

# PERSPECTIVE

## Payments Business 3S Approach



Payment is the life-blood of any economy. The primary objective of any payment system is to enable the circulation of funds. Without a robust infrastructure enabling smooth flow of funds, financial institutions can rarely assume the role of a financial intermediary in the economy. Payment systems have encountered many challenges and are constantly adapting to the rapidly changing payments landscape. More recently, the proliferation of electronic payment mechanisms and advent of alternate payment systems coupled with risk elements in the payments process have focused attention on public policy issues related to the organization and operation of payment systems. Payments Market, across geographies is witnessing a drive to achieve 3S objectives – Speed, Security and Standards.

### Speed - Pacing Payments

Speed in effecting payments right from acquisition till settlement of funds to beneficiary account, is controlled by multiple factors. Payment acquisition has outgrown from brick and mortar banking environment to alternate channels, reaching out to the customers at their convenience. Customers, through such channels, originate payment instructions which flow into Bank's back-office in no time. Traditional Payment systems controlled by Automated Clearing Houses, Central Banks and corresponding banking channels do operate in time cycles with cut-off time concepts. However, the market understood the relevance of real time processing and 24X7 as supported by ATM Infrastructure. Market is witnessing independence of payments from time constraints. UK Faster Payment is such an initiative, where in payments is available 24X7. The evolutionary development in technology and settlement practices which enabled to squeeze the latency period in the payment cycle need to be appreciated. The pattern evolving in the payment markets is not geographically constrained. This trend is bound to hit all markets and ultimately the benefit percolates down to all retail customers, corporates, financial institutions and economy at large. Conversion of un-earning assets to earning overnight funds adds further income to bottom line. Time is Money and by saving time in the payment channels converts to money for all stakeholders. This is an evident tangible benefit derived out of this drive.

Primarily, the drive to achieve speed in payments by squeezing the latency period from days to hours appears to have a negative impact on

interest earned by holding institutions on float funds. In a recent survey conducted in Euro Zone, it was revealed that banking community forecasts 4% YoY drop in their payment business income, due to lack of float funds alone. However, this triggers banks to explore alternatives to boost up volumes to make good of the loss. Banks are seriously engineering payment products which can add up income. This effort is sensible in the context that infrastructural investments made by banks are huge and banks indeed require to explore optimal utilization of infrastructure planned to be taken on business for the years ahead. One major area, which is being explored in the market is Financial Supply chain. Payments are an integral part in the supply chain management. End to End (e2e) reconciliation and transparency of payments right from ordering institution to the beneficiary institution in a trade cycle would be a major milestone for SEPA (Single Euro Payments Area) initiative. EIPP, Electronic Invoice Presentation & Payment would be another emerging area with improved first mile and last mile connectivity to corporates.

Straight-Through Processing (STP) Management would be critical to all banks to achieve the settlement time cycles designed for the emerging payment networks. Higher STP ratios can only be achieved through better standardization of payment messages. Standardized institutional identifiers (Bank Identifier Codes), standardized STP Message formats and standardized account identifiers are pre-requisites to achieve better STP rates. STP controls need to be built in bank's payment solution in line with Bank's risk management policies and KYC/ AML guidelines. Faster the payment, greater is the vulnerabilities embedded in it. Risk Management infrastructure need to be geared up to filter the pacing payments. The pace of payment should not be achieved at the cost of risk. In the recent time with stringent AML guidelines and regulatory compliance, banks need to take up the challenge of monitoring all payments in a narrow timeline, from all risk management perspectives.

### Security - Essence of Payments

A report indicates that organizations worldwide are beginning to recognize that information security can deliver more than just protection for information. According to the survey, the number of organizations that have fully integrated the information security function into risk

management operations has increased to 39 percent in 2007 from 19% in 2006. Compliance, privacy and data protection are considered to be top drivers for information security. Improving IT and operational efficiency are emerging as important elements of information security as identified by 69% respondents globally.

Payments being an externally interfaced system to Bank's internal core applications, security challenges are more. Regulators across the world ensure that adequate security infrastructure is built in the national payment systems. Banks on other hand follow international practices on Information security viz. COBIT (Control Objectives for Information and Related Technologies), an open standard issued by ISACA to manage risks arising out of Information Technology.

Banks internal policies are required to ensure additional need based controls to achieve security assurance. Committee on Payment and Settlement Systems under BIS (Bank of International Settlement) while outlining 14 guiding principles for development of national payment systems, have observed that in the end-user market, the most common characteristics demanded from payment instruments are:

- ▶ High Availability and Choice of Instruments and Services
- ▶ Information on relative costs, benefits and risks
- ▶ Low user costs
- ▶ Interoperability
- ▶ Low Legal risk and high information security

Banks need to prioritize the security requirements in the payment requirements to address legal, reputational and operational risks. More so in an environment, where global banking is accepting Basel II principles as a norm and operational risk has more capital implication from payments business. Automation of payment processes in banks can address the frequent incidents through rule definitions and by reducing people interfaces. Business Continuity Planning and Disaster Recovery Plans need to be coupled with automation to ensure high availability of services.

## Standards - Syntax of Payments

Margins on payments business, which traditionally contributed around 40% of gross income to Banks, are on a squeezing spree with the integration of payments markets. Apart from concentrating on acquiring volumes, Banks need to re-engineer business processes to reduce operational costs, keeping margins intact. Streamlining payments roots to standardization of processes, whether technology or messaging or business flow itself is to be considered. Core Banking Solutions enables Banks to address the business flow restructuring with best practices to ensure optimized utilization of resources. Centralization of core business activities like Back Office operations for payment line of business ensures tangible business results through better liquidity and funds management.

On Messaging, migration to international/national standards will enable Banks to achieve better STP ratios. This will reduce high repair costs incurred by Banks and enable them to scale up volume of remittances. This reduces turn around time for funds availability which in turn meets or exceeds the customer service levels. Integrating corporate businesses to bank through Closed User Group channels or other secured alternatives will enable banks to automate process from origination till processing and for inward payments from reception till settlement and finality of payment. Standardization of messages and processes enables interoperability in view of integration with specialized solutions for Liquidity Management, Anti-Money Laundering checks, Black list checks or integrated CRM services. Globally the market is moving towards such unified direction. UNIFI XML standards would be the messaging standards in SEPA region. International ACH formats are planned for NACHA services in US from 2009. SWIFT has planned for Phase2 migrations to XML (MX) formats and Relationship Management Accounting. The standards intends to achieve straight through processing through real time integration with bank applications, supporting batch uploads and downloads. More detailed payment information is carried through this standard, envisaging corporate reconciliations in a typical trade environment. The standard caters the business needs more than messaging requirements, thereby providing better visibility in financial supply chain for informed decisions on working capital management.

## Integrated Payment Module – 3S Achievability

Banks traditionally treat payments as a specialized stream and segregate the process from the other banking business flows. Retail or corporate banking hands over payment information to the payment stream or capture the payment details in a separate dedicated payment solutions. Due to multiplicity of payment acquisition channels and plethora of payment networks, Banks moved to payment hub architecture to centrally manage work flow of the payment processes. In payment hub, the payment processes including origination, processing, routing, message generation, delivery and confirmation of the delivered message are handled by payment hub separated from the accounting or transaction engines of bank. Payment hub infrastructure has listed advantages of service oriented architecture (SOA), simplified maintenance and change management, workflow management and decoupled technical services. However, the initial investment in establishing a completely decoupled payment hub needs to be justified by the following indicative yardsticks

- ▶ Payment Business strategy
- ▶ Business volumes
- ▶ Payment revenue trends & projections  
Market needs & product “overshoots”
- ▶ Payment Network participation type
- ▶ Maintenance Expertise
- ▶ Vendor Partnership Value
- ▶ Technology Elasticity
- ▶ Coupling with Core Banking Solutions and Channels

Evaluation on above parameters may or may not justify huge investments in this business depending on the above yardsticks. Alternative available for Banks opting for core banking replacement is to weave in payment requirements to the core banking solution. This option often projected as a “Big Bang” approach may not be realistically so depending on vendor expertise and product capabilities.

Banks can capitalize the advantages through an integrated model of payment systems. A payment module integrated with the core banking solution, addresses following generic payment requirements.

- ▶ Payment Network Definitions
- ▶ Automatic Channel Identification
- ▶ Automatic Route Identification
- ▶ Bank Identifier Translation
- ▶ Transaction Management
- ▶ STP Management
- ▶ Message Handling
- ▶ Date Validation – Calendar Maintenance
- ▶ Charges Handling
- ▶ Exception Handling
- ▶ Watch-list Filtering
- ▶ Payment Warehousing & Diarizing

Though hub architecture provides an enlarged scope for meeting 3S objectives, realistically the goals are not insurmountable for integrated solutions. Payment execution cycle is optimized through effective STP Management in integrated solutions. STP controls are in-built at Bank level, Payment Network Message Level, Customer Account Level. Routing Logic and Settlement account identification is configured in the system depending on the settlement types defined for payment networks – Bilateral or Multilateral as the case may be. Banks has the leverage to define the lead days (payment latency) at Bank level, thereby control the float funds for payment products. Network level latency is also definable which can address the squeezing settlement cycles. For inter-bank payments, respective forwarding message is generated and underlying accounting entries are put through, provided messages are formatted as per Standards and message parameters fall within the STP boundaries defined at different levels. The chain of activities is handled intelligently by module without manual intervention, achieving minimum turn-around time for payment execution cycle and avoiding manual errors. Extrapolating

these activities to a real remittance scenario in Latin America originated from US, the moment inward message is received at bank's central core server, processes are triggered sequentially – Message Validation, Settlement funds position checks, Beneficiary Account validations, Transaction Management, Message Disposition and Confirmation to beneficiary - in no time. Assuming the branch network or technology channels viz. ATM/Internet Banking etc, funds are available to beneficiary immediately. In short, the payment finality cycle is completely definable in the centralized module and this enables Banks to achieve the speed objective in payment business.

Security, through out the life cycle of payment within core solution can be managed through Single Sign On (SSO) Infrastructure. This eases the Bank users' accessibility simultaneously maintaining confidentiality. User rights captured through role definitions enable Banks to implement the delegation of powers in payment processes also. Message transfers between payment networks and payment modules can be done through secure file transfer capabilities or Message Queues (MQ Series). Maker-Checker functionality along with administrator controlled parameter setups provides little flexibility to circumvent defined processes. Payment acquisition through file handling is made secured through customized checksums and duplicate validations. Exception Management infrastructure in core banking solution can trap payment exceptions and such instances can be referred to approvers as per authorization matrix through a referral mechanism. Funds and Liquidity Management thresholds can be configured and then triggered to alert bank about the funds positions in settlement accounts.

Standards enable common language for participants in a network. Payment Module can support international standards in payments viz. SWIFT Messaging Format and rules. Payment Modules can support grouping and ungrouping of SWIFT messages which saves channel costs for Banks. Common identifier standards viz. ISO 1316 for International Bank Account Number (IBAN) and ISO 9362 for Bank Identifier Code (BIC) are readily supported by such products. Local message standards, if they differ from SWIFT standards, can be customized. Message formatting is an identifiable activity, which maps payment information passed from respective records to respective message tags. Universal Financial Industry message scheme (UNIFI) are supported or being implemented in those products to support

payment initiation and payment clearing & settlement messages.

## End Note

Banks are prominent players in the remittance market, owing to the traditional branch network, unbounded alternate channels, participation in national and international payment networks, accessibility to international market and last but not least the power of customer trust. Banks need to maintain the infrastructure, refine the processes and practices of delivering payment services. Better Turn around Time of the payment cycles with faster availability of funds to customers would meet the customer preferences. Confronting the parallel players in remittance market, banks need to deliver the best cost effective solution through the established level of service delivery and aim to achieve better customer experiences. The bottom line is - trust reposed by customers through the ages is a real power for every successful Bank. This power should be the driving spirit behind business strategies. Technology and banking solutions would enable to achieve the goals. Realization of the 3S -Speed, Security and Standards in payment business would pose survival challenges to average products in market and cultivate value propositions to innovative products, by scripting successful alliances, with customers at one hand and technology partners on the other hand.

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