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Research Journal

Issue 2



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Shaping the bank of tomorrow

As banks the world over are going through a radical shift in their operational models, financial services institutions in India are emerging relatively unscathed—a reflection of their focus on prudence and a closed banking culture. Even with strong growth statistics, penetration of financial services across the country, however, remains low, assuring several years of growth ahead for the industry. Given the clear lessons learned from the financial crises and the interdependencies of financial institutions and economies, the general attitude of financial conservatism (including higher household spending, decreased discretionary spending and concomitant borrowing) is taking hold today. Financial institutions in India, too, are playing safe and guarding their interests, but they are also quick to tap into the areas of potential and sustained profitability. With the right emphasis and a nurturing environment, they could very well harness each one of these opportunities to architect a successful and promising era in Indian financial services ahead.

Collaboration across multiple disciplines. Many changes in the industry are visible already. The predominant design element emerging in this new banking fabric is collaboration—both, internally and externally in financial institutions, and across business lines. Business applications will be assembled along the lines of processes and on custom-built and off-the-shelf business services. Many services will be available as open source applications and utility-type services, or service banks will offer these basic banking infrastructure services in a ‘plug-and play’ capability or through a managed, hosted or white labeled model. For instance, banks with wholesale banking franchises are poised to move to the forefront in managing the financial supply chain for corporate customers and in offering integrated payments and cash management solutions. As banks use the services of multiple vendors across locations, they will establish a broader SaaS (Software as a Service) environment in banking. Applications designed for SOA and hosted on a Cloud for processing; data and storage; and, predictive analytics will further embellish this pattern of partnerships. ‘Being able to do more for less, and hiring resources on demand’ will be the accompanying benefit of such collaborations.

Brand loyalty and customer engagement. With the objective of enhancing customer experiences, full services business are now offering banking, insurance, and community financial advice to High-Net-Worth individuals and corporates through online communities and portals. Further, the need for sustaining customer relationships will see banks offering online banking content from a variety of sources that help customers aggregate and display all their investments (across vendors such as banks, wealth managers, stock markets and so on) on a common interface. They could also help evaluate the offers that the customer selects (both for banking products and other non-financial products) and make recommendations on how to save money. With the advent of such services, banks will find that brand loyalty as it is defined today metamorphoses into the value customers place on the relationship the bank has with them. Customer emotional engagement will be a singular mantra of success.

Making the ‘core’ universal. Gravitating towards simpler business models to capture a greater share of the market, banks are focusing on the traditional roles they once played as financial intermediaries, with customer-centricity as the core of their business. Risk management has moved from being a support function to that of a competitive differentiator; large parts of the value chain in technology are being outsourced; and, investment and corporate banking are being consolidated into a universal banking model. Core banking renewal across all tier banks is being seen as once-in-a-lifetime opportunity to transform not merely the technology underlying core processes but also the operating model and even the bank. This, naturally, now demands a simple core banking system, pivotal to relationship banking, faster time to market and multi-channel services. Next generation core (universal) systems can create a responsive customer environment by making the customer the agent of transformation.



Banking information architecture. Information will become a crucial weapon in the battle for the customer. Business intelligence systems that integrate structured and unstructured data from internal and external sources, including social networks and other Internet-based sources of customer-related information are helping establish a 360-degree-view of the customer alongside pushing the business beyond the boundaries of the bank, across countries and business partners. Real-time analyses and alert capabilities will help with on-the-spot identification of business opportunities. This will mean offering true relationship-based pricing through a dynamically created set of personalized solutions and services and rewarding customers through similarly priced incentives.

Focused marketing and advertising campaigns can be created/customized to suit customer preferences and demands, which in turn can lead to custom made products. In fact, many banks today have understood the need to play the role of advisors or educators to their target audience instead of sending them a barrage of online ads or promotional messages. Many times, the services offered could be of an informative or educative nature and even location based; for instance, the directions to the nearest ATM or branch, or certain country- and channel-specific capabilities. Such alerts will display across channels and preferably allow the customer to even select the most convenient channel and mode and time of display.

The banking information architecture that supports all of this will need to be able to switch from one channel to another, across branches and home and office communication hubs. As the customer's virtual and physical worlds become completely intertwined, banks will tap into social networks and mobile banking applications to offer easier, convenient and integrated banking experiences.

Financial services sector in India. India has a mobile subscriber base of about 350 million, but the total number of registered users is far less than 25 million, while active users of mobile banking are only about 10 percent of the total user base. Nascent but innovative services such as mobile and contactless payments and fund transfers are fast gaining popularity across the country. The cost per transaction across a mobile network is much lower compared to other channels leading to banks leveraging this channel even more. Real-time assistance, international remittances and wire transfer services will accelerate this move while technological advances such as near-field communication (NFC) and SMS technology will help banks widen their customer base.

Personal disposable income in India is set to grow at an average annual rate of 11.6 percent between 2010-2014. As income rises, so will expenditure on insurance. With more enriched levels of experience being delivered to customers across retail payments and with the emergence of new alternatives and consolidated payments processing across enterprises, the payments business is fast becoming a revenue generator for financial institutions.

As capital markets (India's market capitalization is the ninth largest in the world and its share in total market capitalization globally is 2.79 percent) in India grow to healthy levels (IPOs alone are expected to raise USD 4-5 billion in the coming years) almost on a daily basis, financial firms are gearing up to enter into the mutual funds segment. The advent of newer classes of instruments across retail, wholesale and institutional trading and the emergence of financial superstores is demanding faster best execution timeframes and multi-asset trading platforms. Notably, High-Net-Worth (HNW) individuals in emerging markets are a growing revenue pool. Rural banking, microfinance, including micro-insurance, are sectors that are set to take off in the near future. Biometric and smart device technologies alongside well-designed delivery mechanisms are giving a new meaning to microfinance in India by making it more cost efficient and effective.



A journey of five degrees

We believe that there are a few core areas that financial institutions in India will look into in the future, given the existing scenario and the nature of evolving customer demands and needs.

First, to increase transparency and the comfort feel of customers while also reasserting trust levels, they will ensure that their services are constantly available real-time across diverse but necessarily integrated channels.

Second, a converged approach to risk management, compliance and governance delivering structural integrity, control and monitoring of operational and systemic risks.

Third, with more niche specialist players coming into the fray, competition between these players, banks and non banks will increase. Offering differentiated services amidst these potentially more nimble competitors will mean using advanced predictive customer analytics to create target-specific services to customers.

Four, the era of ubiquitous banking will finally start making its presence felt. Collaborative banking offering mass personalization and convenience services tapping into social media will become commonplace. Banks understand that the key to success lies in delivering the 'Right' product/service to the 'Right' customer at the 'Right' time and through the 'Right' channel, and this will mean tapping into collaborative partner networks across multiple disciplines and industries.

Five, enhancing operational efficiency and using technology to deliver a unique value experience to customers will entail weaving next-generation financial services architecture, open source and Web 2.0 enabled applications, and a combination of service provider banks together in a harmonized whole.

In a nutshell...

Shaping the 'bank of tomorrow' in an interdependent world will require banks to closely collaborate across business, technology groups and institutions and technology partners. Capital adequacy, liquidity and a well-balanced risk management profile are critical to its success. Topping all of this will be business simplicity, adequate transparency and governance, and customer-oriented processes, services and technology. The next-generation bank will also go one step further and get high on 'green technology', serving its ecological responsibilities and saving cost and energy in the long run.



NG Subramaniam

President – TCS Financial Solutions
Tata Consultancy Services



Dear Reader,

Welcome to the second edition of TCS BaNCS Research Journal.

Economies across the world have begun showing signs of recovery and promise. More so, in emerging markets such as India. This edition of TCS Financial Solutions' research journal showcases a collection of research, delving into insights on key trends shaping the industry.

The leitmotif of this edition is the 'peafowl feather'. Considered to be an auspicious symbol in Asia, the peacock/peafowl is also the national bird of India. Legend has it that the peafowl feather symbolizes pride and resilience, among other positive virtues. Echoing these sentiments of pride and embodying resilience is the Indian financial industry today. It has held up well amidst tough challenges and a temporary period of moderate growth and is fast becoming an enduring but robust force. Slated to be a part of the gradual but steady progress in forthcoming economic reforms in the country -- which will, indeed, make for a more competitive industry -- the Indian financial services sector today stands at the brink of a new era of optimism. So, how will it draw onto the underlying opportunities and truly 'emerge' as a global leader? Read on...

Warm Regards,



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Table of Contents

Next Generation Banking in India – Silent (r)evolution	9
Delivering a Compelling Return on Investment from Mobile Financial Services	13
The Financial Superstore in Indian Capital Markets	16
Transforming Corporate Actions Data Transfer	19
Key Trends in Global Wholesale Payments	22
Corporate Actions and XBRL – The Road Ahead	27
Banking on Wealth	31
Is the Future of Retail Banking ‘Picture’ Perfect?	34
Enterprise-Wide Anti-Money Laundering and KYC Initiatives	38
Risk Management: An Introduction to Value at Risk (VaR)	41
Emerging Markets in India	44
Decision Support Criteria for Globally Distributing Work in the IT Industry	47



Next Generation Banking in India – Silent (r)evolution

The Indian financial services industry stands at the cusp of its second structural (r)evolution. While policy makers debate the pace of measured deregulation, banks must cope with multiple dimensions of change involving regulation, technology, new competitors and business models, capital pressures, and constantly changing customer demands.

Winners in the future are likely to move away from the rest of pack at a brisk pace, sailing through the potentially heavy headwinds ahead. These firms will make intelligent choices with respect to their operating models, customer-centric acquisition and management approaches, product portfolio, and partnerships apart from planned international expansion. Most often than not, technology and innovation would be integral to their choices and the themes they choose.

Indian Banking – Next ‘Eldorado’?

With the Indian economy enjoying a long spell of robust growth over the last five years, the Indian financial services industry has seen accelerated growth – with strong performance in each segment, namely, banking, asset management and insurance. This has come on the back of positive developments over the last decade wherein, the sector now compares favorably with banking sectors in the region

on metrics such as growth, profitability and non-performing assets (NPAs). In addition, select banks have made steady progress in global rankings both in terms of asset base, capital and business growth. The market is far from saturation with the economy projected for sustained GDP expansion, opportunities to service a large, young, working middle class¹ population, apart from managing the needs of emerging Indian multinationals with global horizons. In addition, there is a large ‘un-banked’² population pointing to a larger market requiring access to fundamental products at affordable prices.

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As the headwinds of change strengthen, Indian financial services needs to embrace its second structural shift wherein both the market regulators as well as participants can evolve and re-work their strategies.

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Regulation and control have been on the forefront protecting the industry from global financial and currency crises that have occurred in other markets. The government and central bank continue to exert considerable control

and protection, both in terms of regulation and influence in the market place through state-owned banks. This benign environment has aided an era of unbridled growth and strong returns for most banks. Banks, independent of ownership groups and size, have initiated or completed the first technology leap by adopting core processing platforms and deployment of remote channels. Recent entrants have caught up with more entrenched players and have made investments to shift gears towards a world-class environment that supports integrated sales and service, risk management and organizational performance.

Many senior executives in banking would probably claim that they understood the challenges facing the industry. In a sense, they would be right. The challenges of change, increasing regulation, tough competition and more demanding customer expectations are routinely expounded. But in a more profound sense, the industry is yet to encounter genuinely threatening developments arising from disruptive innovations, whether these focus on new technology, new business processes or completely new business models. To date, Indian banking has avoided such disruptive shocks – often guided by state-guided intervention.

As the headwinds of change strengthen, Indian financial services needs to

¹ More than 360 million Indian people have incomes above the National Council for Applied Economic Research's (NCAER) threshold for 'middle class' of more than \$2,000 per person per annum. 90 million earn between \$4,500 and \$22,000 per annum. Their purchasing power is much higher than it would appear in dollar terms (\$3,000 per annum is seen as the threshold for buying a car in India, for example). The NCAER expects the 'middle class' to reach 560 million people by 2010. (The Great India Market, 9.8.05).

² An un-banked is defined as any individual of 15 years of age or older who does not have a saving or deposit account nor access to loans in a commercial bank or any alternative financial institution (AFI) such as state owned agricultural, development and postal banks, member-owned savings and loan institutions, other savings banks, low-capital local and rural banks, and specialized microfinance institutions. (Technology and Innovation in Financial Services: Scenarios to 2020, World Economic forum report, 2008)



embrace its second structural shift wherein both the market regulators as well as participants can evolve and re-work their strategies. The regulators and policy makers are focused on injecting digestible capsules of change whilst prompting deregulation and accelerating the creation of world-class infrastructure (e.g., payments, asset reconstruction companies (ARCs), credit bureaus, back-office utilities)³. Given the state's interest and shareholding in the banking system, market consolidation – either state and/or market-driven influences are required to minimize pressure on the exchequer for additional capital infusion to help the state-run banks meet Basel II requirements aligned to international standards.

The banks themselves – even today's winners have to deliberate on the degree of cultural and business transformation that they need to adopt to tide over the magnitude of change ahead of them. The current 'easy growth'⁴ business models appear difficult to sustain both in terms of profitability and productivity, in the medium term. Fuelled by fundamental product engines where demand outstripped supply and geographic expansion led to tapping customers looking for responsive services, these models have become a part of regular hygiene and are being adopted by most, if not all. Easing of restrictions on foreign bank entry and investments across banking, capital markets and insurance – should increase competition for traditional profit pools. In addition, non-banks (e.g. Reliance Capital and IDFC) apart from niche players (e.g. Rabo) who continue making in-roads, create business slivers that cut slices from traditional revenue streams of mainstream banks. Added to this, de-regulation and the adoption of international norms require banks to craft policies linked to market realities

and their business strategy without guidance support of central bank directives.

Market consolidation and re-alignment of business models will be on the agenda with only a few large players being able to sustain multi-asset full-service business models. Coopetition will be on the rise to allow participants to tap into newer profit-pools. Market leaders will eventually control such arrangements and rules permitting roll-up of these ventures and smaller players. Some banks will need to look at their product portfolio strategy across banking, securities, cards, leasing, mortgages and bancassurance businesses. This, alongside additional capital requirements, could trigger some market-driven sales/divestments in the next near term.

While the overall action agenda and roadmap around reforms is chalked out by the government and regulators, banks need to evolve and craft approaches that support some of the decisions around business model, product portfolio, customer management, human capital and policy, product management (pricing, bundling), and often leveraging solution and capabilities made available by technology and innovation. The winners are likely to get their basic ingredient right and develop a future strategy that exploits opportunities presented at the industry level. Rest of the banks would need to work on their fundamentals with the aim to defend their asset and customer base.

Customer Paradigms – Crafting a Winning Mindset and Delivering an Enriched Experience

With the race towards operational efficiency made possible by advances in

technology, most Indian banks have focused on lowering costs, and some banks have achieved that. By focusing on managing costs and profitability within product business and units, banks have been able to make marked reductions in their cost to income ratios. While many banks claim and have made large investments in Customer Relationship Management (CRM) systems, the way they are managed suggests that their CRM tools are underutilized in generating 'real' insights to help anticipate customer needs and understand customer profitability.

Despite the rhetoric and nice sounding campaigns, some banks tend to leave customers out of the picture. The inward focus on operational efficiencies did not align with differentiated customer services. One division's most valued customer is another's occasional purchaser; but customers view their experience in totality. A poor experience with one division causes a ripple effect of dissatisfaction across boundaries. As a result, the bank is vulnerable to high rates of customer attrition. While executives may recognize the problem, they have tended to see it as a necessary trade-off in the pursuit of operational efficiency.

The goals of operational efficiency and customer focus are not mutually exclusive – they are complementary. Success hinges on adopting a different way of thinking, and having a customer focus embedded in the cultural 'DNA' of the organization. Evidence from other industries has found that truly customer-centric companies think of and manage themselves in a fundamentally new and different way. They deeply understand the profitability not only of products and business lines, but also of individual customers', both present and

³ Indian Banking 2010: Towards High Performance, McKinsey & Co, 2008

⁴ India Financial Services Good Long-term Potential – but Structural Weaknesses Need to Be Addressed (Morgan Stanley/Oliver Wyman, 30 September 2008)



potential value. They make extensive use of customer and market data and are obsessive about identifying emerging trends and opportunities, and use this insight to guide management and investment decisions.

Customer-centric institutions consider themselves as a portfolio of customers; a mix of highly profitable customers providing today's profits, and those with a calculated potential for growth. They also know how to successfully re-balance/re-price and divest themselves of unprofitable customers with poor prospects for improvement. In addition, the investment in iterative testing of value proposition is an option that is fast becoming a necessity in today's economic climate. Some of the most enlightened retail banks have started recognizing that other industry sectors have a great deal to teach them about customer-centric product bundles and related pricing. Even in emerging markets like India, the telecom and digital television players offer their customers an increased choice of flexibility to tailor their packages (to very specific segments or even a segment of one). Supported by technology enablers, these institutions put in place a modular approach to product management – that allows for customized and need-based packages that can be appropriately priced, both at an aggregate as well as at a product/component level.

Role of Branch – Changing the Role and Positioning

Many banks have set out on a path to branch improvement; although, arguably few have embarked on total transformation. Simply refreshing the brand and refurbishing the branch network is not enough. Only a unique, differentiating and compelling proposition is likely to succeed.

In India, most institutions have skipped the emphasis on institutionalizing the more difficult components of a proactive sales and service culture, while spending too much time and money on easier initiatives such as new branding and branch designs as part of their technology upliftment initiatives. In the last ten years, banks have attempted to reinvent and experiment with branch strategy in a quest to transplant traditional retail practices into financial services. Most banks have used direct banking for optimizing costs and shifting customer traffic to self-service and remote channels. Apart from new design and a selective sales focus, old habits still thrive. It is not unusual for a branch to have a lesser customer floor space allocation relative to the bank sales and support staff. In addition, limited leverage of established merchandizing principles have led to the haphazard placement of communication collateral in branches.

Simply refreshing the brand and refurbishing the branch network is not enough.

Banks in India would also do well to learn from the mistakes of their western counterparts in shaping their overall branch strategy. Bankers in Europe and North America learned invaluable, albeit costly, lessons when applying retail concepts and ideas that were not closely aligned to a supporting strategy, namely, that customers do not visit a bank branch to browse. There was a period when many bankers wanted to believe customers would think of the bank branch as a destination point, a place to learn about financial solutions. Once again, without a sound strategy,

this wishful thinking led to complicated and costly branch zone strategies, whereby branches had zones dedicated to market segments such as seniors, young professionals, home-buyers, travellers and college students.

As part of the second phase, Indian banks will need to focus on 'the experience economy' – a period of expanded awareness of the total customer experience, comprising everything the customer sees, hears, feels and, ultimately, does with the bank. It is in this context that the branch is likely to take center-stage – being best placed to deliver the right mix of convenience, value and service. Beating the competition with a differentiated service-led proposition should include a pivotal role for branches as they remain the key channel through which banks can re-connect with their customers. Towards this, banks would need an action plan including:

- Supports sales and service choreography, and design-a-concept stores to enact scenarios and capture desired actions and behaviors of customers. Some leading banks have used these concept stores to test new products, service concepts, often involving the customer in the co-creation process
- Enabling tools and technologies that support customer recognition; welcoming as well as queue management; sales advisor tasks and 'less paper'/more digitized environment
- Design a 'privilege of the moment'⁵ approach that addresses sales and service response paths to customers who visit branches for transaction, information and service fulfillment needs.

⁵ Frontier in Finance; Branch effectiveness: Delivering a high performing sales culture. (KPMG, March 2008).



- Support multi-branch formats and the ability to customize key elements linked to place/footfalls and nature of product/service requests

Leading banks around the world have used concept stores more often to test the above mentioned concepts.

Human Capital – Aligning People and Performance Management

For the planned transformation to be successful, a shift in mindset from board-level down is required. Investment dedicated to increasing the level of customer-centric behavior and empowerment to delivery high-quality service is required. Creating the right people-strategy is thus fundamental to delivering overall transformation. It is the glue that holds together all other aspects of transformation.

In India, the human capital challenge stems from a virtual freeze in recruitment by some segments of the industry. The resultant higher average age of staff imposes a significant challenge in re-skilling the staff with changes in technology and customer expectations. As part of the second phase, Indian banks will need to focus on 're-working their people strategy with a clear focus to investing in critical skills and leveraging partners for other requirements. Towards this, banks would need an action plan that includes:

- **Comprehensive reward mechanisms across both sales and service:** Reward systems are currently too focused on short-term sales targets, and are driving behaviors that do not enhance the long-term value of customers' relationships with their bank. This can produce the wrong behavior at face-to-face and direct banking customer

touch points. Reward systems urgently need to change to promote service-led experiences and advice-led sales. New performance indicators should be put in place to acknowledge the employee's role in creating good service and lead generation.

- **Structuring long-term incentives:** Staff incentives must be designed to build longer-term customer relationships and advice-led selling. The pressure to sell products against weekly targets may well prevent employees from building quality relationships based on putting customers' needs first. The rewards system should be stacked to pay-back on an annual basis and reward loyal service. Rewards should therefore be approached from a staff development perspective—and not be driven by sales. Long-term incentives may not only encourage branch staff to foster long-term relationships with customers, but could also help reduce staff churn and retain skills and experience at the branch level.
- **Reassess the employee profile:** Emergence of new entrants has led to reasonably high attrition rates driving up costs and putting in constraints on the path to an effective service culture. Most banks will need to reassess the profiles of their staff from the perspective of current and future roles. Some will need to step up recruitment to fill in visible gaps.

In short, the people strategy and related policies will need serious scrutiny and need to be supplemented with training that supports an effective service culture.

Identifying Winners:

The next couple of years will test the mettle of most Indian banks. More importantly, banks must realize that the 'easy growth' era is over and the industry is poised to undergo some fundamental shifts. Most banks could potentially be in a better shape leveraging their capabilities and resources – provided they take action now. Those who do not recognize the change and make necessary adjustments to their strategies could potentially end up as losers in the next five years.

Institutions that have started planning, making investments and decisions to combat and identify growth opportunities, both in domestic and select international markets – can lead the industry in the next wave of growth and maturity.



Karthik Balasubramanyam

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Delivering a Compelling Return on Investment from Mobile Financial Services

Mobile financial services mean different things depending on the market you are in and the customer base you are addressing. Regardless, financial institutions in any market need to understand how mobile financial services can deliver them a commercial return. It is important to work with a partner that has the experience to understand how retail banks can leverage the mobile channel for profit; and do so quickly.

For markets like North America, Europe and Australasia the mobile channel is key to improving the customer experience, reducing cost-to-serve, driving new revenue and improving retention. The mobile channel in these markets is a new way to deliver a number of existing services to the entire customer base - whether existing online or offline customers.

In developing markets, mobile financial services are transformational, where in some cases the mobile phone can be one of the only lifelines to the rest of the world. Many communities, either due to a lack of Internet access or geographical remoteness, would have to spend many hours or even days to reach a center with banking services. In these markets, online banking penetration is low and the need to provide banking services to the rural sector or under-banked is very high.

In India, there is a convergence of both sets of requirements. Indian banks

need to provide an increasingly high level of service to a mobile-enabled Indian customer with sophisticated needs due to premium handsets such as a Blackberry or an iPhone delivering an elegant presentation of fully-featured banking and payment services. At the same time, financial institutions in India are expanding their customer base and delivering on “financial inclusion” elements to the wider population.

In this context, Indian Financial Institutions, as well as leading banks around the world, need to consider the following elements:

- **Control** – Does the Financial Institution have the ability to independently control the mobile channel from a service offering and ‘look and feel’ standpoint to ensure its customers have an optimal experience without needing to involve any third parties?

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Mobile channel conversion becomes compelling when consumers can be migrated off more expensive channels to become users of mobile financial services.

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- **Bank-Centricity** – Is the bank following a strategy that has the bank as the primary stakeholder or does

the bank depend on third parties such as payment schemes or mobile network operators?

- **Mobile Payments Strategy** – Does the bank have a solid grasp of its path and direction to achieve maximum return on investment from mobile payments integrated to its wider mobile channel?
- **Universal Reach** - Does the bank understand how it will provide the mobile channel to 100% of its customers as well as increase its reach to consumers that may not be existing bank customers?
- **Channel Certainty** – Does the bank’s approach ensure certainty for both the technical implementation and maximization of customer adoption and ROI? Does the bank’s approach ensure a long roadmap for a solution that will ensure they are competitive over the long-term?

The following discusses the ROI opportunity for banks today against the backdrop of the items discussed above by focusing on quantifying the business case benefits across lowering cost to serve, increasing customer retention and m-payments revenue.

Retail Bank Channel Costs

Most retail banks already offer their customers a plethora of banking channels through which they access financial services. Each of these channels has an existing cost structure associated with



it, typically owing to its legacy technology and infrastructure costs.

- Contact Center costs vary between USD 4 – USD 10 per interaction depending on whether the consumer's call is inbound or outbound. Many consumers still leverage the bank's contact center to receive staff-assisted access to information like balance inquiries. Not only is this expensive, but the Contact Center is often ignored as a way to to sell and enrol mobile financial services to consumers (ATM costs vary between 25c and \$1.20 per transaction depending on the governance and commercial structure associated with the ATM network. Consumers continue to use ATMs for simple inquiry functions, and much of ATM transaction growth is driven by services that could easily be rendered via the mobile channel (e.g. mobile top up). (In India, transaction costs for mobile banking channels are 0.09 USD compared to USD 1.14 for branch banking, 0.46 USD for ATM, and 0.23 USD for Internet.)
- IVR costs vary between 30c and \$1.50 per transaction. Within many banks, the IVR infrastructure is expensive to maintain and cumbersome to change, making the introduction of new IVR-centric products and services unviable for many banks.
- Branch costs vary between \$1.20 and \$4 per transaction. A majority of retail banks are focused on getting their branch-based staff to focus on value-adding services, rather than providing account balance information to walk-in consumers.

The problem is that whilst banks have been investing in the implementation

of new retail channels for the last 20 years, they have largely experienced a growth in non-billable transactions, rather than a migration by consumers to cheaper channels. Many fear that history will repeat itself with the mobile channel.

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By the second year of operations, and assuming a comprehensive mobile financial services offering, banks are managing the fully-loaded costs of the mobile channel to well under \$10 per active user per annum.

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An analysis has determined that of transactions carried out in the mobile channel, 70% are new, whilst 30% are migrated. It is these migrated transactions that create an opportunity for banks to reduce their total channel costs.

Converting Offline Consumers

Many mobile banking implementations have been focused on reaching online bankers through the mobile channel. In the current retail channel mix, online banking is the lowest cost channel on a per-transaction basis. As such, it makes little economic sense to migrate consumers from online banking to the mobile channel.

Mobile channel conversion becomes compelling when consumers can be migrated off more expensive channels to become users of mobile financial services. Leveraging an offline registration

module, banks have already been successful in using the branch and contact centers as effective mechanisms to convert 'offline' consumers.

For example, on the back of a 90-second sales script delivered by bank staff at the branch and contact center, one customer has been able to convert over 40% of contacted consumers into mobile bankers (30% of inbound and 55% of outbound interactions, after a four minute enrolment process). Typically, in this context, the 'converted' have been heavy users of the contact center or IVR for account information services, and the bank in question has seen less than a 25% defection rate off the mobile channel at the completion of the enrolment process.

These findings demonstrate that for a significant segment of heavy IVR and contact center users, the mobile channel represents a sustainable and desirable way to self-serve electronically.

Channel Migration Cost Savings

- According to a US-based Gartner report published in late 2007, consumers continue to use a mix of many or most banking channels on a monthly basis. Similarly, industry analyst, Tower Group's 2008 data for US banks assigns the following channel cost structures on a per transaction basis: ATM = \$0.85 per transaction.
- Branch = \$1.18 per transaction
- IVR = \$1.25 per transaction
- Contact Center = \$3.75 per transaction

In a scenario where mobile banking is provided for free, the average



Offline Customer Channel Costs – Mobile Channel Costs = Net Profit

On average, the total net costs of the mobile channel for customers average USD8 per active consumer per annum, whilst the 'migratable' cost structures for an offline customer add up to USD 41.19 annually.

The annual net profit impact of an effectively executed mobile financial services solution within a retail bank is therefore USD 33.19.

$$\text{USD } 41.19 - \text{USD } 8.00 = \text{USD } 33.19$$

consumer makes over 100 transactions annually; at least 30 of those transactions will be migrated from alternative channels (customer data).

Assuming a typical consumer profile (50% IVR, 30% ATM, 10% Branch and 10% Contact Center), these 30 'migratable' transactions equate to an existing-channel cost structure of \$41.19.

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We have evidence that for Gen Y consumers who are active within the mobile channel, annualized retention rates increase from 85% to 94%.

.....

Mobile Channel Costs

Like all other banking channels, the mobile channel introduces its own costs. By the second year of operations, and assuming a comprehensive mobile financial services offering, banks are managing the fully-loaded costs of the mobile channel to well under \$10 per active user per annum. This is significantly less than the costs associated with other retail banking channels.

Other Compelling Commercial Benefits

From existing data, it is proven that although many banks already receive revenue fees from many of their services, the ROI measurements above ignore any new revenue that may arise from the mobile channel. Typical revenue sources through the mobile channel are focused on two areas:

1. **Value Added Services.** These are new service types that are enabled by the mobile channel, and ones which are distinct from existing channel offerings. Examples in this context include alerts, merchant offers and niche services like mobile remittances.
2. **Road to Revenue for Payments.** The mobile phone is likely to become a payment device, both for remote and proximity-based payments. Enrolling consumers in the mobile channel will facilitate the ability banks have to create mobile payment revenue streams.

Whilst some banks charge for mobile banking on a subscription or transactional basis), most industry commentators concur that charging fees for access to account information through the mobile channel may not be sustainable.

Also of note is the mounting evidence that the mobile channel is delivering banks additional and distinct commercial benefits. For example, we have evidence that for Gen Y consumers who are active within the mobile channel, annualized retention rates increase from 85% to 94%. Mobile enrolment processes have enabled banks to successfully cross-sell additional products. And, in the meantime, it is becoming common for younger consumers to evaluate the extent of a bank's mobile offering as a key criterion when selecting who they wish to bank with.



Matt Krogstad

Matt leads business development for M-Com focusing on new and existing markets; particularly North America and the Asian Sub-Continent. He has been working closely with financial institutions focusing on their mobile banking and payment strategies as well as the development of mobile financial services eco-systems since 2006. Matt also works with M-Com's partners to guide mobile strategy, customer engagement and generating ROI from the mobile channel. Matt's background is in business development and strategy gained through roles at fast-growing technology companies; focused on selling enterprise software and information technology solutions to Fortune 500 corporations.



The Financial Superstore in Indian Capital Markets

Financial superstores or one-stop shops offering a range of financial products—from loans to shares to insurance—are increasingly becoming popular in India today. This article explores the various reasons behind their development alongside the basic pre-requisites that go into a successful store, and the underlying regulatory impact.

Diversification of Services

Earlier, financial services such as banks, broking and distribution firms focused on a few core offerings such as loans, fixed deposits, equity trading services and the distribution of financial products. However, increasing competition has forced these companies to step into each others territory and offer all products under a single roof. With broking firms moving from 'execution only' to the advisory domain, banks were also compelled to offer broking services. This diversification is being led by the three pillars of the financial

industry's framework – capital, information and trust.

The increasing competition from non-bank players is forcing incumbent organizations to diversify revenue streams and offer newer products.

Key Drivers Behind the Growth of Financial Superstores:

1. Low Penetration of Capital Markets

Today, the reach of equity markets is only 7 percent in India and expected to increase to 10 percent by year 2012. This is low compared to other nations. Hence, there is huge untapped potential. (15.7 million

demat accounts as opposed to 400-500 million banking accounts).

2. Large Disposable Income

India's disposable income has increased from USD 50 billion to about USD 290 billion. However, the share of financial services in disposable income is lower (3 percent) in India vis-à-vis global standards. This is set to increase to 5 percent, an opportunity which all financial services firms naturally wish to tap into.

3. Rapid Growth in the Number of People Looking for Wealth Management/Portfolio Management

The country is witnessing increasing interest in wealth/portfolio management solutions, evidenced by the large increase in numbers of mass affluent and High-Net-Worth individuals in India.

4. Increasing Competition

The increasing competition from non-bank players is forcing incumbent organizations to diversify revenue streams and offer newer products.

Some of the Reasons why a Financial Superstore Model Would Benefit Financial Institutions are:

- 1) Ability to cross-sell a wide array of products and, as a result, increase fee-based income. India has an estimated 500 million banking accounts and only 15 million demat accounts show the extent of a cross-selling possibility

Figure 1:

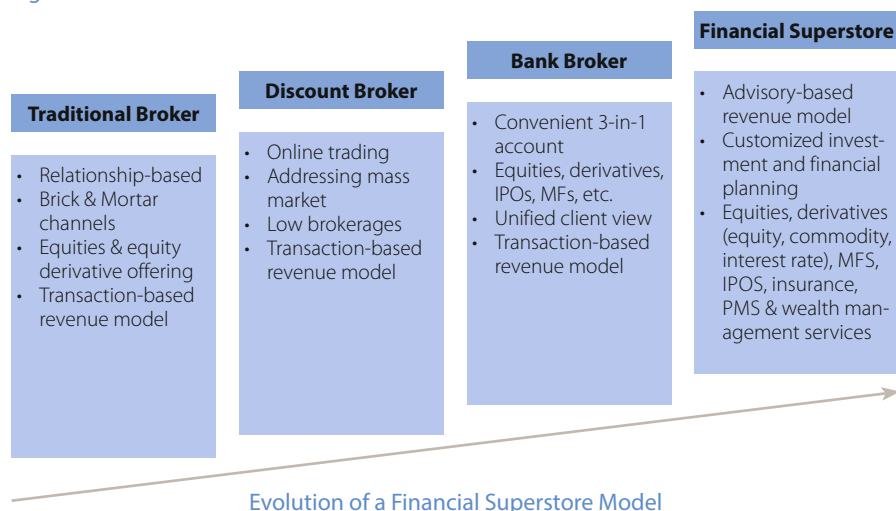
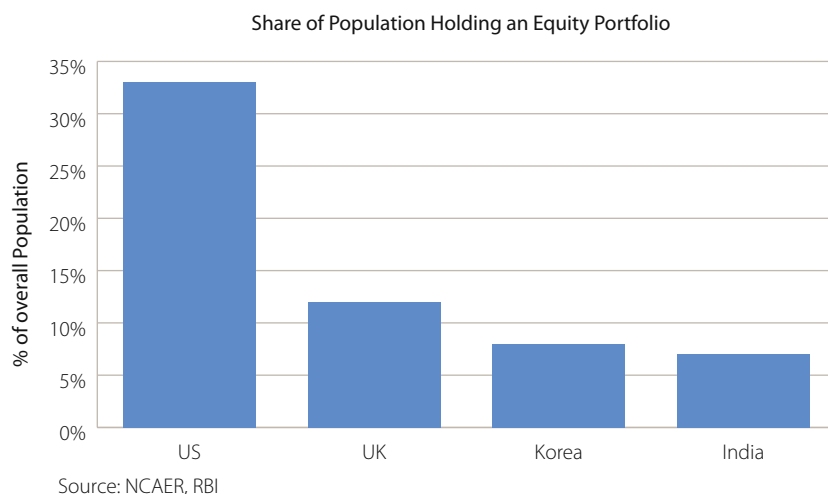




Figure 2: Reach of Equity Markets



- 2) Multiple product portfolios reduce volatility in revenues
- 3) Opportunity to enter into a meaningful, value-added, long-term relationship instead of a mere transactional relationship, thereby increasing client wallet share
- 4) Ability to leverage the huge network of branches to sell products.

A financial superstore should be based on a flexible and nimble IT infrastructure, catering to multiple product flavors, while allowing for rapid innovation.

Pre-requisites for Running a Successful Financial Superstore

A financial superstore should be based on a flexible and nimble IT infrastructure, catering to multiple product flavors, while allowing for rapid innovation. Increasing new products would imply an ability to achieve economies of scale and not merely a

corresponding increase in employee, communication or marketing costs.

Despite the apparent benefits of a financial superstore model, there are some pitfalls (as learnt from the sub-prime crisis), including:

- Greater risk - in case the financial superstore goes bust, the investor stands to lose all savings
- The investor might not receive best-of-breed products as the superstore would be interested in pushing certain products more than others because of higher commissions
- Failures of financial superstores would be a systemic risk to the financial system
- As the superstore gets bigger it would be less nimble and adaptable to the changes in the consumer preferences.

Conclusion

Given the benefits of economies of scale and the tighter regulations post the sub-prime crisis, financial stores as a viable business model will continue to be explored. Here is what Aseem

Dhru, one of the leading experts in the financial services industry in India opines:

As each financial player gains customers, the next focus is to attempt to meet as many customer needs as possible to be able to do more business across product lines.



Aseem Dhru, CEO, HDFC Securities Ltd.

Q: As services offered by banks and other financial services firms such as NBFCs and brokerages may overlap, how can these entities differentiate their offerings? Will we see more consolidation or shakeouts going forward?

Aseem Dhru: Financial services is a wide term encompassing the different needs of individuals and corporations to save, invest, borrow, transact or insure. Each player in the segment has a principal business, which determines its customer franchise. Banking is the most basic requirement. Niche needs are fulfilled by brokers and NBFCs on stock advisory, transaction and loans, respectively. As each financial player gains customers, the next focus is to attempt to meet as many customer needs as possible to be able to do more business across product lines. Some



amount of overlap is healthy but each player fulfills a particular need and can/will co-exist. In an attempt to cover all of that under one roof, increasingly, we are seeing banks establishing subsidiaries in broking and NBFC businesses.

I do not foresee any shakeout in the industry. What will emerge are a set of strong or weak players, depending on how effectively they are able to fulfill a particular customer need at the right price point and remain profitable with a lean cost structure.

.....

Brokerage businesses for one do not require too much capital unless one builds a very large loans business through an NBFC route.

.....

Q: What are the regulatory implications in setting up of a financial superstore? What kind of controls need to be in place to protect the interests of the Indian investor? Would the trend of the financial superstore come to a full circle in India, replicating the story in the USA?

Aseem Dhru: Regulators in India have performed in an outstanding manner. The excesses that we saw in the USA would not happen here as businesses are tightly regulated, Chinese-walled, with individual capital and risk management requirements. In India, financial products are primarily manufactured by banks, NBFCs and insurance companies and distributed by banks, brokerages and independent financial advisors. Under the financial superstore model, all that has been allowed of a distributor is to showcase and sell

multiple financial products; but the manufacturers, the risk takers, have to comply with stringent guidelines of capital adequacy, margining and pricing as per their independent regulators.

Q: Given the regulatory constraints for NBFCs and brokerages in tapping capital, how would they compete effectively with banks?

Aseem Dhru: Most brokerage houses and NBFCs have tapped the capital market quite successfully and have respectable networkings effectively deployed in scaling their businesses as per their business models. For companies with the right financials, a sustainable business plan and proven management, raising capital is not an issue. Banking is a business of much larger scale and hence needs more capital and effective leverage and risk management practices to deliver the sought return on equity. Brokerage businesses for one do not require too much capital unless one builds a very large loans business through an NBFC route, and yes, to that extent the banks will always have an advantage of lower cost of funds, and NBFCs therefore compete only in niche segments where they are able to obtain the right risk premium over their costs.

Q: While very popular in developed markets, Portfolio Management Services and Wealth Management Services have not picked up in India. Is the Indian investor sociologically different?

Aseem Dhru: This has to be viewed in the context that of 47% of household savings in India invested in the financial sector in India, only 3% goes into the capital market. The rest is invested in instruments with a very low risk, with

fixed deposits taking a bulk 55% of the wallet share. The mutual fund industry has also found that channeling individual savings into equity is tough. Indians are a conservative and risk averse people. Portfolio Management is a service meant only for the very top end of the market. The segment started to grow at a healthy clip, but post the market meltdown last year and severe erosion of wealth, confidence is yet to return completely. However, though Portfolio Management Service is taking its time, it shows a promising future.



Shekar Hegde

Shekar has over 10 years experience in Banking & Capital Markets with IT product vendor companies and extensive exposure to the entire trading life cycle from pre-trade to trade to clearing and settlement.



Amrita (Ghosal) Thakker

Amrita has over two years of experience in the BFSI domain. She is currently part of the Pre-sales team for TCS BαNCS Securities & Processing solution group for the past 1.5 years.



Transforming Corporate Actions Data Transfer

In the backdrop of industry harmonization initiatives such as Giovannini, the pressure on the securities industry to move from proprietary to International Organization for Standardization (ISO) has increased. Though ISO 15022 existed in this arena for a long time, there have been a number of issues in the implementation of these messages because of their complex structure, heavy implementation cost and varying interpretations by diverse market bodies.

To enable communication interoperability between financial institutions, their market infrastructures and end-user communities, ISO proposed ISO 20022, a single standardization approach (methodology, process, and repository) to be used by all financial standards initiatives. Though ISO 20022 standards have already been published to cover various aspects of communication, SWIFT is planning to create new, XML-based ISO 20022 corporate action messages by the end of 2009 and expects to make them broadly available to its members by March, 2011.

While the ISO 'newcomers' are reluctant to invest in ISO 15022, there is legitimate resistance from the current users to move to ISO 20022 considering their investments in ISO 15022. Hence, SWIFT proposed that ISO 20022 messages would co-exist with legacy MT, or ISO 15022 messages until 2013.

Current Status of ISO 15022 Corporate Action Standards:

At present, SWIFT covers the complete automation of corporate action activities between account servicer and

account owner with the help of the following messages:

MT564 – Corporate Action Notification

MT565 – Corporate Action Instruction

MT566 – Corporate Action Confirmation

MT567 – Corporate Action Status & Processing Advice

MT568 – Corporate Action Narrative

However, each message is used for various purposes by all the members. For example, MT564 is sent as a corporate action notification, reporting the eligible balance, reminder as well as the cash flow prior to the pay date. These messages include both mandatory and optional data that are subject to different interpretations by the members. Though there is a single global group dedicated to standardizing the use and interpretation of corporate event messages, there are 37 national market practice groups, 19 of which have codified guidelines published in the event interpretation grid.

In the case of the event notification message, the difference in interpretation implies that financial intermediaries will have to reconcile information repeatedly on corporate actions received from multiple sub-custodians, especially when the custodians use a free-format MT 568 that allows information to be recorded in a narrative form. In the case of faulty interpretation of MT 564 messages, firms will be less likely to use the MT 565 voting instruction.

More over, there are a number of areas which are not adequately covered by the current ISO standards such as issuer/agent's exchange of information with depositories, proxy voting, and claim processing.

ISO 20022

ISO 20022 is the latest ISO messaging standard for the financial industry developed to overcome the limitations of the currently used ISO 15022 messages. ISO 20022 makes use of Universal Modelling Language (UML) and eXtensible Mark-up Language (XML) to develop a message syntax representing business processes and underlying transactions that are flexible and not reliant on specific hardware or network. Based on a repository containing a Data Dictionary and a Business Process Catalogue, it allows users to exchange a wide range of messages within the financial industry.

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**For proxy voting,
seven companies have
verbally committed
to use eight new ISO
20022 messages.**

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ISO 20022-compliant messages for communication between issuers/issuer agents and CSDs on corporate actions and proxy votings are developed and expected to be extensively used by the single platform custody. The next stage of development in terms of corporate action messaging will be for



messages between CSDs and clients. Euroclear has already submitted the standards for review to the Standard Evaluation Group (a body created by ISO to evaluate the standards published by the members) and is likely to be recognized as ISO standards by the end of 2009.

Issuer/Agents Exchange Information with Depository

Critical to solving the processing quagmire is the automated, standardized information delivered by issuers. Euroclear SA is demanding issuer agents, or shareholder record keepers to share information on corporate action events with Euroclear Bank and its family of national depositories using ISO 20022 by 2010. Euroclear will accommodate corporate action messages via a dedicated screen-flow format, but will no longer accept faxes.

Although the issuer-agent ISO 20022 format was created by Euroclear for proprietary purposes, SWIFT has approved the usage of other members of the SWIFT network. The following is a summary of the standards and usage:

Proxy Voting

For proxy voting, seven companies have verbally committed to use eight new ISO 20022 messages, including international depository, Clearstream, custodians such as BNP Paribas, Dexia and Standard Chartered Bank, and service providers, Manifest and RiskMetrics' ISS Governance Services unit. Of the new messages, two—confirmation of meeting vote execution and meeting results—are not covered by the current SWIFT formats; the others are upgrades of existing messages for notification of meetings and voting.

The proxy voting messages, pilot-tested last year, allow financial intermediaries and market infrastructures to notify investors of corporate annual meetings, canceled meetings and entitlement to vote. Institutional investors can send intermediaries, infrastructure voting instructions and cancellations of instructions. Banks, brokerages and depositories can transmit messages to the end investors regarding their voting status with the financial intermediary as well as the corporate registrar. The following is a summary of a proxy notification message: (Refer Table)

CSD/Client Communication

Euroclear has attempted to publish the next generation XML based messages, which can be used by depositories and clients to inter-exchange the corporate action related information. These standards are still under evaluation by the Standard Evaluation Group, which

Standard	Message Usage
seev.009.001.01	Agent CA notification advice (from issuer or its agent to CSD)
seev.010.001.01	Agent CA notification cancellation request (from issuer or its agent to CSD)
seev.011.001.01	Agent CA notification status advice (from CSD to issuer or its agent)
seev.012.001.01	Agent Corporate Action Election Advice (from CSD to issuer or its agent)
seev.013.001.01	Agent Corporate Action Election Amendment Request (from CSD to issuer or its agent)
seev.014.001.01	Agent Corporate Action Election Cancellation Request (from CSD to issuer or its agent)
seev.015.001.01	Agent Corporate Action Election Status Advice (from issuer or its agent to CSD)
seev.016.001.01	Agent Corporate Action Distribution Breakdown Advice (from CSD to issuer or its agent)
seev.017.001.01	Agent Corporate Action Global Distribution Authorization Request (from CSD to issuer or its agent)
seev.018.001.01	Agent Corporate Action Global Distribution Status Advice (from issuer or its agent to CSD)
seev.019.001.01	Agent Corporate Action Movement Instruction (from issuer or its agent to CSD)
seev.020.001.01	Agent Corporate Action Movement Cancellation Request (from issuer or its agent to CSD)
seev.021.001.01	Agent Corporate Action Movement Confirmation (from CSD to issuer or its agent)
seev.022.001.01	Agent Corporate Action Movement Status Advice (from CSD to issuer or its agent)
seev.023.001.01	Agent Corporate Action Information Advice (from CSD to issuer or its agent)
seev.024.001.01	Agent Corporate Action Information Status Advice (from issuer or its agent to CSD)
seev.025.001.01	Agent Corporate Action Standing Instruction Request (from CSD to issuer or its agent)
seev.026.001.01	Agent Corporate Action Standing Instruction Cancellation Request (from CSD to issuer or its agent)
seev.027.001.01	Agent Corporate Action Standing Instruction Status Advice (from issuer or its agent to CSD)
seev.028.001.01	Agent Corporate Action Deactivation Instruction (from issuer or its agent to CSD)
seev.029.001.01	Agent Corporate Action Deactivation Cancellation Request (from issuer or its agent to CSD)
seev.030.001.01	Agent Corporate Action Deactivation Status Advice (from CSD to issuer or its agent)



Standard	Message Usage
seev.001.001.03	Meeting Notification
seev.002.001.03	Meeting Cancellation
seev.003.001.03	Meeting Entitlement Notification
seev.004.001.03	Meeting Instruction
seev.005.001.03	Meeting Instruction Cancellation Request
seev.006.001.03	Meeting Instruction Status
seev.007.001.03	Meeting Vote Confirmation
seev.008.001.03	Meeting Result Dissemination

is a body created by SWIFT to review the standards submitted by the fellow members. This group comprises various experts from 19 countries (Australia, Brazil, Canada, Switzerland, Germany, Denmark, Finland, France, England, Ireland, Japan, Luxembourg, Netherlands, Norway, Russia, SE, TR, United States & South Africa) and 8 liaison organisations: Clearstream, ECB, Euroclear, ISDA/FpML, ISITC, FISD, FPL, and SWIFT.

Migration Path from ISO15022 to 20022

Though the market has welcomed the introduction of new standards, SWIFT is facing the challenge in implementing ISO 20022 format because, on one

hand, newcomers prefer to directly move to a new format, there is a legitimate resistance from existing players to invest again in a new format. As a solution, SWIFT has suggested a co-existing period, in which both the formats of the message will co-exist at the same time. SWIFT will also publish the mapping of ISO 20022 messages into ISO15022 and vice versa to allow the users of either type of message to communicate with each other. In order to achieve this transformation, SWIFT has also proposed to limit the functionality of ISO20022 to the current scope of equivalent ISO15022 messages, where available, and synchronize the maintenance of two standards in terms of the timing and review process.

Standard	Message Usage
seev.031.001.01	Corporate Action Notification
seev.039.001.01	Corporate Action Cancellation Advice
seev.035.001.01	Corporate Action Entitlement Advice
seev.044.001.01	Corporate Action Entitlement Advice Cancellation
seev.033.001.01	Corporate Action Election Instruction
seev.034.001.01	Corporate Action Election Instruction Status Advice
seev.040.001.01	Corporate Action Election Instruction Cancellation Request
seev.041.001.01	Corporate Action Election Instruction Cancellation Request Status Advice
seev.036.001.01	Corporate Action Movement Confirmation
seev.037.001.01	Corporate Action Movement Confirmation (Reversal)
seev.034.001.01	Corporate Action Movement Status Advice
semt.015.001.01	Intra-position Advice
admi.002.001.01	Feedback Message

Market Reaction

Even though the market has welcomed the introduction of new ISO standards and believes that it would genuinely increase the STP rate, some players have raised concerns which are now being addressed by SWIFT. For example, limiting the functionality of ISO 20022 message will not allow them to fix some of the issues with ISO 15022 messages like using the same message for multiple accounts. UK has recommended that changes should not be made during the co-existing period in ISO 20022 messages and has emphasized the need to adhere to SMPG guidelines during the designing of new standards. A major French player has recommended that the timing of implementing ISO 20022 is aggressive to complete an appropriate impact analysis and testing, and SWIFT itself must identify the issues in the standards before releasing it to the markets.



Rahul Agarwal

Rahul Agarwal comes with more than 13 years of experience in the automation of corporate action activities across various industry participants. He has been involved in the automation of corporate action processing for some of the largest financial institutions across the world and has implemented the TCS BaNCS solution across all segments of financial services. He is currently working as a product manager for TCS BaNCS Corporate Actions.



It is difficult to further generalize key trends in global wholesale payments, as factors regarding those trends are determined by individual countries' economies. Although regional breakdowns are often used to look at

Developing Economies

are concentrated in Africa, Asia-Pacific, Eastern Europe and Latin America. The countries in the developing economies category tend to have low levels of industrialization and are largely absent from the global markets. Payments for their local or domestic economies are handled in-person or through local institutions, and are cash- or paper check-based. These economies tend to have very little financial infrastructure; a central bank may or may not exist. If it does, it generally provides limited centralized clearing and settlement for domestic payments, incomplete foreign exchange capabilities and inadequate cross-border settlement capabilities. In many cases, a large proportion of the population is unbanked, though mobile phone devices are fairly broadly adopted by citizens of these countries. As a result, these countries want to leverage the ubiquity of mobile phones to build payments capabilities.

The wholesale payments trends in these economies mirror consumer payments trends. These countries are concerned with building local and domestic markets and are less interested in global payments activities. Countries in this category are experiencing the development of online marketplaces with privately provided solutions for payment. Though many still lack point-of-sale terminals, they are beginning to adopt card-based payments: credit, debit and prepaid. Mobile payments are generally welcomed by the population and the governments, as they assist in overcoming the lack of financial infrastructure.

Figure 1: Sample Countries by Economic Category, 2009

Developing Economies	Emerging Economies	Advanced Economies
Argentina	Brazil	Australia/New Zealand
Bolivia	China	Canada
Chile	India	Hong Kong SAR
Columbia	Lithuania	Israel
Ecuador	Malaysia	Japan
Estonia	Mexico	Nordic Countries
Hungary	Philippines	Singapore
Indonesia	Russian Federation	South Korea
	South Africa	Switzerland
	Thailand	Taiwan Province of China
	Turkey	United States
		Western Europe

¹ IMF Emerging and Developing Economies List, World Economic Outlook Database, October 2009.

² <http://forums.imf.org/showthread.php?t=154>



Emerging Economies

Emerging economies wish to participate fully in global markets, which differentiates them from developing economies. Again, countries in this category are particularly concentrated in Asia-Pacific, with some select countries in Africa, Eastern Europe, and Latin America. These economies are in transition between being solely part of their local/domestic markets and being global players. Central banks generally exist, providing regulatory controls and centralized clearing and settlement (or at least planning to implement centralized clearing and settlement). Many local payments are still handled in-person via cash or check, but international payments can be processed through correspondent relationships and the Society for Worldwide Interbank Financial Telecommunications (SWIFT) messages.

Despite fundamental banking infrastructure, mobile devices are more commonly utilized by consumers than banking institutions. For these economies, the goal is to leap-frog technology that is widely deployed in advanced economies, for example by leveraging

the broad adoption of mobile devices. These countries have moved rapidly to electronic payment solutions, as paper check processing has never been a competency for them. Further, infrastructures that are being built are based on newly emerging standards like ISO 20022, and utilize the existing SWIFT network for global communications.

Advanced Economies

The countries in this designation are highly industrialized and well integrated into the global economy. These countries have longstanding financial infrastructures based on central banks that provide regulatory oversight, interbank and intercountry clearing and settlement, and bank liquidity if needed. Independent banks have correspondent banking relationships developed over decades of financial interaction. While these capabilities ensure cross-border payments efficacy, they also create hurdles to improving payments systems. These hurdles include prohibitive costs and perceived risks of replacing existing systems, and current technologies' inability to support new payments types.

The most proactive countries in advanced economies are generally those in which market forces and regulatory requirements are demanding change. An example is those countries of the European Union that adopted the euro as their currency and are implementing the Single Euro Payments Area, or SEPA, to unite their economies. By requiring the price for cross-border payments to be the same as for domestic payments, SEPA created a situation that heightened financial institutions' need to streamline payments processing to reduce costs. For a number of countries, domestic payments were virtually free pre-SEPA, a circumstance that drove European banks to reconsider their role in payments. For some banks, SEPA creates an opportunity to broaden their market, deepen client relationships with value-added services, and provide processing for downstream banks that opt out of pure payments processing. For others, payments may become a commodity that they out-source to other financial institutions or to third-party vendors.

A solution for streamlining payments processing is implementing a

Table A: Global Trends and Opportunities by Economy Classification

Economic Category	Trends	Opportunities
Developing Economies	Mostly unbanked population; concerned with building local and domestic markets; online marketplaces being initiated	Mobile payments; credit, debit and prepaid card payments
Emerging Economies	Transition between local/domestic markets and global markets; central banks being implemented or exist; mobile devices used more often than banking	Leverage broad mobile adoption; leap-frog legacy payments infrastructure; use global standards and SWIFT to build-out infrastructure; quick adoption of electronic payments
Advanced Economies	Eliminate or reduce redundant payments systems; interest in reducing costs and creating value-added products and services (including data analysis); increase STP of payments and provide payments status information	Payments hub deployment; automate payments processing, including exceptions handling, FX processing, repairs, etc.; utilize new technologies and standards in implementations

Source: Aite Group



payments hub. Fundamentally, payments hubs integrate payments processing, ranging from consolidation of fraud prevention, risk mitigation and regulatory compliance for all payments systems at a financial institution to complete deployment of a single, universal payments system that supports high- or low-value, same- or future-day, single- or batch-initiated, and domestic or international payments. Payments processing integration may be accomplished by replacing existing systems or by adding a middleware technology layer to handle common functions and interfaces with back-end systems. A payments hub also provides transparency into the status of payments processing to facilitate management decision-making and enhance financial institutions' relationships with clients.

A solution for streamlining payments processing is implementing a payments hub.

Another important trend for advanced economies is to electrify payments to support straight-through processing (STP). Some advanced economy countries have nearly abolished paper check payments, but many are still migrating to electronic payment methods. Clients of financial institutions perceive STP as being more than electronic payments, however; clients want financial institutions to provide the data surrounding payments to facilitate posting to clients' internal accounting systems. Further, financial institutions that successfully provide STP can realize cost savings from the elimination of manual processes. Forward-thinking financial institutions are using the payments data to provide analysis that assists their clients in making better trading-partner business decisions.

Table A outlines the global wholesale payments trends by economic category. Geographic Differences

Various regions of the world are adapting to changes in payments at differing rates and based on region-specific drivers. Although North American banks have clear opportunities for growth, the most immediate growth will be in Europe and Asia-Pacific, with the Middle East and Africa following. SEPA, the U.K. Faster Payments, STEP2, Target2 and the Payments Services Directive (PSD) all remain drivers of change in Europe. These regulatory and market demands lead financial institutions to consider dramatic changes in payments processing and systems. Europe is where most of the initial deployments of newly architected (e.g., service-oriented architecture, Web 2.0, ISO 20022, XML-based standards) systems have occurred. Over time, SEPA and the PSD could lead to significant infrastructure changes in Europe, well beyond the introduction of Pan-European Automated Clearing Houses (PE-ACHs). Banks will begin to divide into differing types:

- Client-interfacing with value-added services that outsource the actual back-office processing to a third party (potentially another bank);
- Straight-forward processing of payments from clients through to correspondent and central banks for clearing and settlement; and
- Providing the full payments spectrum of services (including value-added services) from initiation through finality of settlement, potentially including private-labeling them to other banks.

The changes wrought by European banks selecting one model over another will lead to a need for systems overhauls or replacements. Most existing systems only support straight-forward

processing of payments from clients to clearing and settlement. These systems will need to be streamlined for efficiency and low-cost processing. Those banks whose strategies focus on value-added services need to modify or replace existing systems to provide the newly required functionality.

The Asia-Pacific region is an important market for payments vendors. There is evidence that the global recession is receding more rapidly there. Asia-Pacific is a divided region in which a number of countries, such as Australia, Japan and South Korea, have advanced economies, while many others are just becoming global players. Emerging economies need financial structures and payments systems to accommodate their growth. As a result of their entry into the global economy, the size of their populations and their geographic reach, these emerging economies demand highly electrified payments services to support their volumes. Advanced economies are embracing standards and vendor-provided systems as ways to integrate with emerging economies and others globally while controlling costs.

Africa represents a similar construct to that of developing countries in Asia-Pacific. Most "banking" in African countries is done locally with cash or checks, and there is little infrastructure to support global banking. The Common Market for Eastern and Southern Africa (COMESA), still in early stages of development, is an initiative modeled after the SEPA concept: to create one economic area from the many disparate countries, which will have greater market power and opportunity for growth. Despite having less government stability than in most European countries, Africa's COMESA could ultimately lead to significant deployment of universal payments systems at African financial institutions.



Table B: Implications of Regional Differences to Wholesale Payments Trends

Region	Motivating Factor(s)	Demands	Solution
Africa	Lacks payments infrastructure; needs to establish local and domestic clearing and then connect to the global economy	Provide payments initiation and processing without building an infrastructure	Utilize hosted solutions and introduce mobile solutions for payments transactions
Asia-Pacific (Emerging Markets)	Lacks payments infrastructure; needs to strengthen local and domestic clearing and connect to the global economy	Provide payments initiation and processing without building an infrastructure	Utilize hosted solutions and introduce mobile solutions for payments transactions
Asia-Pacific (Established Markets)	Cost control and interfaces to global markets	Greater automation in cost-effective ways; stronger and easier integration of disparate systems	Utilize vendor solutions either as licensed or on-demand deployments with pre-established integration capabilities; adopt global standards for easier systems integration
Europe	SEPA creates an environment where financial institutions in many countries can no longer charge for payments, because they charge virtually nothing for domestic payments	Dramatically reduce costs for payments systems and introduce value-added services	Eliminate redundant systems and consolidate payments processing (e.g., universal payments system that handles high/low value, single/bulk, domestic/international, same-day/future-dated payments); add feature-rich capabilities such as data analysis and electronic mandates for SEPA direct debit
Latin America	Some disparity among countries, but mostly comprised of a large percentage of unbanked citizens; still largely local and domestic markets	Support the majority of unbanked citizens; build infrastructure to support cross-border clearing and settlement regionally; work toward global integration	Utilize hosted solutions and introduce mobile solutions for payments transactions; work on developing regional cross-border clearing and settlement
Middle East	Modeled after SEPA; GCC countries working toward a single payments area; companies in this region focused on global expansion; are embracing electronic payments channels	Support large number of unbanked migrant workers; build infrastructure to support a common currency and single payments area	Utilize hosted solutions and introduce mobile solutions for payments transactions; continue to embrace SWIFT capabilities
North America (United States and Canada)	U.S. — solutions to electronify clearing and settlement of paper checks is a prime initiative; Canada — more of a focus on commercial credit cards; financial institutions in both countries looking for cost savings and value-added services opportunities to improve revenues	Dramatically reduce costs for payments systems; introduce value-added services	Some of the largest financial institutions are deploying new payments platforms; most looking for iterative improvements that move their financial institution toward their IT and business strategies

Source: Aite Group



Given the amount of political unrest in the Middle East, this report addresses only those countries involved in the Gulf Cooperation Council (GCC) — Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and the United Arab Emirates. GCC countries have a substantial number of unbanked migrant workers — like other developing and emerging regions worldwide — for whom most payments have traditionally been made via cash and checks. Since these countries are large oil producers and distributors, connecting to the global economy is more important for these countries than for those without internationally desired goods. Despite being relatively late adopters of modern banking principles, the GCC is jumping the development curve and implementing newer technologies. Regional financial hubs have evolved, and ACH capabilities are being rolled out in the region. Large corporations in the region demand Internet banking services with sophisticated encryption and user authentication. These companies participate in SWIFT Member Administered Closed User Groups (MA-CUGs), use direct debits and electronic bill presentment and payment, and are looking to expand globally. The Middle East is also following the European SEPA model, and is expected to incorporate a network (e.g., GCCNet) to settle transactions between the financial institutions in the region. In addition to creating a single payments system, the GCCNet model can facilitate formation of a single interbank Islamic money-market region-wide. The Middle East will adopt SWIFT standards, including the use of international banking account numbers (IBAN). Mobile banking is another winning technology solution for banking in this region.

Latin America, similar to Africa and Asia-Pacific, has a blend of existing payments capabilities. In most countries, nearly 70% of the population is unbanked, leading to a focus on local

payments and mobile devices rather than large financial infrastructure projects. Most clearing and settlement is domestic, but cross-border transactions that need to be settled are frequently settled through the conversion of both countries' currencies to U.S. dollars. There is recent movement toward bilateral or multilateral agreements on settlement to preclude the need to use a third currency. More than half of the countries in the region have implemented real-time gross settlement systems (RTGS) for large-value and time-sensitive payments. Card payments of all types are being adopted. While generally privately owned and operated, automated clearing house (ACH) systems are authorized and regulated by central banks, and exist in about a dozen countries.

The United States continues to be the largest user of paper checks for business-to-business (B2B) payments. While check writing still dominates B2B payments origination, clearing and settlement of checks is moving to imaging technology through remote deposit capture, branch capture, ATM capture, lockbox capture, and/or check processing imaging. Further, the United States is increasingly interested in enterprise payments solutions, especially in the tier-one and tier-two bank range. In the United States many community banks avoided the financial crisis of the largest banks, and are now looking to grow their commercial offerings, which provides vendors with opportunities beyond the largest U.S. banks. Additionally, small to midsize companies are looking to U.S. community banks for additional lines of credit, increased FDIC coverage, and better service than they receive from the largest U.S. banks. It is usually the core processing vendors that support community banks. Generally these vendors need to deploy improvements to wholesale payments such as value-added services and greater STP capabilities, although

their offerings may be simpler than those of specialized payments vendors.

Table B provides a summary of the regional differences and needs of each region, in addition to how these needs can be/are being met.

Conclusion

Market forces and regulatory compliance are contributing to massive changes in payments markets in many parts of the world. Financial institutions can deal with these challenges by deploying technology to reduce their cost structure and allow for quick and easy introduction of new services.

The global wholesale payments market holds lots of promise for both financial institutions and the technology vendors that support them. Despite financial challenges, markets worldwide are in flux regarding payments processing capabilities. Emerging technologies like mobile, SOA, and Web 2.0 are facilitating vendors' responses to these payments challenges and helping financial institutions differentiate their global wholesale payments solutions from one another.



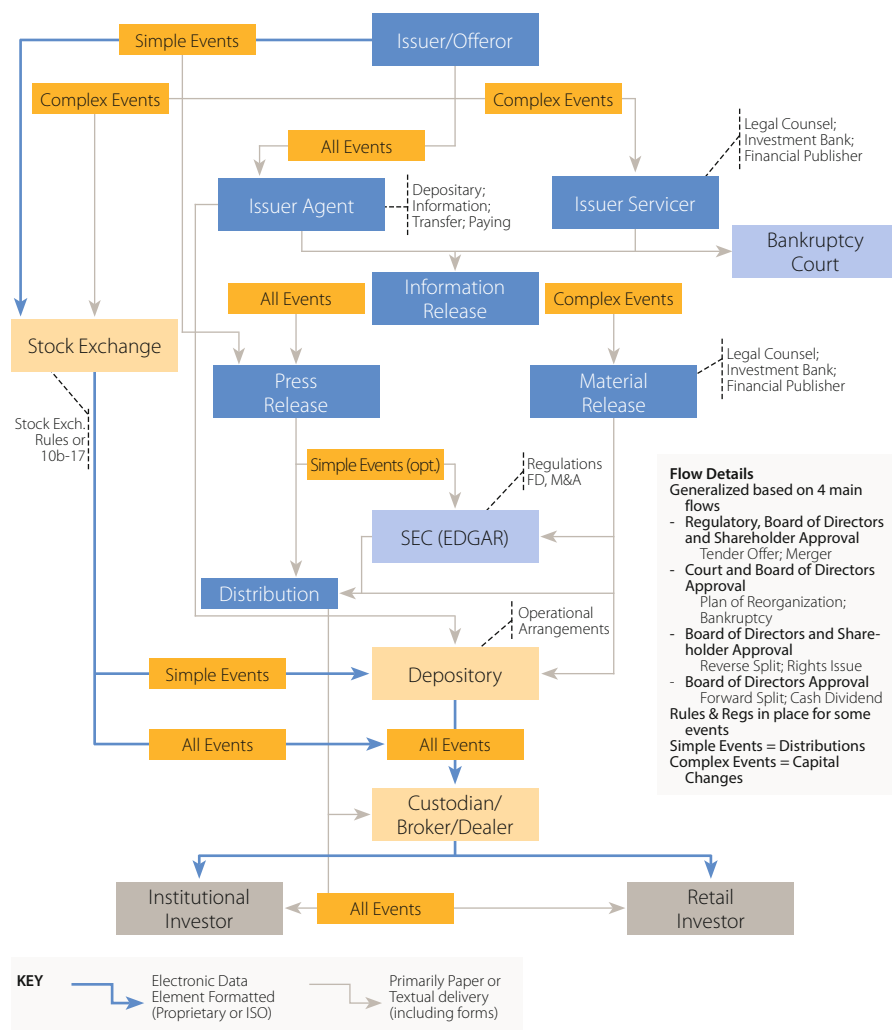
Nancy Atkinson

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Corporate Actions and XBRL – The Road Ahead



Figure 2: US Corporate Actions Flow (Source DTCC)



necessary critical information from various sources and sell it to other intermediaries. The information compiled by each data provider may differ from that of the other.

Adding to the complexities of CA processing are the volumes of CA events announced across the world, which have reportedly grown by more than 80% over the last four years. As per DTCC records, there were close to 200,000 CA events (such as dividends, bond redemptions, rights offerings and mergers) announced in 2008 in the US markets alone.

Intermediaries like custodians/sub-custodians are legally liable to process CA announcements and pass on the benefits to the investor. They purchase the prospectus/critical information required for processing the event from multiple sources and create a 'golden copy' of the event. In such a scenario, the golden copy created by one custodian may vary from the other. With every new version of the golden copy, the possibility of inaccurate information, errors in the identification of events, and delays in processing of events increase manifold.

This problem may worsen if the golden copy is manually updated as it passes through various intermediaries in the CA processing cycle.

Figure 1 shows the workflow of a CA announcement, with multiple versions of the same information as it passes through numerous intermediaries.

Accurate information for all intermediaries can be achieved only when the data standards (ISO 15022 and a soon-to-be released update ISO 20022) for information exchange are implemented and applied consistently at all levels, beginning from the most important link in the chain - the issuer. The uptake of the ISO 15022 standard is widespread among intermediaries at present, but not used by the issuers.

XBRL will enable issuers to electronically 'tag' data using off-the-shelf or open source software.

Figure 2 illustrates the flow of a CA announcement through multiple intermediaries in the CA processing chain.

As can be seen in Figure 2, the announcement flow is also dictated by whether the event is complex or not. Some events require more approvals than the others. Refer to the 'Flow Details' box in Figure 2.

The blue colored arrows indicate the use of electronic means (proprietary/ISO) to transmit data for simple events (distributions). For complex events (capital changes), information is distributed in paper as indicated by the



grey colored arrows. The entire process is extremely complicated and goes through a number of participants before it reaches its final destination, i.e., the investor. It is therefore not surprising that a solution that meets everyone's needs has been elusive.

XBRL and Corporate Actions

eXtensible Business Reporting Language (XBRL) is an application of XML to business information and uses tags to describe data, making it reusable, interactive and intelligent. It is 'extendible' and therefore can be customized for unique situations and reporting concepts.

Many markets like USA, China and Japan are adopting XBRL for the reporting of the financial statements of publicly listed companies. Another application of XBRL that is catching the attention of regulators and market participants across the world is the use of XBRL in the announcement of CA events.

For the US markets, SWIFT, DTCC and XBRL US have announced a joint initiative to promote STP of corporate

actions and address the challenges faced in corporate actions processing, using XBRL.

XBRL will enable issuers to electronically 'tag' data using off-the-shelf or open source software. All of the information that the issuer has 'tagged' or identified within their XBRL document will be 'machine readable' and can be extracted, searched on and consumed by the stock market, custodian, depository, transfer agent and, ultimately, the investor. The tagged data can also be readily transformed into an ISO 20022 message. Figure 3 shows the generic anticipated process for CA announcements.

The use of XBRL to announce a CA event is aligned to existing standards and is expected to further support the adoption of global ISO standards. The adoption of this technology will introduce precision and consistency to the announcement preparation process alongside decreased costs. Participants in the CA processing chain will continue to use the ISO message standards

and be able to tap into the automation infrastructure they have invested in.

XBRL and Corporate Actions in the US Markets

The US markets are expected to implement ISO 20022, XBRL and a unique ID in the near future. SWIFT, DTCC and XBRL US are building a CA XBRL taxonomy with data elements based on, and aligned with, the ISO 20022 repository elements.

Together, they have developed a taxonomy prototype for the data collected and distributed for a merger event. The prototype demonstrates how the CA process can be streamlined and made more effective through the use of XBRL. The prototype contains around 80 core elements that describe a merger, e.g., effective date, number of shares to be issued, among others.

This initial prototype will be expanded to cover all corporate action types, including approximately 55 events such as tender offer, dividend announcement and stock split. Each 'event' will have about 100-10 underlying elements, depending on the complexity of the event. They are expected to contain approximately 200 core elements. Figure 4 shows the anticipated CA processing flow in the US markets.

Once the taxonomy is completed, issuers (or their agents) will be able to create their press releases, prospectus or letter of transmittal in XBRL format, clearly indicating the market, event and security type, including other critical information for the CA event. As the taxonomy is developed following the ISO 20022 standard, the information will be made available in a familiar format to all users.

Figure 3: Anticipated Corporate Actions Announcements Process

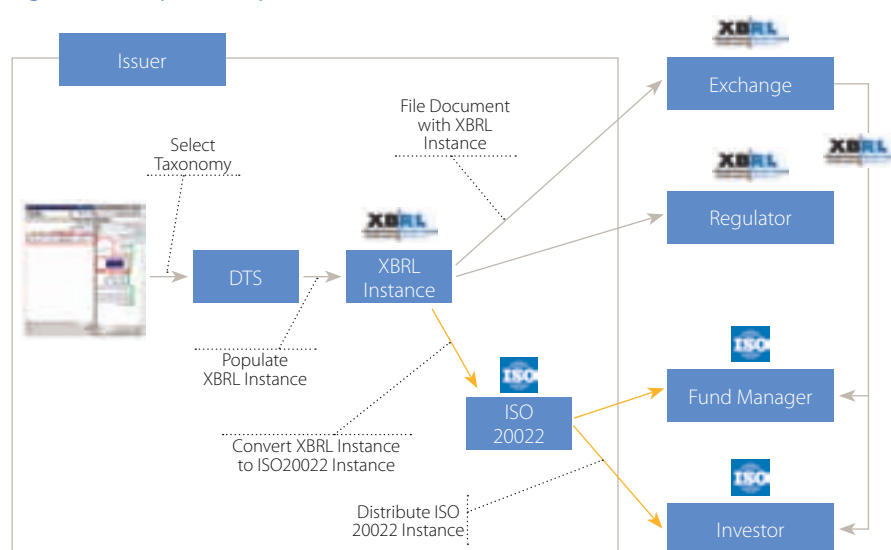
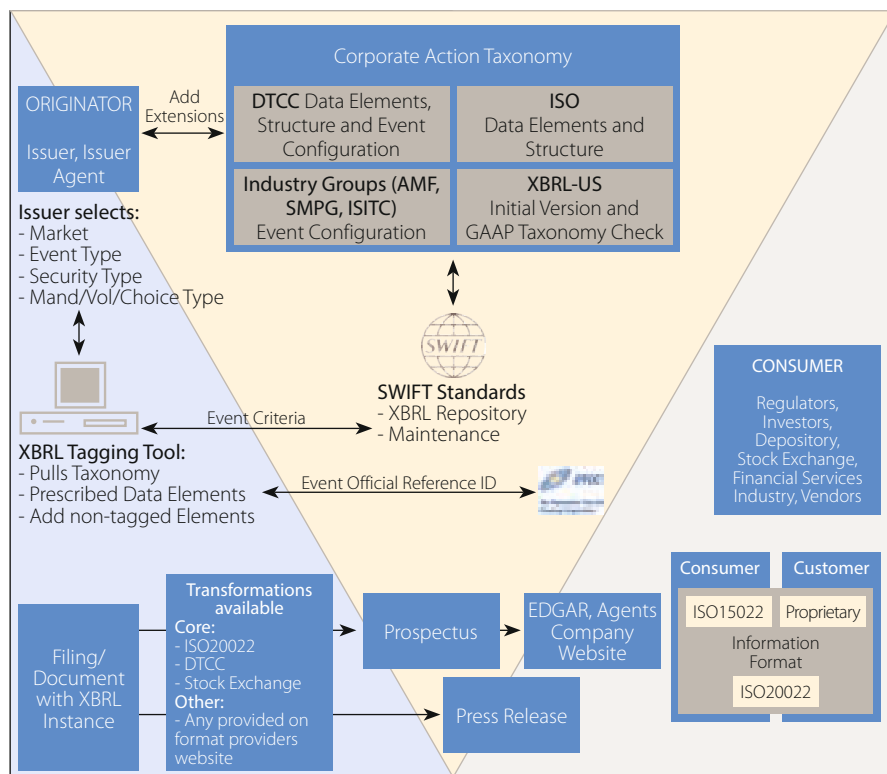




Figure 4: Future Corporate Actions Processing (Source XBRL US)



In addition, the CA process will include the tagging of the CA announcement with a 'unique ID', which will explicitly label the event thus eliminating ambiguity in the identification of an event between parties. DTCC speaks about implementing a registration process that issues the unique ID and works seamlessly with XBRL. All corporate action announcements published from DTCC will be made available in ISO 20022 formats, starting in 2010. All existing legacy publication files will ultimately be decommissioned (anticipated not later than 2015), converting DTCC participants and clients to ISO 20022 for these communications.

As part of another regulation, all US companies will have to file their quarterly/annual financial statements with SEC using XBRL by 2011. Issuer enthusiasm for XBRL has always been tepid at best. Many corporations see it as a

regulatory effort, and are only embracing the technology because of the regulatory pressure from SEC.

Once the issuers comply with the 2011 deadline for the financial statements, it is likely that the usage of XBRL for CA announcements will also be taken up by issuers as they will then have trained manpower and infrastructure to support the same.

Anticipated Challenges

Some of the challenges seen in the implementation of XBRL in the CA announcements are:

- timeframes for the migration to XBRL and ISO 20022
- difficulty in getting the issuers to be involved in the process
- the creation of an extensive, clear and accurate taxonomy.

Unambiguous taxonomy open to different interpretations will help define sanctity, proper validation and interpretation of data

- security of data on the new platform

The Road Ahead

Correcting the problem at the announcement stage is the right approach to the non standard announcements issue. It will improve efficiencies in downstream CA processing while reducing operational risk remarkably. The usage of XBRL to announce a CA event provides the industry with a tremendous opportunity to improve CA processing.

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Banking on Wealth

Consider this.

By 2013, Asia-Pacific is expected to overtake North America as the largest region for HNW financial wealth.

The way forward for wealth management firms rides on their capacity to restore client trust and confidence.

Two statements that hold a lot of promise.

Evidence proves that the wealth management industry in APAC is emerging into a massive opportunity. However, with a fragmented market consisting of financial advisors, insurance companies, banks and other financial institutions, who will gain a larger share of the pie? This article delves particularly into the banking sector, offering a perspective on how banks can improve their services and tap into these opportunities.

Although a conservative atmosphere prevails in the financial services industry in the wake of the recent global economic downturn, there are signs of investors moving from safeguarding their portfolios to actively managing and growing it. Likewise, players in the wealth management space are responding in the form of increased momentum towards more sophisticated customer segmentation, products and services and delivery channels. We are also seeing the emergence of banks as key players in this field. Globally, wealth management revenues are expected to clock about 35 percent of the revenues of full service financial

services institutions by 2012 (Celent). Services offered to investor segments are also morphing and blending into each other, with the industry witnessing convergence across the mass market, HNW, ultra-HNW and mass affluent segments. Firms, in an effort to differentiate offerings, are turning to Islamic finance, structured products and the like. They are also grappling with the challenges of a comprehensive technology enabling solution—one that includes understanding their clients financial planning needs, advising, managing, executing, monitoring and reviewing financial portfolios. They expect their WM solution to offer layered services to multiple client segments with a view to improving advisor productivity and profitability.

In India, wealth management is evolving along with a positive regulatory environment, changing demographics and incomes.

Wealth Management – An Indian Riches Story

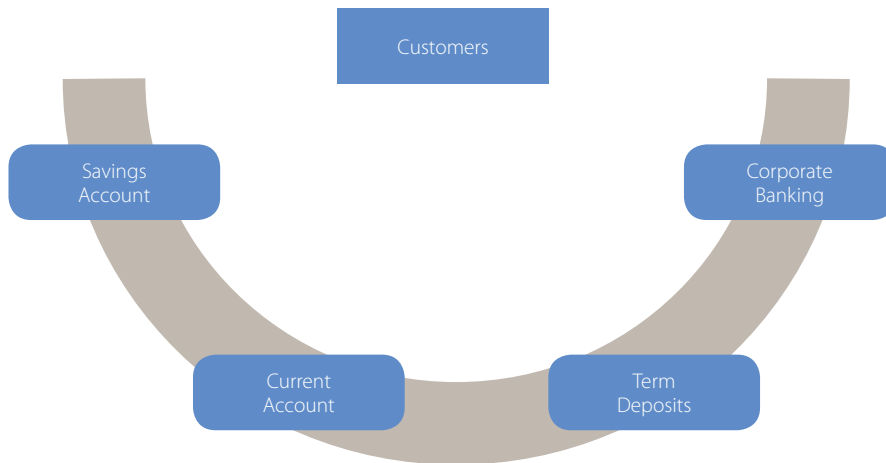
In India, wealth management is evolving along with a positive regulatory environment, changing demographics and incomes. Financial services institutions now offer a wider range of product portfolios targeted at wealthy customers in the form of investments

in art, structured finance, and retirement insurance. They are enlarging their footprint by collaborating with the Indian postal network and offering smart kiosk services. Another area that is witnessing increasing significance is the distribution of solutions as part of the overall wealth management value chain. The most powerful offering for a bank offering wealth management services would be to offer integrated financial planning and monitoring.

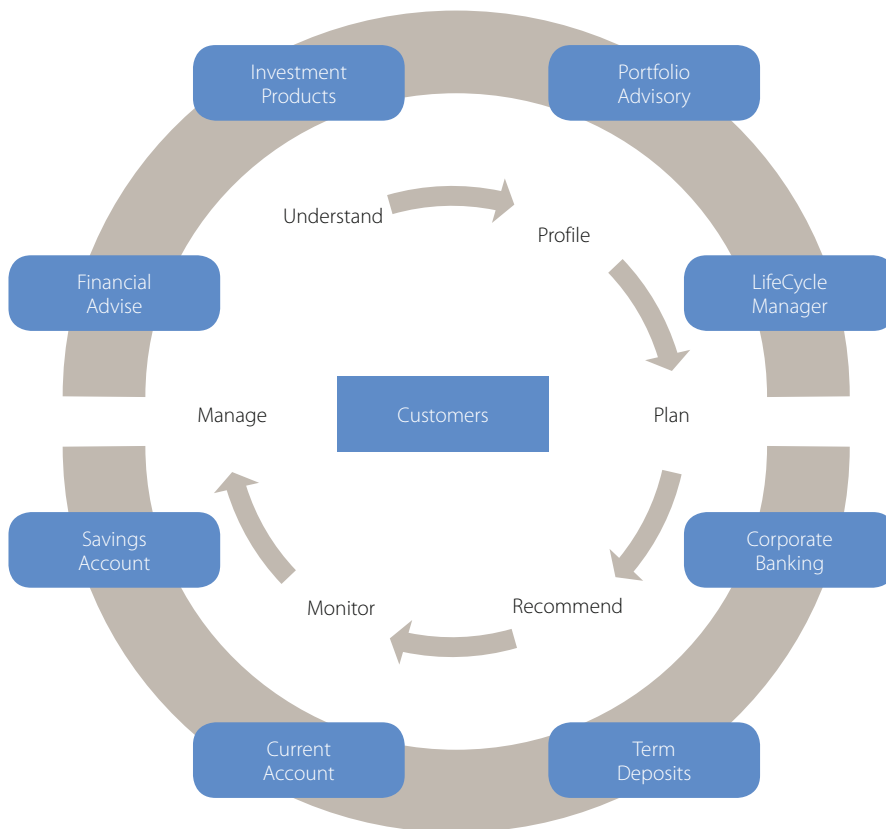
The Indian wealth management segment comprises private banking practices and independent brokers and advisors. Financial objectives of customer segments vary depending on their categorization into Ultra-HNW, HNW, mass affluent and mass market. And, services demanded range from succession planning and capital deployment at the higher end to insurance and taxation at the lower end, with the mass market and mass affluent being the most attractive segments for wealth managers. Sensing this trend, most financial institutions are widening their network and looking at web-based service offerings, and new products and service lines. Foreign institutions are merging with Indian partners to mine these opportunities in the market. Amidst all this, where do traditional banks stand? Are they tapping into this space effectively? More importantly, are they equipping themselves with the right applications and technology to deliver the right kind of services to the right kind of customer in an agile environment?



Existing Scenario - Wealth Management in India



The Future Situation



Long-Term Trends in the Wealth Management Space

The WM space is witnessing product evolution in the form of innovative solutions in asset optimization, fixed income, commodity derivatives, and

real estate, among others, which will act as key differentiators for providers. HNW clients are demanding institutional products and services while there is a shift to fee-wrap revenue models as transaction-based revenues

erode. There are demands for global interoperability and easy connectivity among players alongside operational cost consciousness.

Banks as a One-Stop Shop for Wealth Management Services

Banks tend to provide services related to mutual fund investments, insurance and advisory services to a very select investor segment (HNI). These advisory services are offered through a 'feet on street' model of advisors/relationship managers. Providers tend to adopt varied business models when approaching wealth management.

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In its simplest form, the wealth management service is offered through dedicated departments within the bank to a select customer segment, and is often a niche offering but with limited reach.
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In its simplest form, the wealth management service is offered through dedicated departments within the bank to a select customer segment, and is often a niche offering but with limited reach. Financial planning service models on the other hand are disbursed by relationship managers as a part of the sales process and through a customer internet portal. The third model followed is the investment advisory services route, a sales-oriented service offering investment and insurance products to existing and new customers through a branch network.



If banks have to make a success of managing the investment-lifecycle of their customers, they would have to deepen customer relationships, understand customer goals and create tailor-made plans for each customer, while also empowering the client with tools and the knowledge to monitor and track their investment portfolios. Some of the challenges they currently face are related to:

- Banks being seen as pushing products to improve their fee-based income
- High turnover of relationship managers/advisors leading to customer dissatisfaction (due to lack of continuity of advice)
- Unskilled/untrained relationship managers
- Lack of consistent and scalable WM offerings and services

For banks to be profitable, their wealth management solution has to be comprehensive, scalable and customizable to the unique demands from multiple customer segments. Segmentation would be critical to delivering a unique value proposition and offering multiple service models through web-enabled access and personal advisory channels, among others. A wealth management solution should ideally be:

- Comprehensive – the solution should help the bank support the entire wealth management value chain beginning from converting a prospect to a customer, understanding their financial profiles, carrying out a risk assessment and need analysis, planning for their financial goals, and last but not the least managing their portfolio.

- Scalable –The solution should be highly scalable to manage increasing volumes of business without affecting existing business model processes
- Process-oriented – the solution should be one that imbibes global best practices from financial planning and wealth management. While this would definitely bring credibility to the bank's wealth management services, it will manage and control the process followed by its relationship managers, ensuring that customers receive consistent advice at all times
- Integration-friendly– Banks today are sitting on a large amount of customer data. It would be very crucial for the bank to be able to query and analyze customer information to create new business opportunities. This will depend on the capability to integrate the wealth management solution with the bank's existing applications
- Advisor-friendly – the solution should be intuitive and easy to use so that the advisor is able to offer services with minimal training. The advisor should be able to effortlessly set up client reviews and carry out financial planning, and monitor and review portfolios and report to the client.
- Customer-centric – Customers are increasingly demanding more transparency and active participation in the wealth management process by way of access to their portfolios. The ability of the bank to design and extend wealth management tools to its customers through an online services model will go a long way in deepening and growing client relationships

A solution which automates the wealth management value chain process, and is intuitive and easy to use will improve advisor productivity and new customer acquisition.

A price-discriminated set of offerings, standardized processes, and unbiased advisory services built on in-depth research are some of the areas banks will have to explore. Integration in the form of a holistic view of all investment and non-investment products alongside external aggregation features, multi-asset platforms, advisor workstations, and the use of BPM and SOA tools for agile and open architectures are what will make for a future-proof wealth management offering.



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Is the Future of Retail Banking 'Picture' Perfect?

Retail banking is arguably the biggest profit pool within the banking sector. The underlying customer base represents one of the most dissatisfied segments owing to myriad of reasons. This has opened up possibilities of 'defining' and 'serving' the market differently. The contours of this change and a section of possible paths that banks could attempt to retain franchise are detailed in this article.

What is Changing?

The Customer

- **I and We:** Retail banking largely operates on a one-to-one relationship between the bank and the customer (1:1 cardinality). Today, there is a sense of 'individualism' (I, me, myself) and 'belongingness' (collectively defined as 'communities') among the customers, and this has changed the relationship implicitly to one-to-many (bank to community that the customers belong to). This change has an impact on all aspects of the value sought from financial services across solutions, selection and delivery. In essence, banks need to fulfill individual and community affiliations with financial and/or access implications.
- **Need to save:** Customers across markets are under stress. Getting a bigger bang for the buck has never been more important. This has provided sufficient impetus for customers to look around and leverage communities to realize a good deal/offer.

- **Monolog to dialog:** The understanding of 'banking' among customers has increased manifold over the last two decades, and banks can no longer push what they want. This has paved the way for banking that is built on a dialog-based relationship.

Transformation of the information handling model has created downstream changes in the 'what' and 'who' aspects of the fulfillment dimensions within the boundaries of a bank.

The Bank

- **Custody of transactions Vs. Custody of customer:** Retail banking, at its core, is about managing two levers: customer (relationship) management and risk management. During the last couple of decades, growth pressures have transformed banks into transaction processing machines with most customer-facing initiatives structured to either save costs, or generate sales, or a combination of both. While banks were busy processing transactions and paper, focused competition has taken on a more customer-centric approach. Banks were always in a 'two-sided market' wherein banks matched two sides

of a deal (savers and borrowers) and made net interest margins or transaction fees or both. Ironically, the same 'marketplace' approach has been reconceived and redefined by a few non-bank players by 'involving' the customer. Increasingly, such players are creeping in as a layer between the bank and the customer across countries. In certain countries, banks are bidding to win deposits clearly signaling that 'someone else' is now the 'custodian of the customer.'

- **The information and fulfillment paradigms:** Banks, typically, had access to information (identity and credit) and a steady influx of customers. Leveraging this feature, banks structured products and linked processing units, which were then centralized into SSCs and/or outsourced. These processes have transcended their mere fulfillment nature and are now considered as an integral part of the banking value chain. This value chain is set to be redefined as access to this information is no more restricted to banks alone. A few players, including credit bureaus, are leveraging this information to provide services such as account opening and funding by bundling authentication, money transmission, processing and IT services capabilities. Transformation of the information handling model has created downstream changes in the 'what' and 'who' aspects of the fulfillment dimensions within the



boundaries of a bank. Traditional wisdom of what is done within the bank has been structured in the first place due to 'institutional voids²'. Notwithstanding the residual risk of 'passing-out' the ownership of customer, similar fulfillment and associated enablers are now dispensable. The second wave implications of this paradigm for banking could be to enable sourcing based on requirements across information and fulfillment. This can be viewed as 'Just In Time (JIT) for financial services' and could have as profound and far-reaching implications as JIT had for manufacturing.

The Competition

- **Competitors galore:** While there is enough ink on this subject, a 'balance-sheet' view of 'who impacts what' may provide a deeper insight.
 - **Fund business:** The marketplace approach of 'P2P services providers' could snatch away 'the custodian of customer' function from banks. Most P2P service providers have 'back-to-back' arrangements with traditional banks for account handling, information presentment and transaction processing. Increasingly, banks own transactions and not customers. This is a clear route to commoditization and a lower share of the profit pool.
 - **Fee business:** Adjacent players from mobile/telecom, authentication and money transmission businesses when viewed together can greatly impact two inter-connected loops of transaction fees and information presentment.

- **Information:** Information-oriented players such as credit bureaus, comparison and benchmarking service providers can propel banks disintermediation even further. Alliances with P2P and adjacent players can potentially form formidable competition.

Retail banking, at its core, is about managing two levers: customer (relationship) management and risk management.

- **Clean(er) slate advantage of newer/smaller banks:** This advantage cannot be underestimated. Newer and smaller players have lesser inheritance (baggage) and transitioning to a newer/leaner 'to-be' model is much easier. While the crisis has humbled giants, it has also provided a chance for smaller banks to take a bigger shot at the market/franchise.
- **Transition from monolog to dialog:** A cursory review of leading non-bank service providers demonstrates 'design principles' adopted to engage customers at a more personal and relevant manner. Some of the key principles are:
 - **Speak the customer's language:** Some the key themes include keeping it simple, using limited jargon in all forms of communication, and common views³ of UI (e.g. internet banking) for bank staff and customers for easier interaction.

- **Focus on disintermediation:** 'Keeping the bank out' is a persistent message with the articulation of resultant and relevant benefits of lower funding rates and transaction fees.
- **Demand orientation:** Examples include transition from canned products (classic supply thinking) and standard documentation to product structuring and drafting documentation leading to a 'co-creation'⁴ basis for customer interaction and engagement.
- **Value chain engagement:** Most P2P players also provide for lending to specified borrowers rather than the traditional 'black-box' approach of the bank doing the lending, thus lowering opacity to unprecedented levels. The corollary being lower bank/P2P staff effort, which translates to lower fulfillment costs ultimately resulting in lower transaction costs for customers.

Are Banks Defenseless?

From the above, answers to the questions 'who is a banker?' and 'what a bank should and can do?' are clear. These dimensions could alter banking as it is known and understood today. However, the changes indicated above are 'lead indicators' and 'first wave effects' of technology and information-driven possibilities. While there are many starts, critical mass has not yet shifted away from banks. Also, a few P2P players have had to face regulatory headwinds. Nevertheless, profound changes have been triggered. Regulatory bodies have avowed that regulation and licensing will be easier going forward. Banks are not without



defense. The most potent defense for banks arises out of capital strength, learning from handling growth/complexity, availability of technology and licenses (leading to network/reach) to operate, respectively. In fact, banks can even ride the wave by understanding these changes and adopting a suitable mix of paths.

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Brush Strokes for a Perfect Picture

The following are some of the strategic solution paths that could aid banks in adapting to the evolving landscape of retail banking:

- **Gateway/network and not destination:** Banks are denominators of 'financial 'activity' and therein have developed a sense of destination within their existence. This has translated into 'custody of transactions' mindset. With competition rising, a 'gateway/network' approach will help regain lost ground. A gateway helps users realize more value than when users act on their own. Banks will need to evaluate delivering value propositions that ease customers' pain-points directly or indirectly. E-vaults and identity assurance for city administration are

some of the preliminary initiatives in this direction. Value propositions can be adjacent as well, but beyond the traditional forward integration approaches. One of the foundation blocks for this approach would be to realign from demographics to communities when attempting revised market segmentation.

- **Transition to core-competence:** The availability of 'first wave' technology over the last couple of decades provided the impetus to manage growth and differentiation, with banks promptly lapping up these possibilities. Technology capabilities were differentiators and banks strengthened technology investments and organizations.

As profit pools move and institutional voids evaporate, investments in first wave technology can now be viewed as 'backward integration', with all their limitations to absorb investment while providing limited continued differentiation. While technology will remain a differentiator, banks however will need to transition to the next level of backward integration from 'transaction technology' to 'customer engagement technology', subject to regulation as it evolves from time to time. This transition is evident in an adjacent service industry. A global chain of hotels⁵ now only possesses less than 1% of hotels under its direct management and the remaining are managed under the franchise model. The chain has retained only the branding and reservations processes with itself, the key differentiating competencies or 'customer engagement technology'. While it would be early to replicate the

model in full in a banking context, banks are pursuing three leading paths, rather implicitly, that have 'service' as a common denominator - Managed services (Business operations & IT), Service-Oriented architecture (IT) and Software as a Service (IT). These three 'services' when considered together, have a dramatic impact on the operating and delivery model and thus pave way for transitioning from the first level of backward integration.

- **Innovation programs to aid transition:** Banks are implementing various change and transformation programs under the umbrella of innovation. Largely, two models are being attempted with distinct focus: internal and external. Internal programs, as the name suggests, are aimed at transformation of as-is technology, processes and people to deliver the desired levels of service. Also, typically, this model is aimed at serving 'as-is' customer groups. The external model aims to address people, which may include customers at an 'interest' level based on communities; e.g., social cause, sports, among others. While following either of these models will result in an 'old bank/new bank' type of dichotomy, a blended approach appears best.
- **Re-thinking 'standard' practices:** Most practices, including the ones related to business models, are considered as given. Cross subsidies and pay-off models are considered standard in pricing. Canned services are standard in product definitions and offerings. Instances of re-thinking are evident in different but related finance models. In



microfinance, a model of charging depositors for safe-keeping of money, christened as 'Pay to save'⁶ is radically different from the typical pay-off of paying interest to depositors. Of course, revenue and profit models will depend on working the 'two-sided' business model and compliance to regulatory directives in pricing.

- **Transpose from supply to demand:** A universal approach is, sometimes, summarized as a 'one size fits all' approach. When the solution paths suggested above are attempted in an integrated manner, the business and operating models would transpose, leading to a new definition of a Universal Bank - 'All sizes fit one'. In as much as it seems like a jugglery of words, it is a transition from a supply mindset to a demand mindset. Figuratively, the Universal Bank could look like a 'T': The horizontal line referring to value proposition bundles (cuisine) and the vertical line referring to the delivery mechanism (common kitchen), with limited levels of backward integration.

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Two models are being attempted with distinct focus: internal and external. Internal programs, as the name suggests, are aimed at transformation of as-is technology, processes and people to deliver the desired levels of service.

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- **People:** Employee management to enable 'gateway', 'core

competencies' and 'demand thinking' will be the single most factor apart from the strategy itself. Fostering employee engagement to go beyond traditional job descriptions and short term targets will become an imperative. The challenge for banks is to transition decisioning that was hitherto concentrated at defined centers to the customer touch points or nodes. A key issue in this alignment process, among other things, is to have the best people facing customers and not tucked away in back-office debris.

Integrated approach vs. piece-meal: The scale of transition required to realize the 'to-be' approach will need an integrated method across initiatives and people management. A common framework that guides, measures and ties stakeholders together can help lower the risks in the realization of the target state.

Conclusion

The common thread across the solution paths suggested above is that there is a need to pursue 'direction before details'. The need to chart a new course is evident. While the picture may sit pretty in the short-to-medium term, the changes in its frame are far too significant to ensure continued comfort. A customized mix of suggested solution paths, among others, may help banks prepare for the evolving view of the industry.

References/Suggested Reading:

- ¹ Thomas Eisenmann, Geoffrey Parker and Marshall W. Van Alstyne, 'Strategies for Two-sided Markets', Harvard Business Review, October 2006.

- ² The term 'institutional voids' was originally coined by Tarun Khanna and Krishna G. Palepu in their seminal HBR article "Why Focused Strategies May Be Wrong for Emerging Markets", in a similar sense but in a different context. Within the scope of this article, the term refers to the lack of viable alternate entities/organizations who could deliver similar services resulting in banks 'doing it themselves'.
- ³ Leading banks have attempted this and are at varying levels of realization.
- ⁴ Similar customer engagement objectives are sometimes informally referred to as the 'Ikea of Banking'
- ⁵ 'Outsourcing as you sleep', The Economist, February 19th, 2009.
- ⁶ 'Smooth Operators', The Economist, May 14th, 2009.



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Enterprise-Wide Anti-Money Laundering and KYC Initiatives

Every financial institution is charged with the responsibility of developing policies and procedures to combat money laundering, which includes the duty to be aware of trends and adaptations in the methods by which money laundering is carried out.

Across the world, money laundering legislation has gone through several transformations, mandating that financial institutions establish a well-defined AML (Anti-Money Laundering) program within their organizations. The objective being to identify the risks arising from both, new and existing customers besides their relationships, and to monitor all transactions to detect suspicious activity.

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As an immediate response to money laundering legislations, financial institutions across the globe have implemented a tactical KYC (Know Your Customer) and AML program to safeguard their exposure, regulatory, constituent and competition related risks.

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As an immediate response to money laundering legislations, financial

institutions across the globe have implemented a tactical KYC (Know Your Customer) and AML program to safeguard their exposure, regulatory, constituent and competition-related risks. Although these programs have helped financial institutions to meet the regulatory requirements, there are several other challenges such as the capability of the existing AML system to detect fraudulent transactions at the enterprise-level, including processes not in line with risk mitigation. Further, such responses also include:

- Establishing a single view of the financial institution enterprise/risk across Lines of Business (LOB)
- Establishing a single view of customer risk, product usage, ratio of alert patterns vs transactions, across LOBs
- Eliminating existing manual processes that reduce efficiency
- Inability to view the risks associated with customer/types of alerts/severity of alerts at an enterprise level
- Inability to consider risks associated with customer, type of transaction and channel across various LOBs
- Inability to apply risk-based transaction surveillance at the enterprise level.

Building Blocks for an Enterprise-Wide AML and KYC Initiative

Reusability of data – Financial institutions need to mine customer, account

and transaction data alongside the respective severity of risk across lines of business to detect behavior deviation. Having reusable data will enable better scalability and flexibility to use components that are relevant to a particular LOB, geography, and for regulatory reporting.

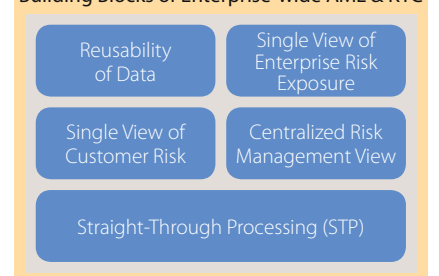
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The most efficient way to uncover a money laundering scenario at the enterprise level is to adopt a system that is capable of accessing and correlating the risk associated with customer transactions across different LOBs within a financial institution.

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A single view of enterprise risk exposure – This includes the capability to

Building Blocks of Enterprise-wide AML & KYC





provide a holistic view of critical lines of business at an enterprise level (360-degree view of enterprise risk exposure) to access the type of alert, risk associated with the customer and severity of the alert (high, low, medium or any user-defined bands) in comparison with each of the LOBs within a firm. The most efficient way to uncover a money laundering scenario at the enterprise level is to adopt a system that is capable of accessing and correlating the risk associated with customer transactions across different LOBs within a financial institution.

A single view of customer risk -

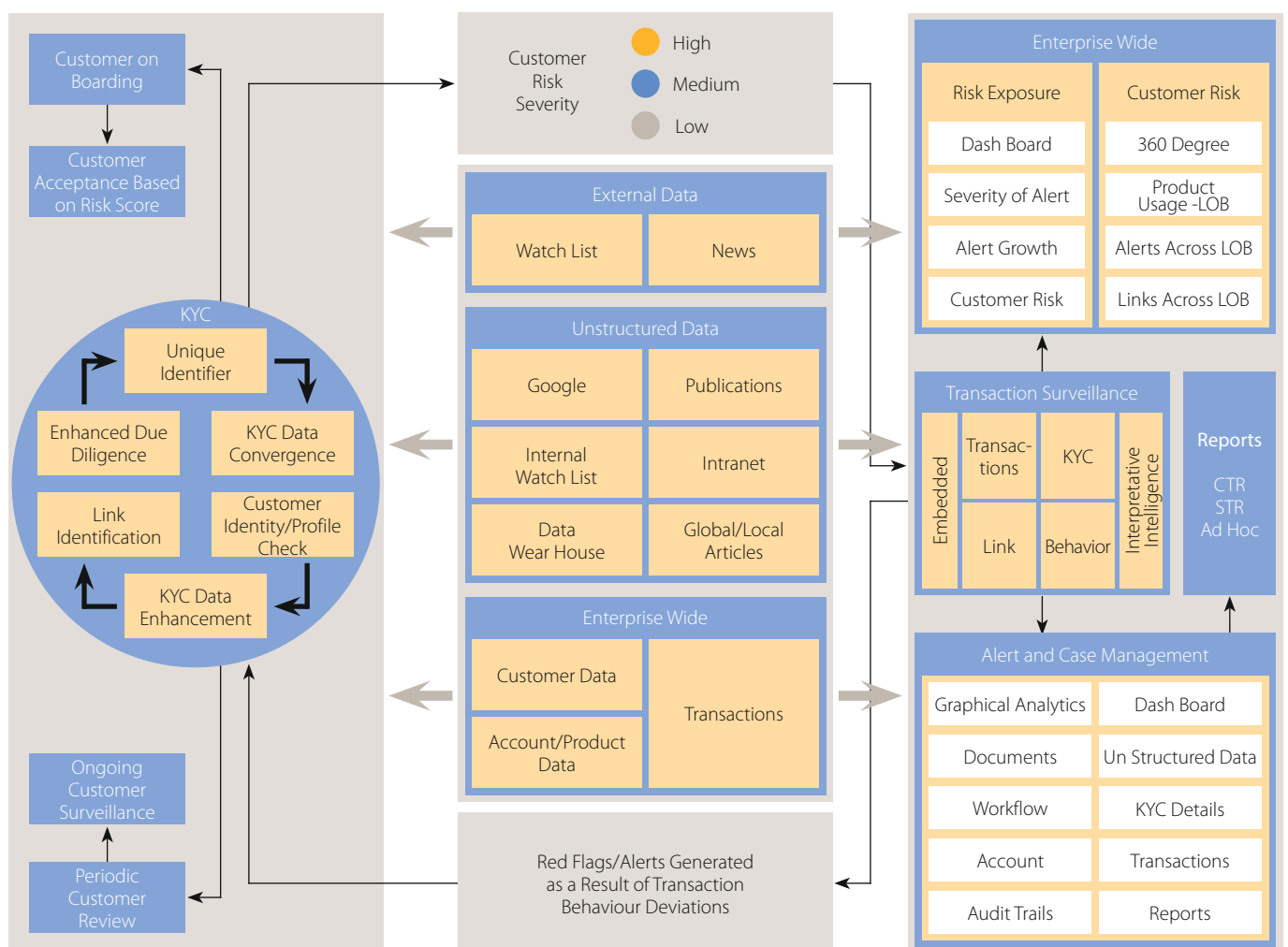
Having a 360-degree view of the customer allows the institution to view customer risks at multiple levels based on demography, geography, external rating, credit risk rating, and transactions. Customers can hold numerous accounts across different LOBs and hence, a 360-degree view will have to cover the customer transaction patterns across various LOBs, KYCs, unstructured data (gathered as part of market research/reports from the media), behavior deviation (In isolation with peers and also with own historical transactions), and alert ratio

across different LOBs. Thus, enabling the financial institution to establish enhanced due diligence to meet the objectives of the AML program.

Centralized risk management view –

To establish a consolidated view of risk across various LOBs for effective KYC and transaction surveillance, financial institutions need to focus on having a centralized risk management system. Some of the key drivers of this system include:

- Centralization of name matching (watch list scanning)





Enterprise-wide data shared by many applications:

A unique transaction DNA for each customer offers multiple benefits, including:

- Elimination of the duplicate storage of customer data
- Availability of customer and transaction data across different business lines. Elimination of reconciliation needs for static and dynamic risk computation across multiple LOBs

Enrichment of transaction surveillance

Applying interpretive intelligence and transaction surveillance results in key benefits: 360-degree view of the enterprise wide AML risk exposure

- Establishment of AML risks associated with different LOBs
- Detection of risk severity of each and every business lines of an enterprise
- 360 degree view of customer risk exposure (Considering transactions across all LOBs within an enterprise)
- Accommodating customer risks as an input to transaction monitoring to refine alerts
- Accommodating transaction behavior alerts risk as an input to the customer KYC risk to assess global risks of customers

analytics spanning LOBs and accessed from a single window.

Straight-Through Processing (STP) –

STP should aim at addressing the key pain areas such as KYC, required documentation, integration with document management system, and with transaction processing systems to block/freeze the transactions, which appear to be fraudulent in nature. However, exceptions can be flagged for manual review. STP ensures that all relevant customer, accounts, transaction and investigation data are captured/reviewed at each stage, reducing the risk of incomplete data. Based on the workflow, STP also enables efficient transmission of red flags/alerts within the compliance team.



- Deployment of centralized watch lists to eliminate risks associated with different LOBs
- Consistency and coherence in arriving at the risk score (based on KYC, product used and transaction) across various LOBs
- Consistent KYC processes applied at the enterprise level in association with the severity of the product/accounts and transactions
- Single view of customer transaction patterns, behavior deviation, linked customers, ratio of alerts v/s transactions made available based on the credentials of the compliance user
- Establish a single view access to history of investigations on existing customers

To establish a consolidated view of risk across various LOBs for effective KYC and transaction surveillance, financial institutions need to focus on having a centralized risk management system.

- Improved correlation capabilities, which further publish customer risk



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Risk Management: An Introduction to Value at Risk (VaR)

Value at Risk (VaR), used extensively by bankers, regulators, treasurers, investors and boards of corporations to understand, measure and analyze risk, has been the corner stone of the risk management practice for a long time. Earlier, firms used to measure risk by a number of parameters, values and models, which provided granularity. However, they were unable to provide a complete picture of the risk involved. VaR, on the other hand, assigns a single value for the entire risk, be it a portfolio or a company or an entire conglomerate of companies. The other advantage of VaR is that it measures and reports risk in monetary terms. While these benefits attracted several users, the BASEL II regulators gave VaR an official stamp and included it in the regulatory capital requirements.

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Value at Risk (VaR) is a single, statistical measure of possible portfolio losses. It measures the worst amount of loss that an institution or portfolio is expected to suffer over a given time interval, at a given confidence level.
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So, what is Value at Risk, anyway? Value at Risk (VaR) is a single, statistical measure of possible portfolio losses. It measures the worst amount of loss that an institution or portfolio is expected to suffer over a given time interval, and at a given confidence level. It uses historical data along with statistical models to estimate the amount of losses and confidence levels. For example, if the VaR of a bank is USD 10 million for a one-day interval at 99 percentage confidence level, it would mean that the bank could lose USD 10 million in one day with the given confidence level. This is easy to relate and use for decision making.

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One of the main attractions of VaR is that it is a single number encompassing the entire risk of an organization.
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Consider a simple example involving two different banks with the VaR as mentioned earlier. Let us assume that the first bank earns USD 20 Million revenue every year. The above VaR would indicate that in one day, half of the revenues may be eroded. The CEO of this bank would realize that the risk reward is clearly not favorable and the risk has to be reduced significantly. Similarly, if

the second bank earns USD 1000 million revenue per year, the above VaR would indicate that in one day, one percent of the revenue may be eroded. This is not as risky as the first case. The CEO may decide to hold the risk or even may go after more risky transactions, which may further add to the revenue stream.

A Bit of History

The concept and usage of VaR is recent. It was first used by major financial firms in the late 1980s to measure the risk of their trading portfolios. The financial industry grew with leaps and bounds in 1990s, especially when computers invaded the corporate world. The computing power - earlier restricted to the large data centers - was unleashed on the desk of the traders. This led to the growth of sophisticated products and, on the other hand, reduced the speed of transactions to a fraction of a second. The earlier practices of intuitive risk management such as management by 'walking around' and having a 'feel' of the risk became less effective. During the same decade, we also witnessed some highly publicized organization mishaps. The most prominent being Britain's Barings PLC failure in February 1995, brought down by a single trader Nick Leeson losing USD 1.4 billion. Barings was founded in 1762 and had played an important role in Britain's involvement in the Napoleonic war and America's Louisiana Purchase.



After the collapse, this historic organization was taken over by ING at the price of one British pound.

These incidents put financial regulators in a spot, with the government and industry questioning the effectiveness of the regulations. Regulators were looking for effective ways to measure risk on common parameters across various institutions. Following this, the BASEL committee revised its proposal and allowed banks to use VaR to calculate capital adequacy, which became an accepted practice. In a 2004 proposal of the BASEL committee, operational risk was included along with credit and market risks to determine capital adequacy. In fact, some of the models used were more than 100 years old, and derived from Filip Lundberg's insurance risk theory of 1903.

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The concept and usage of VaR is recent. It was first used by major financial firms in the late 1980s to measure the risk of their trading portfolios.

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The Evolution of RiskMetrics

One of the main attractions of VaR is that it is a single number encompassing the entire risk of an organization. Nothing better highlights this than JP Morgan's RiskMetrics development. In the early 1990s, Denis Weatherstone, the then chairman of JP Morgan, insisted on reviewing the risk of the entire corporation on a daily basis. Each

day, every trader was required to report the risk position delta across several hundred predefined risk factors. These were aggregated using a covariance matrix derived from historical market data. With this, a standard deviation of the portfolio was calculated, which finally gave VaR - value of risk expressed in terms of dollars. This was presented everyday at a 4:15 PM meeting to Denis along with information on how much money the company can lose in a day, instead of information about deltas, matrices and other risk factors. Thus, the VaR model came to be known as JP Morgan's RiskMetrics, leading to various institutions and banks requesting JP Morgan to lease or sell RiskMetrics. Since JP Morgan was not into software development, they were not interested in selling this as software; however, they published the methodology for adoption by other industry players.

Advanced mathematics and sophisticated computer-based models allowed widespread usage of the VaR. Users were freed from the burden of understanding and remembering a large number of risk factors and were able to use only a unique VaR number instead.

Can a Statistical Distribution Capture Extreme Market Events?

Despite its advantages, VaR is not a panacea. Because of the simplicity which Mathematics brought in, VaR was unable to sufficiently highlight the risk buildup, leading to the mortgage crisis and subsequent financial meltdown that occurred recently. Harry M Markowitz, who published the theory

behind VaR in 1952, had cautioned that 'these procedures, I believe, should combine techniques and judgment of practical men'. Several assumptions, used in calculating the VaR, were overlooked. There was overreliance on the VaR number and judgmental factors were diminished.

Furthermore, since VaR is based on a statistical distribution, it does not accurately capture the extreme market events. Similarly, VaR makes use of historical data for simulations. Goldman Sachs and Morgan Stanley use four-year historical data as opposed to one-year data used by JP Morgan. The period preceding the financial crisis was less volatile and the volatility increased as the crisis began to form. However, the average of high and low volatility reduced the impact on the VaR.

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Despite its loopholes, VaR continues to be one of the most sophisticated tools, which, if used appropriately, would benefit users to a great extent.

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Liquidity of underlying instruments is another key factor that had to be considered in building the VaR model. This was also seen when US hedge fund LTCM (Long Term Capital Management) crashed in late 1990s. LTCM used complex models for trading strategies. Its board members included eminent



economists like Myron Scholes and Robert C Merton, who were awarded the Nobel Prize in economics in 1997. They were responsible for the development of the theory behind some of these models. In September 1998, when the Russian government defaulted on their bonds, the fund realized that there was a liquidity problem and there were no buyers of their portfolio, leading to the failure of the LTCM. Some parts of the VaR are easy to understand. For example, it is easier to comprehend that VaR implies that the portfolio would lose 10 million dollars in a day. However, it also states that the probability is 99%. The managers often ask what this 1% represents from a decision-making point of view.

Liquidity of underlying instruments is another key factor that had to be considered in building the VaR model.

The events leading to the mortgage crisis saw a low interest rate regime combined with ever-increasing housing prices which, in turn, encouraged a steady buildup of the mortgage industry. With the sale of each mortgage, the risks began to increase and the popularity of the products such as mortgage-backed securities and credit default swaps—which were used to transfer the risk from one investor to other—were also enhanced. However, it is important to note that the risks did not decrease leading to increased

pressure in the system, with no safety valve to contain it. Since there was no measure of risk across the industry, the risk build up was not evident.

Meanwhile, the VaR at various banks exceeded limits, signifying an increase in risk. It is assumed that under normal circumstances, an efficient VaR model would exceed the limits two or three times in a year. The third quarter of 1997 witnessed a series of exceptions across banks. Credit Suisse reported 11 exceptions while Bear Stearns and UBS reported 10 and 16 exceptions. This clearly signified that the risk management model was not reacting appropriately to the changing market dynamics.

Conclusion

Despite its loopholes, VaR continues to be one of the most sophisticated tools, which, if used appropriately, would benefit users to a great extent. Each institution should examine the models they have implemented and analyze them so as to understand what more needs to be done. For example, stress testing can be attempted to investigate the effects of extreme market conditions. Since VaR is based on historical data, extreme situations are not factored in. The credit crunch of 2007 was explained by some of the professionals as a 25-Sigma event – which occurs once in a lifetime of the universe. However, we have to reconcile to the fact that stress events will happen from time to time, and that our models need to be adequately upgraded with appropriate stress testing.

The VaR model should also be evaluated by performing back-testing periodically. Back testing is basically a practice of looking back at the past performance of a model. If the model performed with 99% accuracy, it implies that there would be a 1% exception. If the back-testing results indicate that the exceptions were on about 1% of the days, then, the model is acceptable. If the exceptions were on 10% of the days, it demands a relook.

So, did VaR Bring Complacency in Risk Management?

As indicated above, Value at Risk may not be appropriate for all entities. However, we believe that VaR placed a sophisticated tool in the hands of professionals. Probability models cannot replace the process of decision making based on human judgment, and users are expected to be aware of the assumptions, which form the framework of the tool.



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Emerging Markets in India

As a result of continued economic growth, India has emerged as one of the leading hubs covering a substantial part of the global emerging markets. India's earlier experience with financial planning in the 1990s shows that high levels of government expenditure and fiscal deficits can put pressure on the current account deficit in the balance of payments. This is particularly important at a time when export growth has declined owing to slower growth of world trade, the real appreciation of rupee vis-à-vis the country's trading partners, and sharp depreciation of currencies of potential competitors in Asia. Export growth decelerated sharply from 9.5% in 1995-96 to 8.3% in 1997-98, accompanied by a marked deceleration in industrial growth. This figure went up to 20% by the year 2000.

The share of FDI in total capital flow has risen progressively bringing in new technology, techniques and practices to the economy. External Commercial Borrowings, Foreign Institutional Investors and Foreign Direct Investment norms and procedures have been substantially liberalized to facilitate the flow of funds for production and investment. On the other hand, the multinational companies have the advantage of low costs of manufacturing and services when their plants are located in India. With licenses being made available easily for foreign entities to set up shops or services, India has undoubtedly become an emerging market for various industries, including telecommunications, information technology, banking, automobiles, insurance, infrastructure, besides a host of other industries that are gaining momentum.

On the policy side, therefore, measures should embrace steps to: boost export growth, revive the primary capital market, encourage higher private and public investment, relieve infrastructure bottlenecks, and boost demand for core industrial sectors and fiscal and monetary policies aimed at moderating real rates of interest and ensuring adequate availability of productive capital to industry. The climate for industrial investment and growth can also be greatly enhanced through bold economic policy initiatives. Economic reforms play a vital role not only by directly stimulating higher productivity and efficiency, but also by keeping confidence high and boosting investment intentions of entrepreneurs.

India made the most gains on Finance Asia's FA100 list this year.

Against this background, let us look at a few segments in the Indian market that promise substantial growth. The first segment that comes to mind is the telecom sector. We can see enormous potential in this sector as India's telephone density is still only 22% at 150 million against the target of 250 million by the end of next year and lower than that of many Asian and western countries. There is enormous potential as the gap between domestic production and demand is rapidly expanding. This sector has also witnessed exponential growth particularly in the area of cellular services, encouraging several

private players. There are as many as 14 players in the Indian market. Acute competition among them notwithstanding, all the players continue to benefit from decent revenues. Despite the country's slowing economy, the mobile subscriber numbers continued to gain momentum throughout the year with India emerging as the second largest mobile telephone market in the world.

The next segment is the IT Industry dominated by Indian as well as global software giants. The Indian IT industry has an average growth of about 30 per cent per annum. It grew from USD16 mn in 2002-03 to USD28.5 mn in 2005-06, and to USD50 mn by 2007. Indian computer hardware and the peripherals industry segments are dominated by U.S. joint ventures and suppliers. Most business firms in India are not computerized. With more and more international companies setting up offices in India, the demand for hardware has increased. The growing awareness of the case to shed fat in the public sector has called for more automated operations, which in turn, has generated demand for computers. The government of India's industrial and investment policies support all software ventures, particularly export projects. Import duties have been rationalized in the past years and are expected to be further reduced to enable the industry to compete on a global basis. According to a NASSCOM-McKinsey report, annual revenue projections for India's IT industry in FY 2009-10 are USD50 billion. The sector as a whole reached USD58.8 billion in FY08-09, up from



USD52 billion in FY07-08, while the domestic segment grew by 21 per cent to register revenues of USD11.5 billion in FY08-09 from USD9.4 billion in FY07-08. The domestic market witnessed enhanced focus in FY08-09, with large transformational deals in telecom and e-governance and contract value of outsourcing deals growing by 32 per cent. In the face of a severe economic downturn in key markets, the industry was able to deliver a high growth of over 16 per cent and retain its position as a strategic global sourcing destination. The industry also enhanced its thrust on building a globalized value chain, with a 35 percent increase in global delivery centers since 2007. Domestic BPO got a special boost with over 40 percent growth in this period, said the release. Market openings are now emerging across four broad sectors, IT services, software products, IT enabled services, and e-businesses thus creating a number of opportunities for Indian companies.

Infrastructure, is also a crucial area of concern. Urban transport is a nightmare in India though most urban residents take it as a fait accompli. The national highways with a length of over 70,548 kilometers, account for hardly 2% of the total road network but carry 40% of the movement of goods and passengers. Expansion of roads is considered to be easier said than done due to the high density of population. The only option would be to develop Mass Rapid Transport Systems (MRTS) and/or Light Rail Transit Systems (LRTS). Governments of various States within the country are investing heavily towards infrastructure growth, the best examples being the Golden Quadrilateral, the Delhi and the Mumbai metros and several other expressways across the

country, which are at various stages of progress.

India is the fifth-largest country in Asia in terms of total insurance premium. The premium income in the country increased to 4.7 percent of GDP in fiscal 2006-07 from 3.3 percent in the fiscal 2002-03 as compared to the total premium in the insurance industry growth at a CAGR of 28.1 percent during the same period. The life insurance sector grew at a CAGR of 29.3 percent outsmarting the general insurance sector's CAGR of 21.3 percent. The Indian insurance sector has a turnover of around USD53 mn. The current FDI in this sector stands at around USD5 mn and market experts expect FDI to zoom by about 2.5 times once the FDI cap is raised by another 23 percent to 49 percent. The terror pool, set up after the 9/11 attacks, and being funded by the insurers currently has a corpus of USD2 mn. It is expected that with renewals for the next fiscal year, the terror pool fund will increase substantially. General Insurance Corporation (GIC), the Indian reinsurer, is planning to raise terrorism insurance cover to USD2 mn from USD1.5 mn. Currently, any claim beyond USD1.5 mn is covered by international insurers. Meanwhile, on the expected line of foreign investors, the central government has introduced the **Insurance Laws (Amendment) Bill 2008** in the upper house of Indian parliament on December 22, 2008 that seeks to raise the Foreign Direct Invest (FDI) cap in the insurance sector from **existing 26 percent to 49 percent**. The government move is seen as the government's most significant and biggest reform measure in the financial sector. In the life insurance sector, particularly on FDI's front, the growth that took place between 2006 and 2007 is estimated to be around 270 percent. This

clearly reflects the significance investors are attaching to both, the life insurance and non-life insurance sector.

Furthermore, India's insurance market lags behind other economies in the baseline measure of insurance penetration. At only 3.1 percent, India is well behind the 12.5 percent for the UK, 10.5 percent for Japan, 10.3 percent for Korea and 9.2 percent for the USA. Currently, FDI represents only USD1.65 mn of the USD6.34 mn capitalization of private life insurance companies. FDI in insurance would increase the penetration of insurance in India, where it is abysmally low with insurance premium at about 3 percent of GDP against about 8 percent global average.

India made the most gains on Finance Asia's FA100 list this year, bringing in five of the 15 new companies that joined the list. While the country's 2009 growth figures have been revised from 9% to approximately 7%, India is still on course to perform as one of the world's stronger economies. As a result, the Indian companies new to the FA100 span across several sectors including telecom, natural resources, technology and real estate.

The financial services industry has an unenviable role in shaping the future of the emerging markets. Though the G-20 meeting in London earlier this year set the direction for reforming the regulation of financial services to prevent a recurrence of the present crisis, the hard work of hammering out the details without imposing excessive costs or triggering unintended consequences is still to come. The industry has to reshape the regulatory system, which will require a dispassionate assessment of the reasons for the current system's failure. The critical issues regulators must address include - the



appropriate degree of protection for financial institutions, regulation of non-bank entities (such as hedge funds), and the determination of adequate capital levels, which call for dynamic and even radical changes. Of course, all large financial institutions hold both kinds of credit assets on their books.

Some of the largest financial services companies hold 70 percent of their assets at fair value, while some regional banks hold up to 90 percent of their assets in hold-to-maturity accounts. For the banking and securities industry as a whole, about two-thirds of assets are subject to hold-to-maturity accounting. Eventually, it is the net present value of the cash flows from each asset that matters, but those remain unknown until maturity. Accounting, based on mark-to-market principles, immediately discounts assets when the expectation of a default arises and the ability to trade the assets declines, thus making the holder of the assets look worse, sooner. Hold-to-maturity accounting works in the reverse and makes the holder look better for a longer time, which does not reflect the true position, at any given point of time. This is the crux of the current scenario.

Another area of concern is the consumer anxiety about retirement risks that has increased as a result of the economic crisis, which reduced the value of household financial assets by an average of 18 percent. Though consumers have not panicked en-masse, in the past six months, only one percent have moved assets away from their primary financial institution, about 30 percent have changed their investment portfolios, and roughly half of these have changed their retirement portfolios. Those who did make changes have tried to reduce their risk levels by rebalancing allocations toward conservative

assets, products with guaranteed rates of return and holdings of cash and cash equivalents. If this is the impact on financial services with a deviation of just 1% of the target group, one can envisage the impact it will make if the percentage doubles or trebles. This is a very important indicator which cannot be ignored. Banks/FIs themselves have to come up with retirement plan products and market them aggressively.

The thrust on non-interest income in the financial services industry continues. Even this segment was affected as the overall trade and services suffered due to the recessionary trends. The Asian markets escaped with minimal impact partly due to the strong regulatory policies and the conventional wisdom that they continued to work with. Indiscriminate lending will have to stop for the financial institutions to regain their lost ground. The industry also needs a strong correction against inflated revenues and salaries noticed in certain pockets. On the other hand, however, rural banking is gaining ground due to the government's thrust on poverty alleviation and rural development. This is noticed in the number of cooperative/rural banks coming forward with gearing up their operations and heading towards core banking solutions.

Conclusion

Indian firms will have to make certain adjustments by bringing in necessary checks and balances, which are fast becoming the order of the day. Inability to cope with these changes will throw them out of the competition sooner than later. The All India Management Association (AIMA) recently set up a High Level Strategic Group (HLSG) that comprised leaders from industry, academia, and the government with the objective of identifying the

opportunities available to Indian companies and to develop a common goal. The report identified that India can accelerate its economic growth and mitigate forecasted unemployment by seizing the opportunity provided by a combination of global developments in industry, trade, and demographics. The core industries in India need to act now to capitalize on this opportunity. Despite weak scenario of global economic growth, with a healthy Gross Domestic Product of 9 percent achieved in India this year, the gains for India are pronounced and enormous.

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Decision Support Criteria for Globally Distributing Work in the IT Industry

1. Introduction

Culture (from the Latin cultura stemming from colere, meaning “to cultivate”) generally refers to patterns of human activity and the symbolic structures that give such activities significance and importance. Cultures can be “understood as systems of symbols and meanings that even their creators contest, that lack fixed boundaries, that are constantly in flux, and that interact and compete with one another”¹.

Power distance, uncertainty avoidance, individuality and masculinity are part of Hofstede’s cultural dimensions.

Culture can be defined as all the ways of life including arts, beliefs and institutions of a population that is passed down from generation to generation. Culture has been called “the way of life for an entire society. As such, it includes codes of manners, dress, language, religion, rituals, games, norms of behavior such as law and morality, and systems of belief as well as the art”¹.

Hofstede’s conducted large scale quantitative research in the field of Culture and the 2 major dimensions Individuality and Power Distance. Most of his research was conducted in IBM a company which had a very diverse workforce and operations in several countries around the world. Hofstede’s work on

global culture and the dimensions of power distance, uncertainty avoidance, individuality and masculinity these dimensions seem most appropriate to examine the central question. These 4 dimensions are based on fundamental issues in human societies within which every society has to find its answers. And according to Hofstede (1980), they represent the basic elements of common structure in the cultural systems of countries. Thus, they provide an important framework not only for analyzing national culture, but also for considering the effects of cultural differences on management and organization. This framework is especially useful for understanding people’s conceptions of an organization, the mechanisms that are considered appropriate in controlling and coordinating the activities within it, and the roles and relations of its members (Hoecklin, 1996). Hence, we choose Hofstede’s work as our reference to further our understanding and find answers to the central question.

Values - Broad Tendencies to Prefer Certain States of Affairs Over others. Usually Acquired Early in Life, not Susceptible to Argument.

Although we have chosen Hofstede’s dimensions as a reference for this study, it is also observed by other experts in this field that Hofstede’s conceptualization is from the Western/Anglo-Germanic perspective – and therefore, misses out important Asian dimensions such as GuanXi, Face and other aspects prevalent in the Indian culture. One can also observe that some of

these aspects have a religious connotation as well. However, for the purpose of this study we have limited our scope to Hofstede’s research findings.

It is also observed by other experts in this field that Hofstede’s conceptualization is from the Western/Anglo-Germanic perspective – and therefore, misses out important Asian dimensions such as GuanXi, Face and other aspects prevalent in the Indian culture.

Values have four underlying dimensions:

- » **Power distance index** - Society’s endorsement of inequality. High value means hierarchical structure.
 - The Power – Distance Dimension is concerned with how close or how distant subordinates feel from their superiors. This is not a physical distance, but how big the personal gap is felt to be. In the High Power Distance Culture (Eg – France and India) being a boss means exerting power and keeping that gap open. Inequality is accepted: ‘a place for everyone and everyone in their place.’ So,



employees are frequently reluctant to express disagreement with their bosses and prefer to work for managers who take the decisions - and the responsibility – and then simply tell them what to do.

In a Low Power Distance Culture (Eg Austria, Israel) superiors and subordinates consider each other to be colleagues, and both believe inequalities in society should be minimized. So those in power should try to look less powerful than they are. Employees are seldom afraid to disagree and expect to be consulted before decisions are made³.

Advancement in technology provided mankind with the “New” ability to disintegrate, distribute and re-integrate “Work”.

- » **Uncertainty avoidance index** - Tolerance for uncertainty or discomfort in unstructured situations. High value means rules are needed or some other form of control.
- The Uncertainty Avoidance dimension is the ease with which the cultures cope with novelty. In Strong Uncertainty Avoidance Cultures (Eg Japan, Greece) people feel the need for clarity and order. They feel threatened by uncertain situations and higher anxiety and stress are experienced. This is combated by hard work, career stability and intolerance to deviancy. Thus, the employee rules

should not be broken even when it is shown to be in the companies’ best interest and hence such employees look forward to continue working with the firm until they retire.

In the Weak Uncertainty Avoidance Culture (Eg Denmark, Hong Kong) the uncertainty inherent in life is more easily accepted and each day is taken as it comes. A very pragmatic view is taken about keeping or changing those rules which are in existence, and employees are expected to be working for the firm for much shorter periods³.

- » **Individualism vs. Collectivism** - Attitude of being responsible for one’s self (and family) alone as opposed to collectivism - group orientation, loyalty, etc.
- The Individualism Dimension focuses on the degree to which the culture encourages an individual as opposed to collectivist group-centered concerns. In an Individualist Culture (Eg USA, Britain), the emphasis is on personal initiative and achievement, and everyone has the right to have a private life and opinion. By contrast a collectivist culture (Eg Iran, Peru) is characterized by a tighter social framework, where people are members of extended families or clans which protect them in exchange for loyalty. The emphasis is on belonging and the aim is to be a good member whereas in the individualistic culture the ideal is to be a good leader³.
- » **Masculinity v. Femininity** - Assertive, competitive or oriented toward

material achievement. The opposite being femininity - warm relationships, modesty, quality of life, caring for the weak etc².

- The Masculinity Dimension highlights ‘masculine’ cultures (e.g. Australia, Italy) where performance is what counts; money and material standards are important, ambition is the driving force. Big and fast are beautiful; ‘machismo’. In contrast, in ‘feminine’ cultures (e.g. the Netherlands, Sweden) it is the quality of life that matters: people and the environment are important, service provides the motivation, small is beautiful and unisex is attractive. The expected relationship of men to women differs considerably along this dimension. In ‘masculine’ cultures men should be assertive, dominating; women should be caring, nurturing. In ‘feminine’ cultures the roles are more flexible, and there is a belief in equality between the sexes. It is not ‘unmasculine’ for a man to take a caring role, for example³.

Over the last two decades, the world has seen globalization and a tendency for economic capitals to shift towards the east. There has also been some shift in Knowledge Capitals from the west towards the east although this process is significantly slow. Both these phenomena have significant impact in the way “Work” is carried out today across various industries. Until the 19th century, it was usually the case to take the people to the location of work, and there as several instances where economic powers exploited the weak .



Towards the end of 20th century, advancement in technology provided mankind with the “New” ability to dis-integrate, distribute and re-integrate “Work”. This ability has given the industry options to take “Work” where it can be best executed from a cost, quality and schedule perspective. And now the very paradigm in how “Work” is executed has transformed Program management, Communication, Collaboration and Innovation.

However, along with “Work” Transformation and Global Distribution comes the human adaptability to this change and a lot of cultural challenges, as we don’t seem to have the ability to rapidly change along with these transformations. We are human and hence are susceptible to cultural and emotional adaptability arising out of changes in work practices.

One very important change in the recent times is the globalization of the Indian IT industry. Perhaps “Global Distribution of Work” has most affected the IT, BPO and services industry and hence exploration of this phenomena especially in the decision to find a suitable geographic location to distribute “Work” becomes critical. Here the term “Work” refers to divided or broken down pieces of a larger project or service rendered to customers. A piece of “Work” could in itself be significant that it can be sent to a specific location but; however, might have interdependencies on other pieces being executed elsewhere in the GDW environment. In some instances “Work” is done on the same piece of code by different people being located in different geographic locations sharing the same IT infrastructure.

2. Lack of Motivation

Although IT services and global distribution of work for IT has been successful and models like GNDM (Global Network Delivery Model) have become pioneering ideas that have brought about tremendous success to the Indian IT Industry, there still seems to be a challenge experienced in our people integration capabilities and the ability to truly work in a globally distributed way. The power of the GNDM model gives customers the ability to acquire the services from a single provider globally depending on where they need these services rendered. Although this model is widely successful, there are some inherent problems such as time to delivery services, quality of service delivery et al. Although this problem does not surface in the beginning of an engagement or project they seem to compound into a delivery problem as the project is being executed. Often enough it begins with communication gaps between the parties where the work is distributed. (Ref. table in Section 2) but soon translates to differences in opinion and begins to impact delivery or the end goal. Hence broadly an observation can be made that culture and an ability to work with a multi-cultural workforce increasingly is playing an important role in the success large global programs.

Hence, our question perhaps can be narrowed to, **“Are there certain set of cultures that work better together as compared to others on a relative scale and can this be a critical factor of decision making in putting teams together for a global program?”**

Here we are looking at the “work together” as an overall aspect which includes communication and other

cultural differences. So, our intent is to provide a high level guidance in the choice of Globally Distributed Multi-cultural Teams although the guidance should not be treated in absolute terms, it could help build better teams that can in turn be more productive.

There are several challenges and solutions in distributing work globally and quite a bit of academic work and industry best practices are available today especially with large multi-national corporations. For the purposes of this project I have tried to narrow the scope down to global work distribution in the IT industry.

Over the last decade the Indian IT Industry has expanded its operations across the globe. Many of them have operations in various countries like US and Europe, as well as lesser developed countries in Latin America, Africa, Eastern Europe and East Asia. Most of these operations pertain to providing IT and BPO Services. The reasons for the expansion are several and a few salient ones are listed below.

- Proximity to customer
- Language needs
- Strategic in nature like joint ventures et al
- Cost advantage
- Time zone advantage
- Geo-political de-risking
- Data privacy and regulatory compliance

The global expansion and presence in various geographies has changed the ethnic and cultural diversity of the work force. Hence, the need for people to adapt, accept and work



together towards a common goal is very critical for the overall success of the organization.

The change in the demographic landscape and global distribution of work has also brought about some challenges and a few of them are listed below.

- Work package disintegration, distribution and integration
- Global program management
- Other geographies where work gets distributed, lacking process maturity unlike India
- Tax policies of countries not extending themselves for global distribution. e.g. withholding tax (corporate tax) especially in Latin American region. Usually the corporate tax is the most hindering and sometimes double taxation is inevitable.
- Customer perception on data security and hence their comfort in choice of distributable locations
- Visa constraints for Indians in several emerging countries e.g. Latin America
- Service orientation not natural in their culture
- Distribution of roles and responsibilities to be based on the skill and strength of the local geography – e.g. sales roles.
- Power (distribution) to make decisions in a distributed work environment
- Adaptability (of people with different cultural backgrounds in the GDCs) to culture and willingness to change

- Importance of collaborative tools in global program management

Indian IT industry has successfully distributed “Work” across the globe and established various delivery centers in different countries so support customers and delivery IT services. Many of the organizations choose the location for these “Global Delivery Center” GDCs to cater to their customer needs. Usually there are several criteria that are used to decide and finalize the location of a GDC of these some of them are discussed and elaborated in the following section.

Criteria for Choosing a Location for a GDC or BPO Service Center

The following (Table 1) criteria is typically applied by large IT companies in locating their GDCs. All though this list may not be exhaustive it has most of the commonly looked at parameters. These parameters are considered for economic and operational viability of the Global Development Center prior to establishing one in a specific geography. The key parameters are grouped under various heads such as people, cost, geography, legal, finance, culture and infrastructure.

The weightage computes into an overall score that helps overall decision making. These weightages are internally used in the organization based on past experiences in building several GDCs across the globe and promoting the GNDM solution to our customers. These weightages of the parameters vary based on the type of work executed (BPO, Application Development & Maintenance and Product Development) in the Global Delivery Center e.g. BPO, Application Development & Maintenance or Product Development.

3. Objective of the Study

Usually, the parameters for decision making revolve around economics, human capital availability and operations. However, culture seems to play a crucial role in the overall success of a Globally Distributed Program and usually the challenges related to cultural fitment seem to become visible post facto and organizations go into a “Fix the Problem” approach from there on.

The focus hence is to explore the various cultural parameters and look at its influence in Globally Distributing Work so as to help senior management with its decision making process for locating GDCs.

The deliverable will be a list of questions and parameters that senior executives will need to be considered before making a decision on locating a geography for the GDC. The deliverable will also try to provide the weightage for each cultural parameter. At this point we will be looking at an initial set of values based on knowledge claims and experience.

i. Central Question

The central question describes the specific aspect of culture that we are probing through our interviews.

- Seek to understand how cultural sensitivity aspect of certain cultures enhances the ability to distribute work to those regions
- Seek to understand how the adaptability of people to other cultures seems to improve the ability to distribute work to those regions
- Explore how the culture plays an important part the organizational governance of GDW and the roles



Table 1 Key Parameters to Choose a GDC Location and their Weightage

Key Parameters	BPO	Application Development & Maintenance	Product Development
PEOPLE			
Labor Pool (Volume)	●	●	◐
Skill Levels (General IT)	◐	●	●
Skill Levels (Special Products & Domain)	◐	◐	●
English Speaking Skills	●	◐	◐
Multi Lingual Proficiency	◐	◐	◐
Universities and IT Education	◐	●	●
R&D Intuitions	◐	●	●
COST			
Cost of Labor	●	●	◐
Cost of Training	◐	◐	◐
Cost of Living	◐	◐	◐
GEOGRAPHY			
Local Market	◐	◐	◐
Geographic Location	◐	◐	◐
Time Zone	◐	◐	◐
Geo-Political Stability	●	●	◐
Local Government Support	◐	◐	◐
# IT Companies Locally Present	◐	◐	◐
Quality of Service (IT) & Performance in Local Market	◐	●	●
Customer Requirement	◐	◐	◐
LEGAL CONSIDERATION			
Visa Regulations	◐	●	◐
Export Regulations	●	●	◐
Data Privacy Laws	●	●	◐
Establishment of Local Presence	◐	◐	◐



Key Parameters	BPO	Application Development & Maintenance	Product Development
FINANCE			
Local Tax Structures	●	●	◐
With Holding Tax	●	●	◑
Local Currency Stability & Convertibility	◐	◐	◐
CULTURE			
Intercultural Sensitivity	●	●	◑
Ability to Adapt to Cultures	◐	◐	◐
Roles Fitment	◑	◐	◐
Service Orientation	●	◑	◐
Power to make decisions	◑	◐	●
INFRASTRUCTURE			
Cost of GDC Setup	●	●	◐
# Communication Service Providers	◐	◐	◐
Quality of Data Communication Infrastructure	●	●	◐
Quality Voice Communication Infrastructure	●	●	◑
Cost of Data Communication Infrastructure	◐	◐	◑
Cost Voice Communication Infrastructure	◐	◐	◑
Software Products Availability and Support	◑	◐	◐
Physical Security	●	●	◐
Logical Security and Encryption	●	●	◐
Air Connectivity	◑	◐	◑
Local Transportation	◐	◐	◐
Real Estate Pricing (Vol. Based)	◐	◐	◐

Legend

Weightage	Harvey Ball Indicator
Low	◐
Medium – Low	◑
Medium High	◐
High	●



that people play in the governance model

- Seek to understand why service orientation nature of different cultures influences the nature of GDW
- Explore how the dynamics of power distribution and organizational governance in a GDW environment.

An initial indication of the investigators opinion and view on the various key parameters and the associated weightages related to culture is described in Table 2. And going ahead we seek to elaborate and understand each of the parameters so as to re-calibrate them based on the findings of this study.

ii. Methodology

Qualitative approach is chosen for this project as most of the elements related

to culture are subjective and intangible. The knowledge claims, experiences of various people, narrations of various instances and situations gives us a good start point to probe into this area using qualitative methods. Models and approaches for quantification will be taken as the next step in continuation of this project.

Approach	Strategy of Inquiry	Methods
Qualitative	Narrative Design	Open-ended

At this point, we wish to interview some key people in the senior management responsible for businesses across industry verticals and are involved in decision making as and leverage their experience and understand

the challenges in GDW focusing on the elements related to culture.

4. Data Collection Process and Analysis

Heads of Services Verticals, R&D, Sales and HR were selected for interviews. A standard set of questions was prepared to specifically investigate the central questions that are further elaborated into sub-questions in an attempt to dwell into each of the central questions. There is also a column to indicate how close the responses to the questions are to the proposition in each question.

All interviews were scheduled and conducted one-on-one. The interview responses were captured on paper and later recorded in the template. All the data collected is further collated and

Table 2 Summary of findings

SI No	Culture	Central Question	Elaboration Questions	Inference	Weightage
1	Intercultural Sensitivity	Seek to understand how Cultural Sensitivity aspect of certain cultures enhances the ability to distribute work to those regions	In your experience have you come across certain cultures who have a higher degree of tolerance towards other cultures, if yes please elaborate with examples	Based on some of the interviewees' experiences, it is observed that Certain Cultures, for example, Indian culture and sometimes corporate culture depict a higher degree of tolerance. It is also observed that certain people who are able to adapt to new cultures usually are more successful. Although some corporate/organizations still do not acknowledge that cultural differences affect the overall output and performance of an organization, several multinational organizations accept the need for training their employees in managing cultural differences. Cultural differences also seem to become more apparent when teams are large and there is a majority of people from a particular cultural background. Few believe that its more of an individual's attribute and has less to do with a specific cultural background.	



SI No	Culture	Central Question	Elaboration Questions	Inference	Weightage
			Do you think this has a positive or negative influence in Globally Distribution of Work. Pl. provide an example	Its largely observed that Indians in general seem have higher tolerance and higher tolerance may also act as an inhibitor to GDW as an example if Indians are more tolerant they would take on more work to their plate and reduce distribution. However, cultural sensitivity might not have an influence as people may not consider it important enough. Its also observed that it is easier to distribute work in a smaller perspective, however in larger projects quality of work tends to differ. Some Interviewees feel higher tolerance has an overall positive effect on GDW since it may channel more work towards a tolerant group, but in large teams it might have a negative effect due to overburdening one group. Few interviewees believe that higher tolerance has a positive influence on GDW as thought processes change and the influence is positive if channeled in the right way.	●
			A leader of a multi-cultural team like the program manager needs to be culturally sensitive to be successful. This statement is true or false pl explain.	Most interviewees observe that a leader of a multi-cultural team like a program manager needs to be culturally sensitive to be successful. And a leader has to understand cultural differences and how to react under circumstances. Some of them feel this aspect is more important than technology expertise. For example, usually Indians don't want to say bad news, and this can have serious impacts to the projects. And sometimes there is a religious context to this as well, for example being sensitive to religious practices and beliefs. Hence, a leader or a Program Manager should be culturally sensitive and have empathy.	●
			Certain multi-cultural teams in a globally distributed environment are more successful than others. Can you explain the reason as to why they were successful.	It is observed that people who are cognizant of culture work very successfully. Good leaders understand their goals and have the skills to execute global programs. Success has less to do with cultural elements and more to do with individuals, type of work and capability as well as skills. Teams need to be well balanced. Usually very strong cultured people working together in a team are quite difficult. Trust and overcoming language barriers are key for success. Certain type of work would benefit from ideas that are generated due to the local nuances. Different cultures are put together in a complementary manner i.e. roles which play to the cultures strengths would work well.	●



SI No	Culture	Central Question	Elaboration Questions	Inference	Weightage
2	Ability to Adapt to Cultures	Seek to understand how the adaptability of people to other cultures seem to improve the ability to distribute work to those regions	In your experience have you observed that people who are able to adapt themselves to other cultures are more successful in their work than others	It is clearly observed that people who can adapt are more successful; however knowledge and respect are very important for success as well. For many people it comes naturally to adapt to a new culture however for some it's a continuous effort. Indians seem to be good at adapting to cultures. The culture of a company is also observed as important and how one adapts to the same. By adapting oneself to those one works with is found to be an effective way of dealing with others and getting things done, else it could lead to stress and these efforts could be channeled better.	
			Have you observed that the ability of an individual to adapt to a new culture has a positive influence in a multi-cultural team	Most of the interviewees agree that an individual's ability to adapt to a new culture has a positively influence on GDW and learning the local language can also be a crucial aspect. However, they point out that beyond understanding the cultural differences, commitment to work is also important. And some cultures are more adept on adopting other cultures while certain cultures may not do so.	
			In a multi-cultural team, each team member has to be able to adapt to another individuals culture else the team will not be successful in their project. Is this statement true/false. Pl. elaborate	An important observation based on interviewees experiences is that for long term association or project it is important for teams to blend into each others culture. And usually people adapt to the dominating culture for being successful. And another important view is that projects in which people do not adapt to others cultures are not so successful, and it is often seen in the IT industry. Although this is broadly observed some believe that its critical to "Adapt one's approach", and team members need to be aware and respect the cultural differences and have a level of empathy for other cultures.	
3	Roles Fitment	Explore how the culture plays an important part the organizational governance of GDW and the roles that people play in the governance model	In your experience have you observed that people from certain cultures are more adept at performing certain roles versus others. Pl. elaborate with examples	Some interviewees observe that managers from certain countries are much more preferred compared to others. Certain cultures have specific ways of working and people from those cultures also play those roles well. Thought it may appear that people from certain cultural background may appear as better leaders it's not necessarily true and depends to an individual's capability. Its usually observed that Indians are good at analytical capabilities, Americans at innovation and Japanese at improvisation. One could argue it's the company culture that plays a role here rather than the national culture. And people within cultures are not always homogenous.	



SI No	Culture	Central Question	Elaboration Questions	Inference	Weightage
			Culture has an influence on type of role an individual is going to perform in a multi cultural team. E.g. leadership roles.	Culture seems to have an influence on the type of role an individual is going to perform. Hierarchical cultures are quite distinct and one considers respect versus disagreement becoming a conflict. Open disagreements are less compared to Non Hierarchical cultures. However one can also argue that culture is not written in the genes and hence adaptability is the key. Role stereotyping may not be the right approach as one of our interviewees pointed out. An attribute of a leader is that they are globally cultured and it's more of an individual's capability. Fundamentally people must be 'open' and tolerant for things to work. Some nationalities may have developed expertise/tendencies in certain areas, but at a team level it would be hard to generalize.	●
			In your experience has it been observed that people with certain cultural background consistently perform better in certain roles than others? Pl. elaborate with examples	It's a common observation among interviewees that people who have been exposed to different cultures perform better. Indians overall seem to be more successful especially after exposure to other cultures. It is about how adaptable the person is, or his desire to adapt. It's also observed that Chinese seem better at manufacturing and Indians are good at problem solving. However a culture does not make for a skilled person. And for the most part though it is dependent on the individual or the company and less about cultural background of the individual.	●
4	Service Orientation	Seek to understand why Service Orientation nature of different cultures influences the nature of GDW	In your experience have you observed that certain cultures who have a higher Service Orientation are better suited for working in Global teams	One of our interviewees observed that the ability to distribute reduces with increased service orientation and service orientation may have a negative effect but it may have a positive effect if we are moving work to a single location. Usually countries in the North seem to be more individualistic and country capitals are more oriented to life style and less to work. Service Orientation is also viewed as an organizational attribute as well as an individual's attribute. We need a service oriented nature and it is required for GDW to work, however, those that favor excellence and demonstrate work commitment will also do well. It is also observed that service orientation may tend to increase with poor overall national economic environment. But in some cases a high service orientation may be detrimental to a team as only a few people may end up doing all the work.	●



SI No	Culture	Central Question	Elaboration Questions	Inference	Weightage
			Does the Service Orientation Nature of certain cultures influence the nature of GDW positively or negatively? Pl elaborate with examples.	All the interviewees seem to agree that Service Orientation nature certain cultures seem to have a positive influence on GDW. Also Indians seem to be good in performing certain roles. In certain roles a service oriented nature would be beneficial, but in others where the team member needs to be persuasive.	
			Certain cultures which are not service oriented are not good fits for a multi-cultural teams. Pl. explain and elaborate your experience through this statement.	The role fitment is critical when one distributes work. Multi-cultural teams need to have service orientation. It's about being practical and driven rather than cultural alignment. Collaboration is key, and this is more apparent in large teams. It's about being practical and driven rather than cultural alignment. Aggressive or strong culture will break at some point. May not be true and it really depends on the role one is playing. And as long as service orientated culture is on the provider side its ok. There could be roles that people can fit in. And in some cases it may be a good thing to have in a team. One of our interviewees don't seem to agree at all.	
			Do you see Service Orientation as a cultural attribute or an individual's attribute	Some believe that 70% of service orientation is a cultural attribute and not an individual's attribute. Some believe that it's a cultural attribute that becomes a part of an individual's attribute. Some believe that it's a continuum but more on the side of culture. Where as one interviewee felt it's more of an individual's attribute.	
5	Power to make decisions	Explore how the dynamics of power distribution and organizational governance in a GDW environment	Does power to make key decisions affect the Global Distribution of Work, if yes how affect the nature of Global Distribution of Work	It's usually observed that the predominant culture and a larger composition in a team will dominate and in hierarchical cultures the power is usually centralized. Usually GDW in multi-national companies is affected by economics and power and less about skills availability. And one has to decide where the leadership team will work out of and how they will work together. It's also observed that when right decisions are taken things will work well and the power center can be located anywhere. Another interviewee observed that the power to make decisions affects GDW and shifting communication and coordination but for multi-cultural and distance teams to work appropriate decisions made in a timely manner.	



SI No	Culture	Central Question	Elaboration Questions	Inference	Weightage
			Does culture have an influence on the power to make decisions? If Yes how?	It is usually observed that Americans are good decision makers. And in a hierarchal system can have significant influence on power to make decisions. The environment also is observed to have an influence on a person's ability to make decisions. Another interviewee observes that it's not about culture but the ability to collaborate that is key and note what the teams can deliver individually. B nature most decisions are made by western cultures. It is also important for the culture to be decision owning. And where the management style is risk taking then in those cases the power to make decisions affect GDW. For example the Dutch nature of consensus nature of decision making can be quite frustrating at times.	
			Does Power to make key decisions retained with individuals belonging to certain specific cultures have an influence on the outcome of the project? Pl. explain with an example	One interviewee believes that it's absolutely true and collaboration is critical and also determines the outcome. Mutual respect is important despite inequality between cultures. Credibility of the Leader is key and not so much about culture. Adaptive behavior is critical and ability to blend with the culture is also very important. If the power resides with people from a culture that favors such ownership the outcome is generally favorable. One of the interviewees observe that it is more important the decision making power should reside with the person in the appropriate role.	

results are compared to the proposition of each question. The relative agreement to the proposition is captured indicatively using Harvey Balls and a summarized conclusion drawn as the response to each question. The overall summary further aggregates these responses and a final conclusion is drawn to each sub question. The aggregation of each sub question is taken as the conclusion to each central question.

Further upon arriving at the conclusion to each central question, an attempt is made to map each key parameter to Hofstede's underlying dimensions to draw a correlation and list a set of countries that match Hofstede's scores.

Summary of Findings

A summary of our findings is presented providing a consolidated view of our inferences from the detailed analysis. An associated weightage is also provided depicting the alignment to our elaborated questions. Some of the key statements that were made by our interviewees are repeated verbatim to carry the same meaning and avoid interpretation and misrepresentation.

5. Conclusion

The survey was conducted in a very large IT Services and financial solutions firm and senior leadership participated in this survey, however due to time and availability constraints the interviews

were limited to 7 participants. And going back to the central questions this project sought to seek answers to based on the above analysis is further elaborated below:

Reflecting back on our Central Questions and key parameters under culture as one of the criteria for GDW we have recalibrated the weightages based on our above findings for Application Maintenance Services and the same is summarized in the table below.

Clearly culture plays a crucial role in the success of GDW and is an important criterion that is to be considered in choosing a location for Application



Table 3 Conclusion on Central Questions

Central Question	Conclusion Based on Study	Overall Weightage
Seek to understand how cultural sensitivity aspect of certain cultures enhances the ability to distribute work to those regions	It seems as if there are certain cultures that have a higher degree of tolerance and Indian culture is believed to be a culture of high tolerance. At the same time it's also about individuals and corporate cultures and not just a national or regional culture. Cultural sensitivity and tolerance has a positive and a negative effect in GDW and it's also pointed out that the effect is largely positive and enhances the ability to distribute work. However the negative effect seems to be over burdening of work or channeling work towards a singular group that might have a higher tolerance hence not being able to optimize the distribution. The study concludes that a leader of a multi-cultural team in a GDW environment has to be culturally sensitive and has to understand the cultural differences in order to be successful. Perhaps as some point out this attribute may be more important than other skills such as technology. Good leaders understand their goals and have skills to execute global programs. And some teams perform better than others in a GDW environment, this happens with good leadership and having balanced teams. It is also observed that trust and overcoming language barriers and key for success. Though some believe that success has less to do with cultural elements and more to do with an individual's capability there are others who feel that when people of different cultures are put together in a complementary manner where in roles that they play are to the cultures strengths, the team would be successful.	
Seek to understand how the adaptability of people to other cultures seems to improve the ability to distribute work to those regions	Most observe that people who are able to adapt to other cultures are more successful. Indians in general seem to be good at adapting to new cultures. Corporate culture is another important aspect to consider. There seems to be a strong agreement among interviewees that an individual's ability to adapt to a new culture has a positive influence on GDW. And learning the local language also helps significantly. Some cultures seem to be more adept at adapting to other cultures. Another observation is that for projects which span over a long time it is very important for people in these teams to blend culturally though there is also another view that it's important to adapt ones approach and teams need to be aware and respect cultural differences.	
Explore how the culture plays an important part the organizational governance of GDW and the roles that people play in the governance model.	It is perhaps a general observation that people from certain cultures play certain roles well. Although this may be true it cannot be generalized and it can be concluded that it depends on an individual's capability. And people are not all homogeneous. It may not be possible to conclude that culture has an influence on the type of role an individual is going to play. And an attribute of a leader is that they are globally cultured and this is more of an individual's capability. Although it is observed that some nationalities have developed expertise/tendencies in certain areas its difficult to generalize. It may be observed that Chinese are good in manufacturing, Americans in innovation and Indians are good in problem solving, for the most part it depends on the individual and less about the cultural background of the individual.	



Central Question	Conclusion Based on Study	Overall Weightage
Seek to understand why Service Orientation nature of different cultures influences the nature of GDW	The effect of a high degree of Service Orientation nature is largely positive and helps GDW. However, it may have some negative as it may reduce the degree of distribution and channel work towards the service oriented team. Service orientation can be viewed as a national, regional or even a corporate attribute. And a service orientation is necessary for GDW to work however all those who demonstrate excellence and show commitment also work well. It is largely observed that the service orientation nature influences GDW positively though collaboration is key, especially in large teams. Role fitment is crucial and multi cultural teams need to be service oriented. Collaboration is perhaps most critical and people need to be practical and committed. Most of them observe that service orientation is a cultural attribute and not individuals attribute though these are hard to differentiate and cannot be distinctly separated, it should be treated as a continuum. Although some believe that service orientation is an individual's attribute.	
Explore how the dynamics of power distribution and organizational governance in a GDW environment	Power to make key decisions affect the outcome of GDW. Usually it is observed that GDW in large multi-nationals organizations are affected by power and economics, it has less to do with skills availability. It is also observed that the leadership could be located anywhere but the key is to make the right decisions then things work well. GDW will also involve a higher degree of communication and co-ordination and it is important for the right decisions to be made in a timely manner. Some observations indicate Americans are in general good at making decisions and usually where management style is risk taking then in those situations the power to make decisions affects GDW. Also in hierarchical cultures the power to make decisions can significantly impact GDW. Collaboration and mutual respect are important in a GDW environment rather than the cultural background of an individual who has the power to take decisions. In addition the ability to adapt and blend with the cultural diversity is key. The choice of the appropriate person in the decision making role is crucial rather than the individuals cultural background.	

Table 4 Recalibrated Weightage for Culture as a Criterion for GDW

CULTURE	Weightage
Intercultural sensitivity	
Ability to adapt to cultures	
Roles fitment	
Service orientation	
Power to make decisions	



Table 5 Recalibrated Weightage for Culture as a Criterion for GDW

SI No	Key aspects of culture	Mapping to cultural dimensions	Correlation	Example
1	Intercultural sensitivity	Individualism	Higher the degree of individualism lower the degree of intercultural sensitivity	UK, US
		Masculinity	Lower the degree of masculinity the higher the lower the degree of intercultural sensitivity	Netherlands, Sweden
2	Ability to adapt to cultures	Uncertainty Avoidance	Lower the degree of uncertainty avoidance the higher the ability to adapt to cultures	US, India, UK
		Individualism	Higher the degree of Individualism lower the ability to adapt to different cultures	US, UK Australia
3	Roles fitment	Power Distance	Higher the degree of power distance more difficult it is to fit roles	India, China
		Masculinity	The higher the masculinity the more difficult it is to fit roles	UK, Italy
4	Service orientation	Individualism	The higher the degree of individualism the lower the degree of service orientation	UK, USA, Australia
		Uncertainty Avoidance	The higher the degree of uncertainty avoidance lower the degree of service orientation	Uruguay, Japan,
5	Power to make decisions	Masculinity	The higher degree of masculinity better the use of power to make decisions	Switzerland, UK
		Uncertainty Avoidance	The higher degree of uncertainty avoidance better the use of power to make decisions	Brazil, Uruguay, Peru, Argentina

Maintenance Services. Though through this project we have limited our sampling and interviews to a small set of interviewees, there is clearly more work to be done in further enhancing this study through quantitative analysis and perhaps exploring the construction of a mathematical model or an empirical rule that can further elaborate and detail our initial findings in this project.

6. Closing Remarks

The choice of Hofstede's work and looking at the four dimensions of culture one could perhaps map our findings back to Power Distance Index, Individuality, Masculinity and Uncertainty Avoidance Index. We attempt to depict

a correlation between our findings and Hofstede's research and details of index value for various countries for each of the dimension of culture. Although this is not proved in our study, this opens another area for further exploration and research.

7. References

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