Aug-Oct 05 · Vol 01 · Issue 03

CONNECTING THE BANKING WORLD



Interview Mike Grime, MD - Operations, Technology and Shared Services, ANZ

Inside



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Voice from the Desk



BPM -The Next Wave

Till a few years back, the standard mantra for organizations trying to improve their business processes was business process reengineering. However, firms have learnt over time that one-off process realignment does not work. Processes are dynamic entities that evolve continuously and require constant monitoring and enhancements, and this is only

possible through Business Process Management (BPM) tools and techniques. It is important to understand that far from being a point solution, BPM is an approach to automate complex processes spanning across multiple solutions, business units and trading partners, using supporting software tools. And, it goes without saying that in a process rich industry like banking, BPM can play an extremely critical role to help increase efficiency, reduce costs and improve staff productivity.

In this edition of FinacleConnect, we discuss the various aspects of BPM in banking, right from the very basics of what exactly does the term BPM mean, to how it can be implemented in banking along with examples of banks that have successfully implemented BPM to improve their processes. Retail banks have mostly used BPM tools to automate processes such as mortgage and loan origination, and servicing and exceptions processing. However, using BPM to streamline and improve traditional operations doesn't address the needs of banks to transform themselves into agile, customer-focused organizations. To address that transformation initiative, some banks extend the use of BPM beyond traditional transactions and processes to operations such as remote deposit automation, content management and account opening."

A bank that has successfully deployed BPM is ICICI Bank, the second largest commercial bank in India. It is using BPM solutions to streamline and accelerate core processes such as account opening for retail banking and trade finance for corporate banking. That ICICI Bank is among the forerunners in deploying BPM is not surprising. It is a technology leader. This has been aptly brought out in the case study 'Technology-led Transformation', which showcases how ICICI Bank has used technology as a strategic differentiator to propel it into a leadership position. This edition of FinacleConnect also carries an interview with Mike Grime, Managing Director of Operations, Technology and Shared Services at ANZ, where he describes key technology and e-commerce initiatives at the bank, and ongoing strategies such as business-IT alignment.

FinacleConnect aims to cover diverse aspects on technology in banking and we are delighted with the immense response received thus far. Indeed, we are pleased to have been able to send several of our readers with complimentary copies of the book reviewed in the previous issue, 'The Future of Retail Banking'. Please keep your feedback coming in.

Till next time!

Girish G. Vaidya Senior Vice President and Business Head - Finacle

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Deploying BPM in Banks



Aligning Business & Technology



ICICI Bank Technology-led Transformation

FinacleConnect is a quarterly journal on banking technology published by Infosys Technologies Limited. For more information contact: Sumit Virmani, Infosys Technologies Limited, # 44 Electronics City, Hosur Road, Bangalore 560100, India. Tel: +91-80- 51057020 or write to us at: finaclemktg@infosys.com All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any

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BPM, Not Just Another **Technology Fad**

BPM helps banks across the world save time, save money, and add value to internal or external customers.

The concept and importance of business processes has long been understood by organizations. Business processes control and describe how business is conducted internally and externally in terms of data and information flow, and the interactions between individuals and partners with the concerned organization. From purchasing goods and services from a supplier to paying salary to employees, organizations realize the importance of ensuring that all processes are executed smoothly and efficiently, and therefore the need for solutions that can support and facilitate these business processes.



However, managing these business processes is not easy. More often than not, business processes are complex in nature, span across multiple systems and involve interactions across several business units and trading partners. Applications, on the other hand, are not designed with cross-functional business requirements in mind, they are designed to perform a particular function or solve a particular problem. So to keep a particular process operating smoothly, employees devise workarounds and links between applications such as manual transfer of data, telephone conversations, fax, email or simply, face-to-face meetings. While such partially automated processes often exist for several years, it is widely accepted that this is a sub-optimal solution. With such a state of affairs, organizations are not able to achieve maximum operational efficiency, nor are they equipped to deal with change if business processes evolve, as they inevitably do.

Through the nineties, firms tried to streamline business processes through Business Process Reengineering (BPR) initiatives. But these initiatives were usually one-off static projects that were conducted primarily with the aim of cost reduction and did not take into consideration the dynamic nature of business processes. Like other three-lettered acronym technology waves of the decade - SCM and CRM - BPR too did not deliver the required results. However, what emerged in due course is a better understanding of how business processes operate and how they need to be handled through a new approach labeled Business Process Management (BPM).

BPM: More Than a Concept

Defined differently by industry experts, Business Process Management is essentially an approach to effectively automate and manage cross-functional processes by orchestrating people and applications using supporting software tools. BPM recognizes and takes into account that business processes are multidimensional, cut across functions and organizations and are dynamic in nature. It builds on technology elements such as workflow management, process modeling, application integration, process analytics and rules management to manage the lifecycle of a process starting from definition, to execution, measurement, optimization and re-deployment.

One of the main benefits that BPM offers is improved process control and visibility, which leads to higher productivity and reduced errors. Also, by separating process logic from underlying applications, it enables firms to derive ROI from the investment they have made

- Separate processing layer
- Easy to deploy
- Provides an audit trail
- Flexible, on-going adaptation
- Adapts across people, applications and systems (process-centric, not document centric)
- Creates new applications and extend legacy applications
- Intelligent, able to learn





BPM offers improved process control and visibility, which leads to higher productivity and reduced errors.



in the underlying enterprise applications. "According to a recent study by Gartner of 154 BPM projects across 50 companies, 75 percent of them with assets in billions, 95 percent of the organizations had successful BPM projects. In addition, those successful projects had a minimum of 10 percent Internal Rate of Return (IRR) and almost 80 percent had an IRR in excess of 15 percent. Significantly, 80 percent of the respondents felt an increase in competitive advantage by adopting BPM. The study also revealed that over 60 percent of the projects were completed in less than six months and that BPM's value to the company was estimated to be higher than any other systems such as ERP, CRM and SCM".1

Another key benefit that BPM offers and which takes greater importance in the current environment is regulatory compliance. By providing a framework for managing complex processes, BPM ensures that firms can make process changes in line with regulatory requirements such as Sarbanes Oxley, Basel II and International Accounting Standards.

It is important to note that unlike other technology trends, with BPM, 'IT' does not take precedence over 'business'. Technology does not dictate the way a firm's processes are structured. Rather, it is a collaborative approach between business and technology. The business team designs the processes, while the technology team provides the right tools to deploy the processes and derive optimum performance from the same.

BPM: An Essential Technology in Banking

It is not surprising that BPM is considered ideal for the financial services sector and banks have been early adopters of BPM. The need for flexible processes and real-time responses is incredibly high in banking, be it for a retail customer opening an account at a bank, or a bank providing a letter of credit to their corporate client. A process-oriented industry like banking stands to gain significantly through process improvement technologies like BPM.

BPM can help banks reduce costs and improve staff productivity by automating routine tasks. In case of processes like retail loan processing, greater automation of processes and effective workflow BPM can help banks in not only lowering the time taken to process a loan request but also tracking the exact status of each loan application. Other processes where banks can apply BPM are: credit approval, overdraft processing, loan and mortgages origination and administration, and compliance. At Barclaycard Germany, which implemented a BPM solution in an initiative to reduce the time taken to process new credit card applications, the benefits of BPM are for all to see. With the BPM solution, which manages all the steps involved in applications processing and integrates all necessary underlying systems, Barclaycard has been able to cut the processing time from three days to just 18 minutes.

BPM can help banks integrate multiple delivery channels to ensure that customers seamlessly get a unified view of their customer information across all delivery channels. Banks can also gain the ability to implement advanced CRM features such as empowering their staff to cross-sell products in real-time. Risk management is another area where banks can achieve significant benefits through applying BPM. Banks can combine credit, market and operational risk to achieve an integrated approach to risk management.

In an effort to achieve the promised benefits, several leading banks have already adopted BPM. Credit Suisse has deployed BPM for its private banking operations. Industry experts suggest that BPM can offer banks a key differentiator that can help them offer better customer service and compete successfully against their competitors.

¹ Jim Sinur, Gartner Application Integration and Web Services Summit, November 2004

With BPM, TT' does not

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ICICI Bank, the second largest commercial bank in India, is using BPM solutions to streamline and accelerate core processes such as account opening for retail banking and trade finance for corporate banking. Rabobank of The Netherlands is using business process management technology for automation projects in payments processing, while Nordea is using BPM for inquiry and exception management in payments processing. BNP Paribas had initiated BPM to accelerate and streamline existing processes for the secure transfer of funds for its customers.

According to TowerGroup, one of the key aspects of BPM is that business processes should be treated as reusable components. Basic business processes such as opening a new account, underwriting a loan, or processing a payment occur throughout a bank across its many lines of business and product sets. While some variability will always be associated with a particular product, the basics are fairly standard. Banks that view business processes as reusable components spend less time on proprietary coding efforts and benefit from a quicker time to market on new product initiatives. TowerGroup states that documenting processes and storing them within a central business process repository positions the bank for meeting the three goals of BPM: saving time, saving money, and adding value to the bank's internal or external customers.

Conclusion

BPM, applied correctly, has the ability to transform banks through greater efficiency, agility and customer focus. There is no doubt that banks stand to gain enormously from BPM, which explains the heightened level of interest in this space over the last few years. However, industry experts caution against firms getting carried away in the hype that always surround a new technology trend. Banks need to realize that BPM is definitely not a panacea that can solve problems instantly, nor can it transform overnight a costly or failing bank into an efficient and successful one. It is also important to bear in mind that while BPM tools have vast capabilities, they cannot fix broken processes. Before adopting BPM, banks need to first thoroughly examine their existing processes, define the main requirements for current and anticipated BPM applications, optimize the technologies and relationships that are already in place and then identify the right solution that best meets their current and future requirements **■**

Merwin Fernandes

Vice President and Global Head Sales & Marketing, Finacle.

Inside ak

Aligning Business & Technology

Mike Grime, Managing Director of Operations, Technology and Shared Services, ANZ

A veteran at managing technology operations at banks around the world, Mike Grime joined ANZ, one of the largest financial services group in Australia and New Zealand and among the top 50 banks in the world, towards the end of 2003, where he is responsible for ANZ's global information technology solutions and infrastructure, global back office payments processing and the provision of shared services. Before joining ANZ, Grime was with Standard Chartered Bank for ten years where his most recent position was Group Head of Operations. During his stay at Standard Chartered, he was responsible for a number of major projects including the bank's Y2K transition, the design of the bank's future operating model, and leadership of the technology integration of Standard Chartered Bank's acquisition of Grindlays. Grime talks to Rekha Menon of Finacle Connect, outlining his view of the industry and strategies and initiatives at ANZ over the past two years.

What are the main technology challenges facing banks today?

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One of the main challenges is managing delivery channels—all points where the bank interfaces with customers, right from call centers and ATMs to the sales contact at branches and Internet banking. These channels need to be integrated such that there is the same look and feel, same navigation across all delivery channels. Time-tomarket is the second challenge. With legacy systems, introducing new products and even making changes to existing products becomes very complicated. Another technological challenge that banks face today is ensuring informational security in the face of phishing attacks and rising Internet and credit card frauds. And finally, standardization is an enormous challenge. Along with standardizing processes, banks need to have a passionate focus on achieving standardized systems and solutions around the bank such that the customer's experience is the same across all geographical locations.

What have been your priorities since coming into office in 2003?

There are two main technology initiatives that I have focused on. The first was the integration of National Bank of New Zealand (NBNZ) with ANZ. ANZ National Bank is now the biggest bank in New Zealand with around 40 percent of the market share. ANZ bought the bank from Lloyds TSB around the same time as I joined the bank. Amalgamation of the technology systems and cultures of both the banks that are nearly the same size within the timeline set by the New Zealand authorities was the biggest challenge. The second and much more recent initiative is 'Project Tiger', the overhaul of our retail Internet banking system.

Please describe Project Tiger, the key drivers and objectives.

At ANZ, we had deployed a retail Internet banking solution from the vendor Edify way back in 1998. The system adequately met our requirements and we won awards for our Internet banking solution consecutively for four years in a row. However, Edify has been acquired and the new organization is no longer actively developing the Internet banking solution. We could not afford that. In addition, we were looking for enhanced functionality, such as, higher level of security and features for small business customers to enable them to process more complex Internet banking transactions. So we decided to replace the Edify system with Infosys' Finacle solution. This retail Internet banking replacement exercise has been code-named Project Tiger.

Why Finacle?

The Internet is a very important delivery channel for ANZ and we have over a million retail Internet banking customers. We were looking for a powerful, future-proof solution to replace the incumbent system. Initially, we even considered developing the solution in-house, but soon dropped the idea since as a bank our core competency does not lie in this direction. Instead, we looked for a reputed vendor with the required commitment to continually enhance the solution to meet market requirements, and Finacle fits the bill. Not only is Finacle a very good fit in terms of architectural requirements, it is very cost effective too. We are spending approximately USD 50 million on Project Tiger, which is less than half of what a similar exercise has cost our competitors. We were also very impressed with the work Infosys has done for Esanda, our online leasing firm, which has deployed Infosys' Finacle core banking solution. We like their hands-on approach and project management capability.

What are the other areas that you are focusing on at ANZ?

One of my biggest tasks has been to align business with IT, aligning them such that technology understands what business wants and delivers accordingly. This required a lot of change for both the business and technology units at ANZ. Technology was very much a central unit at the bank, a very inwardly focused unit. They needed to change their attitude to one of enabling the business units to meet their goals. On the other hand, business too needed to change their attitude. They needed to get used to a technology person sitting at the same desk and contributing to their meetings. I believe that it is because of the IT-business alignment culture at the bank that we were able to decide on not developing the Internet banking solution in-house. A few years back, the decision would have been to build, not buy. The other key focus area is improving operational efficiency at the bank, which is imperative for a bank to compete successfully. Tools such as Business Process Management (BPM) can help a bank in achieving high operational efficiency. Along with technology, I also head operations at ANZ, and this is one my biggest agenda items as we go ahead



Deploying BPM in Banks

Before deploying BPM, banks need to look at issues like where can it be used, where will it fit within the existing IT architecture and how can they justify this investment.

I have been to many banks in different parts of the worldbig banks, small banks, regional and local banks, global banks, retail banks and wholesale banks. Sometimes as a customer, many a time as a technology partner, and for a good part of my working life, as an employee, as well. And what differentiates the good ones from the others? Cutting-edge technology definitely has a role to play, but that by itself is not enough. Sure, plush branches make an immediate impact, particularly where the customer service representatives are smiling and helpful, but again, that by itself is not enough. I am sure there are many other reasons. But when you look behind the glitzy exterior, if there is one common thread that runs through these banks, it is the quality of their processes.

Banking is a process business. Whether it is opening an account for a new customer in the branch, or ensuring a smooth handover of operations between the front and back-office, whether it is a service partner to whom some operation has been outsourced or indeed even where one is required to chase up a delinquent customer, in a good bank all of these are supported by efficient processes. Traditionally, banks have relied heavily on documented procedures and training to bring about uniformity in process. However, as business has become more dynamic, decision-making more crucial, and compliance mandatory, banks are realizing the need to look for solutions that can help them address these needs without compromising on the quality of processes.

Ever so often, in the world of banking and technology, it is not uncommon to find that an emerging idea catches the fancy of all concerned—the bankers themselves, technologists, consultants and even those who are researching the respective areas. Some of these eventually fall by the wayside, some others are prescribed to be ahead of their times, while many just fail to live up to their initial potential. It is only a handful, which really live up to their expectations and end up making a definitive impact on the banking technology world.



Banking is full of processes, and therefore BPM could be applied everywhere. However, it is recommended that when a bank is planning a BPM deployment, they must first take stock of

where they stand,

process-wise.

In the last few years, Business Process Management (BPM) has been increasingly discussed in these circles. After all, these are difficult times for banks. One the one hand, banks are hard-pressed to improve operational efficiency. On the other hand, though, growth through increased revenues is also hard to come by. Recognizing the dire need to address the issue of operational efficiency, banks have tried to reengineer processes or to automate various business functions. But these attempts have, at best, remained half-hearted, thereby leading to less than optimal results. It is with the advent of various BPM tools that banks are now beginning to realize that there is an opportunity to consider a pan-organization approach.

However, before banks plunge into adopting BPM, they would do well to recognize that they have some real issues on hand. This article attempts to explore some of the major issues that banks would need to consider in adopting BPM. While there will be many issues to consider, we are going to focus on three issues that we believe every bank will need to factor in:

- Where can BPM be used in a bank? What kinds of transactions should come within the ambit of BPM?
- Where will BPM fit within the underlying IT architecture in a bank? Is it just another tool that should be plugged on? How can it be leveraged along with the rest of the components of the IT infrastructure?
- How can the bank justify this investment?

Issue 1: Where can BPM be used in a bank?

Theoretically, the answer is everywhere. As we have already said earlier, banking is full of processes, and therefore BPM could be applied everywhere. That said, however, it is recommended that when a bank is planning a BPM deployment, they must first take stock of where they stand, process-wise.

Broadly speaking, most banks would be expected to initially focus on the high-volume, low-value transactions, which inundate back offices, such as clearing operations and payment processing. While focusing on such transactions will definitely improve productivity immensely on the one hand, and will lower costs on the other. banks will not be really utilizing the full value of BPM, if they were to restrict themselves only to such transactions. Banks would do well to consider carefully certain critical transactions in the front office too. Transactions such as account opening and administration, loan account opening etc. not only account for fairly substantial volumes but in many banks they tend to be sometimes dissimilar in execution as well. Moreover, BPM could possibly help banks in another important area-freeing up time for Customer Service Officers (CSOs). With customer retention gaining increasing focus in all banks, they are actually realizing the great utility in their CSOs being able to spare more time in serving their customers. This can happen only if the routine transactions are automatically taken care of.

The true test for early adopters of BPM will come when they try and extend its deployment beyond just the routine back-office transactions. This can happen in two ways. One, where banks extend its deployment to outside the confines of the bank itself, to systems deployed by their outsourcing partners or vendors. Two, where they get deployed with the more complex set of transactions such as credit and operational risk, or on other aspects of compliance.

Optimization can happen only when banks keep bringing in more and more transaction types within the ambit of BPM, such that it does not get seen as a one-off bad experiment. BPM facilitates the bank take a holistic view to streamline their processes from front to back and across departments, partners and channels.

Issue 2: Where will BPM fit within the underlying IT architecture in the bank?

Another very important issue confronting the bank is deciding where should BPM reside within the IT architecture of the bank? Moreover, purely from a strategic perspective, how is it to be leveraged along with other components.

Banks have today realized that both the departments within the bank as well as the accompanying systems operate in silos and that is hurting the bank immensely. Even the accompanying processes are designed to cater to this situation, thereby leading to sub-optimal processes. Recent trends in architecture and technology deployment have demonstrated that banks are recognizing the utility of going in for enterprise applications. These applications cut across geographically dispersed businesses or across segments and lines of business within the same enterprise.

Increasingly, banks are driving home the need to conform to a powerful breed of Service-Oriented Architecture (SOA) which is based on web services standards and enterprise applications. However, while this is a step in the right direction, the banks need to understand that flexibility and integration capabilities of these can only be optimized if they align with the overall business purposes.

This is exactly where BPM comes into play from an architecture deployment perspective. BPM allows the bank to take a pan-organization view on business, and SOA and web services fully support that deployment. Actually, BPM, SOA and web services truly complement each other while on one hand, BPM facilitates the bank take a holistic view to streamline their processes from front to back and across departments, partners and channels, on the other hand, SOA and web services facilitate allowing standard processes or 'services' to be used and re-used while also allowing the dynamic movement of data from internal and external sources. Some examples where BPM, SOA and web services would complement each other by streamlining processes and opening up services for other partners or channels are:

- Transactions like account opening and loan origination which are today being outsourced
- Credit approval facilities where amongst the several steps involved, some require interaction and collaboration with third parties for some crucial information
- Strengthening risk management practices by bridging the gap that may lie in nonintegrated credit, market and operational risk

The important point to note for the banks here in deciding where to deploy BPM is whether it is product or services delivery. If the organization's strategy is to look beyond the silos within, then BPM can strongly assist in streamlining the processes while SOA and web services will facilitate the interoperability for such a deployment.

Issue 3: How can the bank justify an investment in BPM?

Banks have not had a good experience in the past with new technology solutions, which promised much but delivered little. At a time when fresh investment is difficult to come by, banks need to fully understand what benefits it will bring them if they go ahead and deploy BPM. It is important for the bank to understand what parameters should be used to evaluate and justify the investment.

Banks should broadly consider the justification of the investment on three major criteria:

- The cost factor: Banks need to consider whether long-term benefits would actually justify the initial outlay. Banks would need to evaluate the cost element keeping in mind that BPM can help banks achieve the following:
 - o Automate routine transactions, and facilitate handling of greater volumes



o Reduce long-term application maintenance, thereby reducing substantially the overall outlay on BPM

- o Facilitate greater straight through processing by managing exceptions and centralizing business logic
- The business factor: It would be a very exceptional case where cost alone will be able to justify the investment. Eventually, the bank needs to make money out of that. Banks would need to consider the following while evaluating this investment:
 - Can it facilitate much greater time-tomarket through greater agility in new product development?
 - Will the quality of service in the branches improve if greater automation leads to more time for customer service representatives to spend with their customers?
 - Can the reengineering of processes allow the bank to aggressively go after additional business knowing fully well that service quality will not get compromised?
- The regulatory factor: It is common knowledge today that in most countries, the cost of non-compliance is very high. Even in the eyes of the management, the quest for additional business does not justify the risk arising out of non-compliance. Some of the factors that banks need to consider are:
 - Will it improve the "time to compliance"? This implies that once the new regulations are understood, will the bank be able to do whatever is required quickly and accurately?
 - Can the rules engine within BPM facilitate the extraction of data in such a manner that it allows the bank to submit information that is necessary, quickly and accurately?

An important underlying and crucial question that grapples banks is whether they are willing to and capable of looking at BPM as a continuous activity, rather than a one-off deployment issue. Banks must be willing to commit resources and develop a strategy to continually optimize their processes.

Conclusion

As banks work hard in ensuring that they do all they can to retain customers, they realize that there are many means to an end. In making customer experience enjoyable and more importantly consistent, banks have necessarily had to look at an enterprise approach, rather than just a departmental or line of business approach, to improve operational efficiency. BPM supports precisely that end objective, through its ability to cut across silos and lines of business in standardizing processes.

If banks fully realize that BPM is not just a business solution to solve many of the problems that a bank faces, nor is it the technology department's answer to addressing silos in a bank, but that it transcends both business and technology, then they would be well served. A bank whose enterprise architecture comprises not just BPM but web services and SOA as well, will find that not only is the operational efficiency within systems enhanced substantially, but in the bargain it also has the potential to make the customer experience truly enjoyable. That alone is good enough reason to pursue BPM, don't you think?

Sanat Rao

Associate Vice President and Global Head, Product Strategy & Management Finacle

BPM is not just a business solution to solve bank's problems, nor is it the technology department's answer to addressing silos in the bank, but it transcends both business and technology.



ICICI Bank Technology-Led Transformation

ICICI Bank's investment in technology is yielding rich dividends today.

Established in 1994, ICICI Bank is today the second largest bank in India and among the top 250 in the world. In less than a decade, the bank has become a universal bank offering a well-diversified portfolio of financial services. It currently has assets of over USD 41 billion and a market capitalization of USD 9 billion and services over 14 million customers through a network of about 570 branches, 2000 ATMs and a 3200-seat call center. The hallmark of this exponential growth is ICICI Bank's unwavering focus on technology.

ICICI Bank was set up when the process of deregulation and liberalization had just begun in India, and the Reserve Bank of India (India's central bank) had paved the way for private players in the banking sector, which at that time was dominated by state-owned and foreign banks. Serving the majority of the country's populace, state-owned banks had a large branch network, minimal or no automation and had little focus on



service. Foreign banks, on the other hand, deployed high-end technology, had innovative product offerings, but had a very small branch network that serviced only corporates and premium high net-worth individuals. Sensing an untapped opportunity, ICICI Bank decided to target India's burgeoning middle class and corporates by offering a high level of customer service and efficiency that rivaled the foreign banks, but on a much larger scale and at a lower cost. A crucial aspect of this strategy was the emphasis on technology. ICICI Bank positioned itself as technology-savvy customer-friendly bank.

Technology Partner For a Tech-Savvy Bank

To support its technology-focused strategy, ICICI Bank needed a robust technology platform that would help it achieve its business goals. After an intense evaluation of several global vendors, ICICI Bank identified Infosys as its technology partner and selected Finacle, the universal banking solution from Infosys, as its core banking platform. An open systems approach and low Total Cost of Ownership (TCO) were some of the key benefits Finacle offered the bank. Unlike most banks of that era, ICICI Bank was automated from day one, when its first branch opened in the city of Chennai.

Explaining the bank's decision to select Finacle, Pravir Vohra, Senior General Manager and Head of Retail Technology Group at ICICI Bank, says, "After evaluation of numerous products, we chose Finacle universal banking solution from Infosys for its future-proof technology, best-of-breed retail and corporate banking features, scalable architecture and proven implementation track record. Finacle has enabled ICICI Bank to achieve competitive advantage by enabling rapid roll out of new products, faster customer service and reduced time to market, to cater to the ever-growing needs of customers. Its open architecture and flexibility has enabled easy integration with multiple systems."



With a strong emphasis on technology, ICICI targeted India's burgeoning middle class and emerging corporates by offering a high level of customer service and efficiency at an affordable price.





ICICI has been able to successfully move over 70 percent of routine banking transactions from the branch to other delivery channels, thus increasing overall

efficiency.

One of the biggest challenges for Finacle was ensuring Straight Through Processing (STP) of most of the financial transactions. With the ICICI group having several companies under its umbrella, Finacle needed to seamlessly integrate with multiple applications such as credit cards, mutual funds, brokerage, call center and data warehousing systems. Another key challenge was managing transaction volumes. ICICI Bank underwent a phase of organic and inorganic

growth, first by acquiring Bank of Madura followed by a reverse merger of the bank with its parent organization, ICICI Limited. The scalable and open systems-based architecture enabled Finacle to successfully manage the resultant increase in transaction levels from 400,000 transactions a day in 2000 to nearly 2.1 million by 2005 with an associated growth in peak

volumes by 5.5 times. With Finacle, the bank currently has the ability to process 0.27 million checks per day and manage 7000 concurrent users.

Over the years, the strategic partnership between ICICI Bank and Infosys that started in 1994 has grown stronger and the close collaboration has resulted in many innovations. For instance, in 1997, it was the first bank in India to offer Internet banking with Finacle's ebanking solution and established itself as a leader in the Internet and e-commerce space. The bank followed it up with offering several e-commerce services like bill payments, funds transfers and corporate banking over the Net. The Internet is a critical element of ICICI Bank's award-winning multi-channel strategy that is one of the main engines of growth for the bank. Between 2000 and 2004, the bank has been able to successfully move over 70 percent of routine banking transactions from the branch to other delivery channels, thus increasing overall efficiency. Currently, only 25 percent of all transactions take place through branches and 75 percent through other delivery channels. This reduction in routine transactions through the bank branch has enabled ICICI Bank to aggressively use its branch network as customer acquisition units. On an average, ICICI Bank adds 300,000 customers a month, which is among the highest in the world.

Channels	Share of Transactions March 2000	Share of Transactions March 2004
Branches	94%	25%
ATM's	3%	43%
Internet and Mobile	2%	21%
Call Centers	1%	11%

The bank has successfully leveraged the power of Finacle from Infosys and has deployed the solution in the areas of core banking, consumer e-banking, corporate e-banking and CRM. With Finacle, ICICI Bank has also gained the flexibility to easily develop new products targeted at specific segments such as ICICI Bank Young



Stars, a product targeting children, Women's Account addressing working women and Bank@campus targeting students.

Reaping the Benefits

Case Study

A powerful, scalable and flexible technology platform is essential for banks to manage growth and compete successfully. Finacle provides just the right platform to ICICI Bank, thus fuelling its growth. "Our objective of creating a universal bank providing end-to-end financial services clearly required solutions which were based on newgeneration technology, offered end-to-end functionality and were highly flexible and scalable. Finacle offered all this and much more," says Chanda Kochhar, Executive Director at ICICI Bank.

ICICI Bank is today recognized as a clear leader in the region and has won numerous accolades worldwide for its technology-driven initiatives. In 2003, the bank received the best multi-channel strategy award from The Banker magazine and this year it has been rated the second best retail bank in Asia by The Asian Banker Journal. The bank has effectively used technology as a strategic differentiator, thus not only redefining the rules of banking in India, but also showcasing how technology can help in transforming a bank's business



What are the challenges that banks face for business process integration where a process spans across different systems and involves manual steps?

Problem Description

Most banks today need to integrate systems from different vendors or those developed in-house. These systems could be delivery channels like branch, ATM switch, Internet banking, call center or back-end systems like Current Account and Savings Accounts (CASA), loans, trade finance, treasury, credit card, insurance or investment systems.

Middleware technology has solved integration issues to a large extent by reducing the spaghetti of interfaces between systems. Thus we can have a single interface from a delivery channel to a central hub (assuming that hub and spoke model was used for integration) and from the central hub to a back-end system. Message transformation can be done at the hub to address issues related to changes in versions of applications. Usage of queuing technique addresses the issue of availability of systems at different points of time.

The problem of defining business processes across different systems still needs to be solved. Take the example of "Check Book Issuance". A sample process for this could be:

- (a) Get customer information
- (b) Issue a command to "Check printing system"
- (c) Mark checks as issued within "core banking system"
- (d) Dispatch checkbook to customer's address.

Thus the process would span across multiple systems (in this case "Check printing system" and "Core banking system") and could involve manual operations (e.g. "Dispatch of Checks through courier").

Many back-end systems do not provide workflow facility and even when provided, it is limited to chaining of menus within the same system. There is a need to define processes across multiple back-end systems and allowing for manual steps.

Solution

The solution to this problem involves usage of an enterprise-level BPM tool, which comprises two components:

1. Modeling Tool: This involves definition of a process. Each business process is defined in terms of activities and decision boxes.

TECH WATCH

Banking on Enterprise-Level BPM



Each activity should have well-defined inputs, which it can receive from either a previous activity or as an input to the process creation and well-defined outputs, which can be used by the next activity or as results of the business process. This modeling tool should also allow creation of roles and assignment of activities to respective roles. Storing activities in a standard format like BPML helps interoperability between modeling tools and process engines. An extract of BPML for check issuance process defined above would be as follows:

```
<wsdl:message name="CustInfoInParams">
        <wsdl:part name="AcctNumber" type="String"/>
    </wsdl:message>
    <wsdl:message name="CustInfoOutParams">
       <wsdl:part name="CustName" type="String"/>
        <wsdl:part name="CustAddr" type="String"/>
    </wsdl:message>
    <wsdl:portType name="java:invokeActivity">
        <wsdl:operation name="CustInfo">
            <wsdl:input message="CustInfoInParams"/>
            <wsdl:output message="CustInfoOutParams"/>
        </wsdl:operation>
    </wsdl:portType>
    <process name="IssueCheque">
        <parameters>
            <input name="StartParam:null:AcctNumber""/>
        </parameters>
        <sequence>
            <context>
<property name="StartParam:null:AcctNumber" type="any"/>
                  <property name="CustInfo.InParam.AcctNumber"</pre>
type="String"/>
                   <property name="CustInfo.OutParam.CustName"</pre>
type="String"/>
                   <property name="CustInfo.OutParam.CustAddr"</pre>
type="String"/>
      ....
            </context>
            <assign property="CustInfo.InParam.AcctNumber">
                <source property="StartParam:null:AcctNumber"/</pre>
      >
            </assign>
            <action locate="finCore.Customer" name="CustInfo"
                                     operation="CustInfo"
portType="java:invokeActivity">
                <output element="AcctNumber">
                                                       <source
property="CustInfo.InParam.AcctNumber"/>
                </output>
                <input element="CustName"
property="CustInfo.OutParam.CustName"/>
               <input element="CustAddr"
property="CustInfo.OutParam.CustAddr"/>
            </action>
        </sequence>
```



</process>



BPML shows "check issuance process" taking "account number" as an input parameter. First step is an "action" to invoke a web service to get customer information. This step sends an output message containing account number to the web service and extracts customer name and address from the message returned. Extensions to standard BPML could be required to indicate the role to which an activity can be assigned and to distinguish between automated and manual activities.

2. Process Engine: The process engine allows creation of a process at runtime and invocation of automated activities using standard mechanisms like web services or EJBs and so on. It also allows usage of manual activities, which could cover activities not implemented in any existing back-end e.g. "call up the courier company to dispatch checkbook to customer's address". For such activities, the engine should provide a user interface for marking the activity as complete and keying in the outputs, if any, produced by the activity. Manual activities could also involve invocation of menus within the back-end systems. This would be required if all inputs required for the activity are not available at the time of invocation of the activity. It would also be required in case the bank wants a manual control to execute a certain activity. For this, the engine would need to provide an inbox so that the back-end user interface can be customized (or new screens could be built) to show inputs provided by process engine and allow users to enter additional inputs to execute the required menu. The process engine should also provide for process monitoring. This would involve tracking compliance with respect to SLA that can be defined for various processes.

Conclusion

The inherent business benefits of an enterprise-level BPM integration can be summarized as below:

- Easily configurable processes tailored to suit bank's needs
- Integrated processes across products to allow seamless workflow for the bank
- Ability to generate reports for business process auditing and improvement
- Opportunities to monitor functioning of various processes, and
- Identification of bottlenecks leading to overall enrichment of customer experience.



BPM Components:

- Modeling tool to define processes and roles. Tool needs to allow passing results from one processing step to the next step.
- Process engine allows creation of processes at runtime, maintaining of process contexts, invoking automated activities, providing facilities to invoke manual activities and monitoring of processes

Business processes can be created with simple menu options by interfacing to a process engine. These processes are for various operations like loan origination or changing beneficiary of an insurance policy and so on. Improved straight through processing capabilities reduce the possibilities of errors and lead to substantial improvement in various operations.

Thus, integrating processes and sharing information of diverse business systems helps streamline operations, reduce costs and improve responsiveness to customer demands

Deepak Hoshing

Head Architecture, Finacle

Infosys in the news

Q1 revenues grow 42.09 percent YoY

Infosys Technologies Limited announced financial results for its first quarter ended June 30, 2005. Revenues for the quarter aggregated \$ 476 million, up 42.09 percent from \$ 335 million for the quarter ended June, 30 2004. Net income was \$122 million (\$ 83 million for the quarter ended June 30, 2004).

No.8 amongst fastest growing tech companies

Business 2.0, the leading business trends and technologies magazine, has ranked Infosys at No. 8 on its prestigious B2100 list of the world's fastest growing technology companies. In 2004, Infosys was ranked at 59.

Infosys ranks No.9 on the Wired 40

Wired Magazine has ranked Infosys Technologies at No. 9 on its 'Wired 40' list for 2005. Infosys moved up two places from last year's ranking of 11. Wired 40 described this year's winners as 'masters of technology and innovation' and 'global thinkers driven by strategic vision'.

Hallmark

Infosys ranks No.10 in BusinessWeek IT 100

BusinessWeek magazine has placed Infosys at No. 10 on its BusinessWeek 'Information Technology 100' list of the world's top technology companies. Infosys made the rank on the distinguished list, published annually by the leading business magazine, for revenue growth of almost 50 percent in 2004, and the strong promise to boost revenues by about 30 percent to cross \$2 billion in 2005.

Finacle – The Universal Banking Solution from Infosys

Finacle wins The Banker Technology Awards, 2005 in the "CRM" category

Finacle was judged the winner in the "CRM" category, at the recently concluded The Banker Technology Awards, 2005.

The awards institutionalized by The Financial Times UK, are annual awards that recognize the best and the most innovative technology solutions from around the world, in the banking industry. Last year, The Banker awarded Finacle in the category of "Mobile solution of the year" for Finacle's innovation in mobile payments and recognized Finacle's corporate e-

banking solution as highly commendable, in the "Application of the year" category. The Finacle CRM solution was recognized for its comprehensive capability, efficiency and innovative approach.

Our esteemed customer, **State Bank of India** (**SBI**), India's largest bank, won The Banker Award in the category of '**Core Banking**'. This award has been conferred to SBI's core banking initiative including its implementation of Finacle's Core Banking Solution across 21 countries.

Finacle in the News:

• Union Bank of The Philippines went live with Finacle core banking solution, making it the first bank in The Philippines to successfully replace its mainframe legacy with a new generation open systems based solution. Among the top ten banks in The



Philippines, Union Bank of The Philippines (UnionBank) had entered into a strategic partnership with Infosys in July 2004, to achieve greater business agility and lower Total Cost of Ownership (TCO).

• Equity Bank, Kenya has selected Finacle core banking solution to replace the bank's decentralized, mainframe based legacy system across its 23 branches. Equity Bank, which is over 80 percent publicly owned, is a leading micro finance institution providing a wide range of products and services. The bank will also deploy treasury and e-banking solutions from Finacle. The strategic technology deal will support the bank's growth plans in branch network, ATM rollouts and product diversification.

Customer Speak

"In Finacle, we believe, we've found a cost-effective solution that scales up well as we push through our customer acquisition program. It is also one that empowers our people with the ability to rapidly deploy new products and services that this growing customer base demands. To do this, we needed a solution that would enhance our process efficiencies thereby giving us a competitive edge in the market, while reducing the total cost of ownership and, I believe, we've found that in Infosys' Finacle."

Justo Ortiz Chairman, UnionBank

Infosys[®] Finacle

FIRST**LOOK**

management, which is the focus of this book, is the latest approach to process design and implementation which aims to transform the way firms conceive, build and operate automated systems. Unlike other solutions, third-wave BPM is not a point solution or a single product that a company can go out and buy. It is an essential business capability that allows firms to take control of their current and future business needs. Smith and Fingar describe third-wave BPM as a synthesis and extension of concepts like business process reengineering, enterprise

Process Management v/s Process Reengineering

BOOK

REVIEW

Business Process Management – The Third Wave: Howard Smith and Peter Fingar

Throughout the nineties, Business Process Reengineering (BPR) was the standard mantra for organizations trying to improve their processes and increase efficiency. Reengineering involved designing a new process and then implementing it at one go. But, these new processes did not necessarily turn out to be simpler than the earlier ones, nor did they offer the flexibility to be enhanced, if required. Further, the change program of replacing well-established business practices was too disruptive and often resulted in organizations losing valuable resources that had been built over the years. Firms have therefore realized that they need to focus on process management, where unlike in reengineering, the approach is not to start all over again, but to build on and transform what already exists. Howard Smith and Peter Fingar's book, Business Process Management - The Third Wave, discusses the benefits of process management over process reengineering and how firms can achieve the third wave of Business Process Management (BPM).

According to Smith and Fingar, the first wave of BPM began way back in the 1920s, when organizations learnt how to discern and create business processes, but did not automate them. The second wave took place through the 1990s when firms tried to make their business processes more manageable by reengineering them or by deploying solutions like Enterprise Resource Planning (ERP) systems. Now, the third wave of business process



application integration and workflow management, and helps bridge the gap between business and IT. With a focus on best practices and seamless interaction with trading partners, it enables IT to respond to business requirements at a pace governed by the business rather than the complexity of the IT environment.

The book provides an in-depth theoretical analysis of the science behind business process management along with a brief discussion on how firms can implement third-wave BPM. Taking the example of General Electric as a firm that is ahead of the curve in adopting third-

wave BPM, Smith and Fingar explain that rather than going for a piecemeal replacement of old processes, GE is focusing on a single program to establish the ability to implement and manage a continuous stream of business process innovations. "The goal is two-fold: hyper efficiency and an unprecedented agility. GE seeks to empower every business unit and every workgroup to take control of their processes and to make all the assets of the company available to be reused, repurposed and recombined with those of partners."

While the book provides a thorough academic discourse on third-wave BPM, it lacks real-life examples. The discussion appears too theoretical. For instance, even though GE has been cited as a firm implementing third-wave BPM, the book does not dwell on how and why the firm has adopted this strategy. Examples of processes that have been transformed in specific industries and how business process management has been deployed within firms, would have enriched the book, and made it much more readable. The book is also not for someone looking for a basic understanding of BPM. Rather, it is for BPM experts who are looking to increase their knowledge of the space. Despite these lacunae, Business Process Management – The Third Wave comes forth as a serious, well-researched book written by people who have several years of experience in the field, and manages to convince the reader that the third wave of business process management is indeed the breakthrough that will help redefine competitive advantage for the next fifty years

Rekha Menon

Research and Contributing Editor FinacleConnect





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