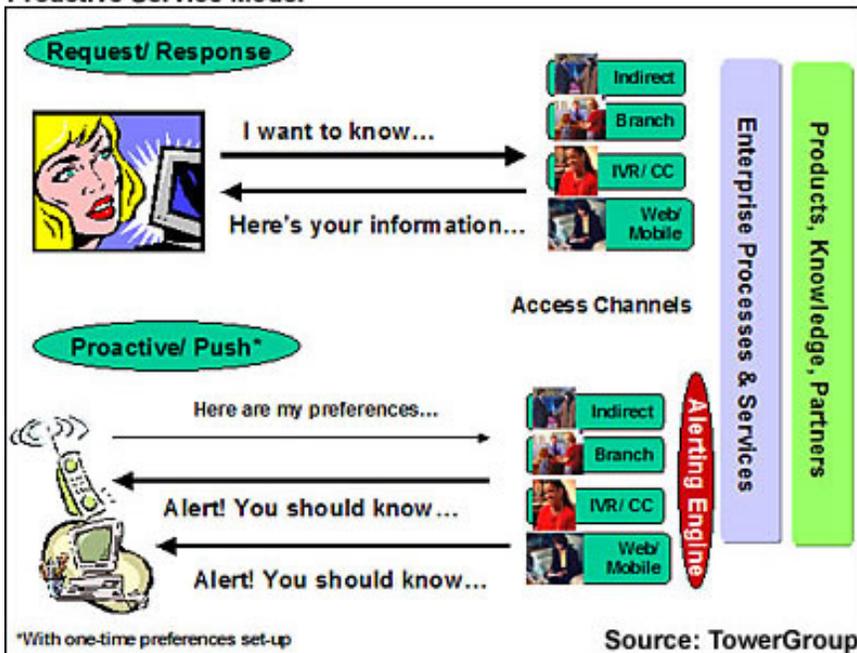
The rise of automated decisioning and alerting technologies will help change this, introducing a proactive, yet scalable, customer service model. Although alerting and decisioning technologies are still at an early stage of deployment, TowerGroup believes they will help financial service institutions (FSIs) rethink today's reactive model for customer self-service while delivering both cost and time benefits not traditionally possible in an agent-based scenario.

***The rise of automated decisioning and alerting technologies will help change this, introducing a proactive, yet scalable, customer service model.***

**The move to proactive e-customer care**

In a typical request/response environment in financial services, a customer request to an FSI's staffed or electronic operations is followed with a response, delivered via live or automated voice, e-mail, or Web page containing the desired information. The customer may be asked for additional background needed to fulfill the request. In proactive financial alerting, a customer can arrange to have automatic delivery of information and updates triggered by certain parameters that are chosen when the customer signs up for the alerting service. These parameters, which vary by alert type, form a customer profile from which alerts will be generated and the channel hierarchy will be managed for dissemination of the alerts. The alerting engine monitors series of events, automatically notifying the consumer of a relevant change. Multi-channel alerting solutions, which are designed to support delivery of alerts across multiple channels, including e-mail, automated voice, short messaging, and Web and ATM, are now becoming the norm in the financial services industry. FSIs must carefully decide whether a single-channel solution provides the breadth and customer-service results that customers will increasingly demand. (See Fig. 1)

**Fig. 1: Automated Alerting Moves FSIs from Request/Response to Proactive Service Model**



**Drivers for implementing proactive alerts**

In the early days of alerts in US financial services, most push alerts were designed for delivery via e-mail. Several factors are now coming together to replace informational e-mail alerts with actionable, multi-channel alerts. These include advances in consumer devices, especially Internet-ready personal digital assistants (PDAs) and cell phones, and wireless local-area network cards for laptop PCs. Other advances are faster and technologies, and improved voice synthesis and voice-recognition technologies that enable realistic voice interfaces for outbound voice alerts. FSIs are embracing proactive alerting to appear more responsive and flexible. These services can enhance competitive differentiation and customer satisfaction while more cost effectively and efficiently serving a greater number of customers.

Developers and users of alerting solutions are increasingly looking beyond single-channel financial notifications. The face of proactive financial notifications is now changing in the following ways.

**Hierarchical multi-channel delivery.** Newer alerting solutions emphasize delivery to multiple end-user access points, including automated voice alerts, e-mail, short message service/multimedia messaging service (SMS/MMS), and instant-messaging-based alerting. Individual users set the channel-hierarchy they prefer, which then automatically determines when and under what conditions contact is made and in what order channels are attempted. Over the next few years, TowerGroup expects a gradual but steady shift away from e-mail-based alerts in favor of those that are voice based and delivered through the automated voice and messaging capabilities of cell phones and other handheld computing devices. Already, the rise of multi-channel alerting in other industry sectors (notably, collections and card fraud prevention) is placing additional emphasis on interactive voice alerts via telephone. What's more, voice alerts in such environments are being driven by the ability to reduce costs and enhance productivity, replacing hard-to-scale agent involvement in call center operations with an automatic link to such information.

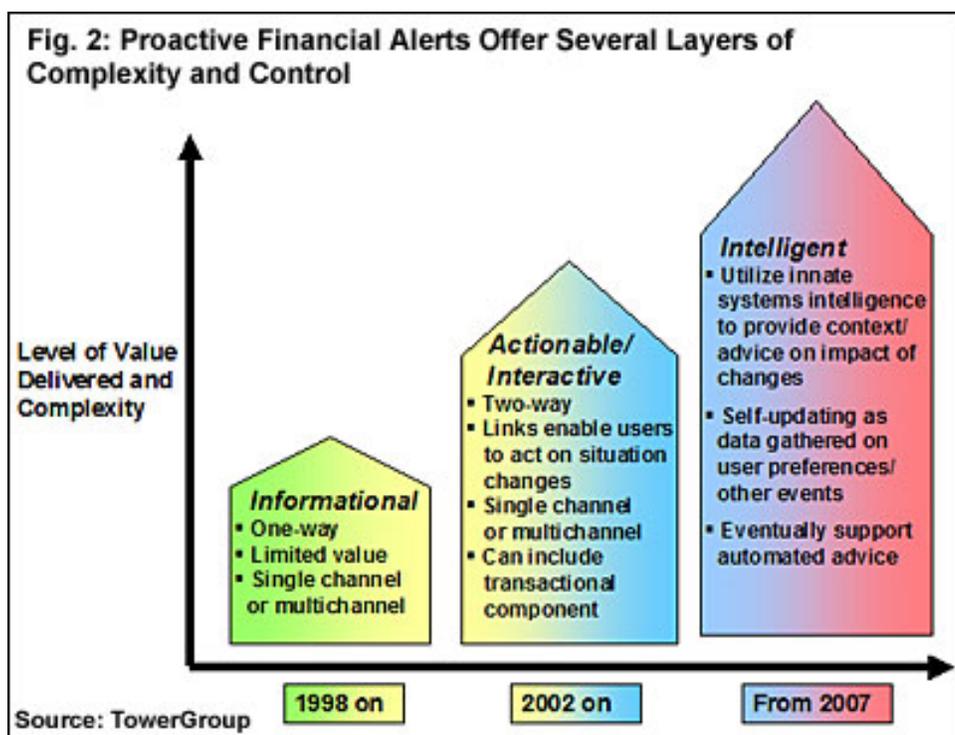
*Over the next few years, TowerGroup expects a gradual but steady shift away from e-mail-based alerts in favor of those that are voice based and delivered through the automated voice and messaging capabilities of cell phones and other handheld computing devices.*

In the US retail banking industry at present, TowerGroup estimates that some 65% of overall alerts are still delivered via e-mail, although we expect that FSI's growing rollout of voice alert services and growing consumer comfort with voice and SMS-based alerts will drive that number down to 40% in 2009.

**Actionable and interactive alerts.** Alerts increasingly add an actionable component to the information they deliver – a link that enables recipients to specify an action based on the conditions outlined by the alert. In some cases, a transactional element is added that enables merchants or FSI's to seamlessly embed a click-through link to a payment or funds transfer screen for transaction fulfillment or collections settlement. Some types of next-generation alerts are going even further, adding an interactive element that enables FSI's to conduct an active, two-way exchange of information with end users. To ensure seamless deployment and ease of use and maintenance, alerting solutions must therefore allow for easy integration with FSI's existing data warehouses and processing systems.

**Intelligent triggers.** Next-generation alerting systems will increasingly be able to parse multiple events or data fields and then recommend a plan of action rather than respond to simply one event. Rather than triggering an alert when Stock X is up 10%, intelligent

alerts will suggest lightening up on Stock X when it is up at least 5%, when earnings come in at greater than 5% under consensus, or when other industry and user conditions are met, based on the interaction between these events. User-defined preferences will serve as a trigger, and intelligence built into the system will provide the context on which suggested courses of action are based. Such alerts will serve as a precursor to a more in-depth interaction with a human agent. (See Fig. 2)



Alerting services are based on a convergence of technologies, but they are more than just a technology solution looking for a business case. They can provide tangible benefits to both the financial services institution and the ultimate end user, including reduced costs of service, reduced risks of fraud, and enhanced support capabilities within existing operations staffing and spending requirements. They can also offer competitive differentiation, providing positive return on investment (ROI) based on cost reduction compared with manual alert methods. For the financial industry as a whole, a coherent alerting strategy will provide a defensive barrier against other industries (particularly retailers and telcos), which are already offering alerts

and seeking to make inroads into prepaid payment solutions. This approach can also be used to generate additional revenue streams, through a combination of target marketing and alerting solutions designed to support users' changing financial conditions.

Leading FSIs are already deploying alerts in business environments where reduced customer-support costs and increased customer-service capabilities can be measured effectively. Given the significant cost reduction that is possible with automated proactive alerts, FSIs must seek to embrace positive short- to medium-term ROI with the deployment of these technologies. What's more, continuing advances in end-user data access devices (particularly cell phones and PDAs, but also consumers' laptop and desktop computers) mean that the multi-channel proactive alerting solutions visible

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today will be supplanted by increasingly sophisticated alerting solutions. This growing sophistication will support new ways of interacting with clients, cost-effectively improving the ability to reach out when, where, and via the channel that consumers find most convenient. In particular, future solutions will feature enhanced capabilities to monitor the consumer's lifecycle and to update alert type or content based on an on-the-fly reading of these changing conditions. Future services will also be increasingly segmented by customer demographic, with specific solutions now emerging for banking, credit card, small business, and other customer groups. FSIs must start approaching alerting technologies as the logical extension of a successful customer relationship management strategy, in which the request/response model can be extended with cost-effective, scalable automated solutions.

## Component business models for the mortgage industry

By Linda Simmons, Associate Partner, Mortgage Banking, IBM Business Consulting Services

Like their busy customers, mortgage lenders are on the move. But they're not necessarily changing their addresses. They're changing their business models – relocating from a costly and cumbersome monolithic structure to a component-based model to bring themselves into competitive trim and become more responsive to the market.

It's a move dictated by the need for going beyond simply the process improvements and cost efficiencies following the frenzied refinancing boom of 2001-2004, during which mortgage and consumer lenders very nearly had more business than they could handle. The weak spots always make themselves evident when the engine is running hardest and hottest, and the fury of the last few years left many banks with the nagging realization that customer service and market responsiveness (among other things) need more than a good tune-up.

As the dust clears, four business imperatives are beginning to emerge:

- A focus on separating out a financial service company's real competencies and looking for partners to off-load what's left
- The need to act quickly through insight-driven decisions
- The strategic necessity of stabilizing margins by moving from fixed to variable costs structures
- And the urgency of reducing operational and marketplace risks.

Oftentimes imperatives can be turned into opportunities with the right tools, and in this case information technology is the Swiss army knife of financial services. Open MISMO standards, for instance, enable a network of business partners to engage in efficient and economic collaboration. Faster decision-making can result from the integration of systems, data and processes within and across banking enterprises. Cost-effective on demand computing provides as much or as little IT capacity as is required, delivering nicely on the variable-cost imperative, while advanced self-monitoring and self-healing systems help keep the lid on risks.

***Cost-effective on demand computing provides as much or as little IT capacity as is required, delivering nicely on the variable-cost imperative, while advanced self-monitoring and self-healing systems help keep the lid on risks.***

### **From factory to finance**

The component-based business model (CBM) is one of the latest techniques for matching technology with a bank's particular needs and formulating a strategy to get the most out of it. It's a concept that other industries – manufacturing in particular – have adopted to deal with the complexity of business processes, and has only recently been adapted by the financial services sector.

A component is a group of cohesive business activities supported by similar information systems, processes, organizational structure and performance measures. Each component serves a special purpose and collaborates with other enterprise components based on common messaging standards, IT systems and service agreements. Some 60-90 components keep the average bank up and running every day.

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CBM helps to develop a clear line of sight from a bank's organizational processes to its business strategy and technological response, leading to fact-based decisions about the most effective methods for managing change. Deconstructing a bank's business operations into components – similar activities that utilize the same data – clearly depicts how it collaborates (or doesn't) across product lines, functions and geographies, and at the same time points the way to eliminating redundancies, closing gaps and improving efficiency and resilience.

### **So long to silos**

Most mortgage and consumer-lending companies generally are quite familiar with redundancies, gaps and inefficiencies because they operate based on a vertically integrated business structure in which distribution occurs either by product silo or by customer. Similar processes usually are embedded within each silo.

In that kind of environment, reducing the cost base is a constant struggle. But neither can lenders afford the duplication across product and channel silos. Making matters worse, customers generally see very little or no differentiation among banks because most are organized the same way.

Cross-selling – the mantra behind so many financial services mergers nowadays – presents its own set of challenges. With value constantly shifting to different sets of products and processes, lenders are left scratching their heads about which areas of the

business matter the most, and which organizational structures fit best with their corporate strategies.

Out of that turbulence two trends are influencing mortgage and consumer lending. One is deconstruction, which is a migration away from monolithic organizations (those that own every link in the value chain) toward more networked enterprises in which many organizations combine to deliver the final customer offering. Networked functions include the outsourcing of document management, IT infrastructure and even some back-office processing – an off-loading of work that often occurs after a bank takes a long hard look at what is (and isn't) its core competency.

Secondly, some organizations are moving from decentralized, siloed business models to 'enterprise-optimized' models, in which work is aggregated across all company segments, brands and value propositions to build competence and drive out inefficiencies. In lending, that is reflected in centralized call centers and collections and cashiering operations.

***Instead of a traditional orientation around products, the basic framework of a CBM is formed around horizontal competencies, which include distribution, manufacturing and processing.***

#### **Follow the signs to CBM**

At the point where those trends intersect, a few very responsive and resilient business models are emerging – operational blueprints that concentrate in-house activities on core components and function at the center of a network of business partners to more cost-effectively deliver customer and shareholder value. By adopting component-based business models in which the enterprise is divided into autonomous yet interdependent parts, mortgage and consumer lenders not only become more customer-oriented, but also avoid cyclical market pains associated with the industry.

Instead of a traditional orientation around products, the basic framework of a CBM is formed around horizontal competencies, which include distribution, manufacturing and processing. Distribution is tuned to targeted customer segments, resulting in the provision of a variety of products through customer-centric channels and, ultimately, greater customer loyalty and wallet share. Manufacturing is synchronized across those channels to ensure that the right customer gets the right product, and processing functions – now largely redundant in separate silos across the lending enterprise – are centralized, generating significant economies of scale.

Within those layers of horizontal competency lenders can subdivide activities into components, a building-block approach that will enable quick reconfiguration,

flexibility and rapid response to changes in the marketplace. The change engine, of course, is technology, which is now moving at a sufficient pace to support the connectivity and standards-based environment underpinning the model.

### **Making it real**

Several mortgage and consumer-lending companies have taken the lead in adopting a CBM that best reflects their overall strategic objectives, and are now beginning to gain a competitive advantage in terms of overall performance and customer experience. One leading international bank, for instance, has developed a target CBM to help identify an overall reduction of more than 20 percent in base manufacturing and operating costs. And that's just the first phase. The final goal is a whopping 45 percent reduction.

A second European bank is aiming to expand its customer base and double its shareholder value in three years. It developed a CBM to deliver high revenue and shareholder value while significantly lowering its cost-to-income ratio.

#### ***For more information:***

[Read the article, "Whistle while you workflow: How mortgage bankers could break out into a happy tune"](#)

[Read the article, "Some interest-generating thoughts for mortgage banking CEOs"](#)

Yet a third European financial services institution – a well-known retail and wholesale banking operation – has developed an operational strategy to achieve leading product manufacturing and processing capabilities. Its CBM was designed to leverage economies of scale and maximize collaboration among business units, and the goal is significant increases in revenue and an expected drop in cost-to-income ratio from 60 percent to 45 percent in three years. (To learn more about these case studies, read ["From Banks to Banking II: The Journey Begins."](#))

Mortgage lenders can reasonably expect to achieve similar gains in customer satisfaction, productivity, market responsiveness and cost reduction simply by packing up and moving... to a well-thought-out component-based business model.