

Ali Abbas Sikander

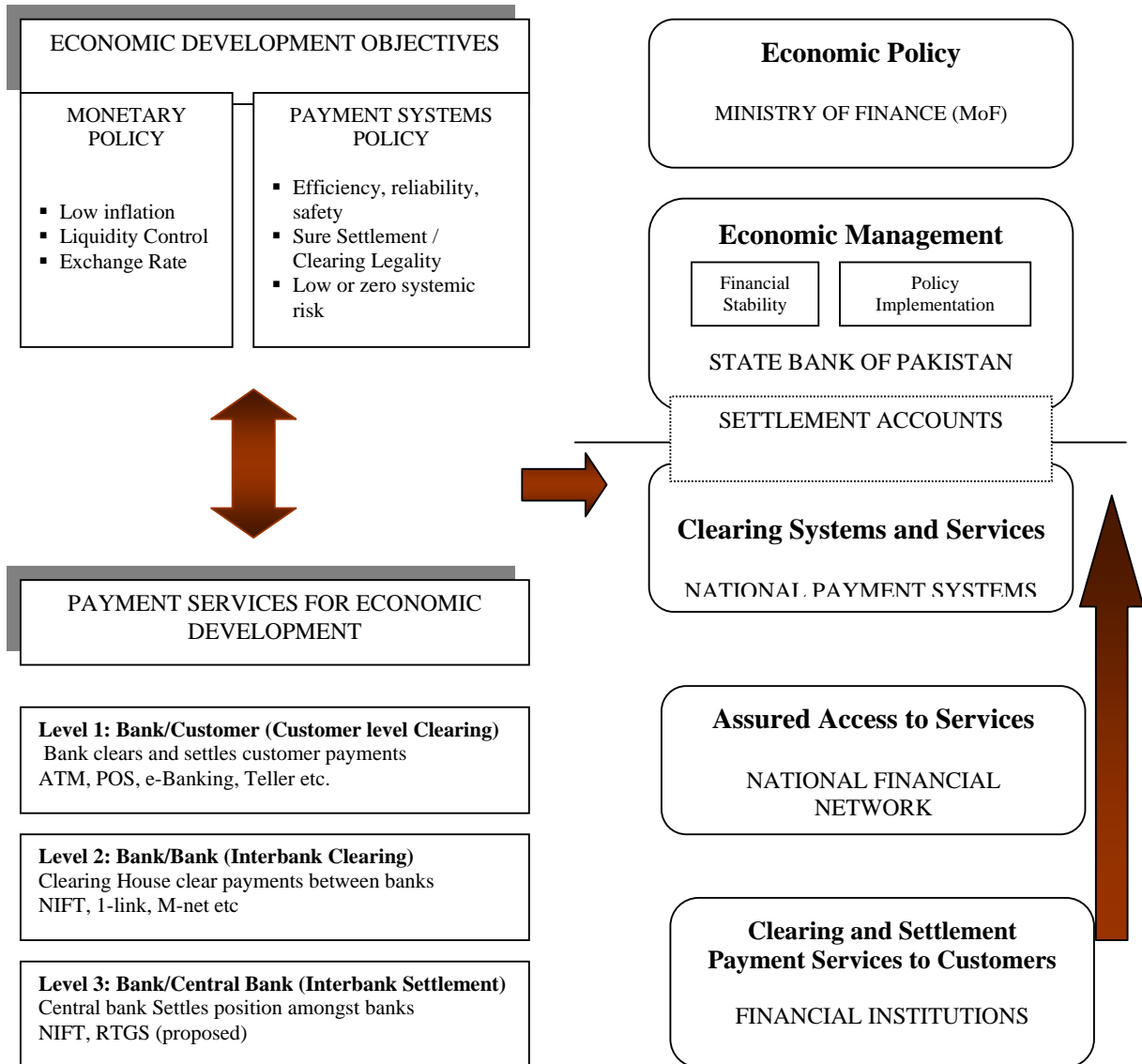
Tameer Bank

THE DEVELOPMENT
STRATEGY OF THE
PAYMENT SYSTEM AND
NON-CASH
CIRCULATION IN
PAKISTAN

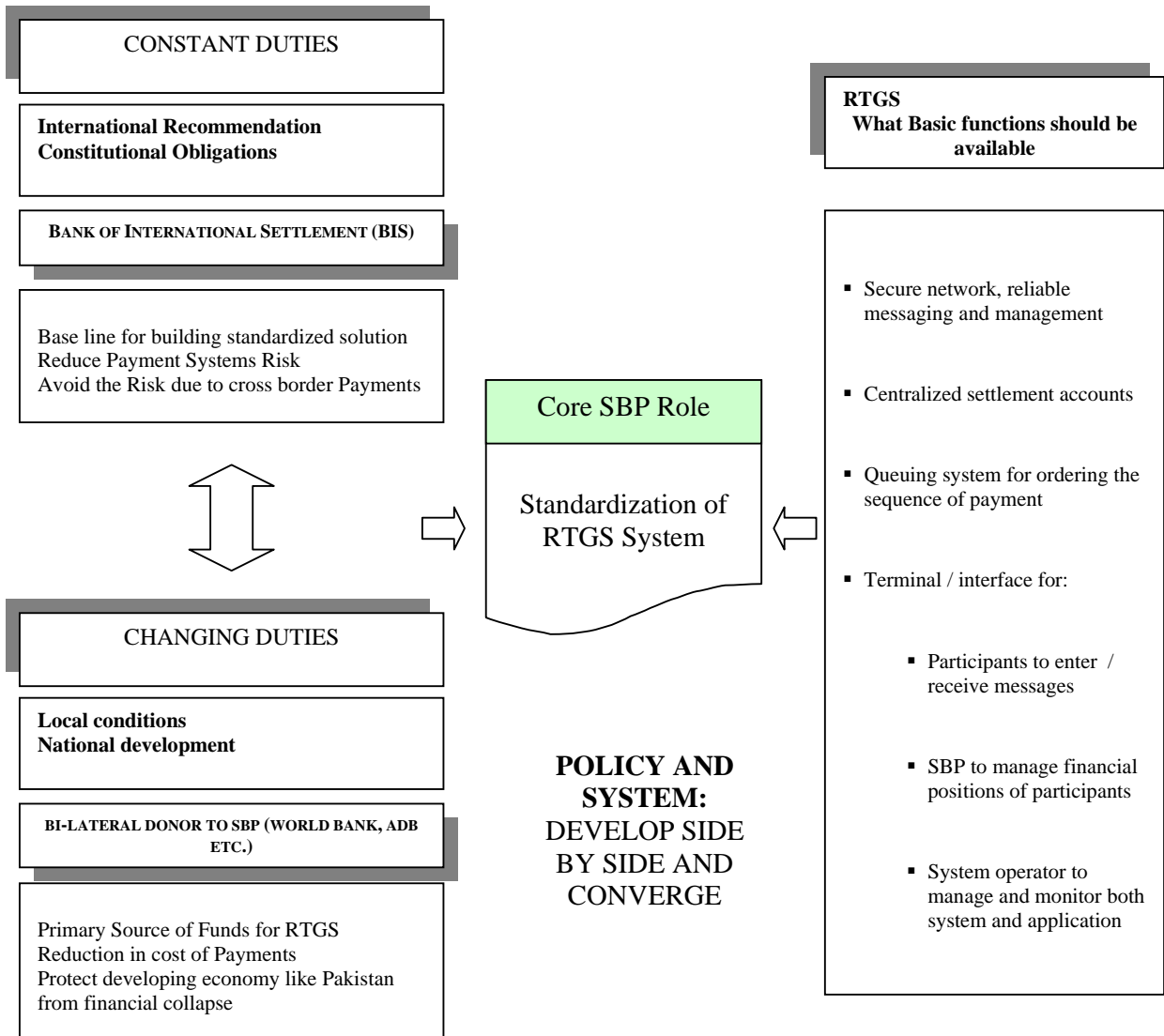
Overview

There is a close relation between the development of the payment system and that of the economy. Let us begin by providing an answer to the following question: what is the payment system? Many people think that the Pakistan payment system is, e.g. the Clearing House and Central Depository system, operated by the NIFT and CDC, or the ATM / POS Switch system operated by the 1-LINK or M-Net or EURONET etc.. They are partially right; however, they confuse the term 'payment system' as a domestic system with the particular funds transfer systems (payment systems).

NIFT, CDC, 1-LINK and M-NET systems are payment systems in the second meaning (funds transfer systems), which indeed are the pillars of the Pakistan payment system per se. However, a national payment system is much more than the sum of particular payment systems.



According to the definition of a payment system adopted, inter alia, by the Bank for International Settlements, a payment system is “a set of instruments, banking procedures, and, typically, interbank funds transfer systems that ensure the circulation of money,” typically within a given country (i.e. a ‘national payment system’).



The fundamental components of the payment system are:

- a) participants in the system;
- b) payments cleared in the system;
- c) money subject to transfer within the system;
- d) payment instruments used to effect payments;
- e) communication channels, via which payments are cleared;
- f) contractual relations among the interested parties.

All these components are to be found directly or indirectly in the above diagram — in a simplified manner — depicts the most important persons (legal and physical) and institutions participating in the payment system, as well as the most important channels for effecting payments.

For the purposes of further analysis, it is important to isolate two parts of the payment system: the level part of the pyramid, which includes either payment mechanisms that do not use the intermediation of banks (i.e. usual cash payments) or customer-bank relations (which constitute the first stage of banking non-cash payments), and the upper part of the pyramid, which includes interbank clearing and settlement and funds transfer systems, also called payment systems, that form the basic infrastructure of the payment system in every country.

In order to analyze properly the relations between the payment system in Pakistan and the economy, a breakdown of payments, into the most important categories: the fact of intermediation or non-intermediation of banks in executing payments (bank and non-bank payments), the type of money subject to transfer (non-cash and cash payments) and the type of the payment instrument by means of which a payment is effected (paper-based and electronic instruments), will be of use. It should be noted here that non-cash circulation is related solely to payments effected with the use of bank money, i.e. with the use of one of the forms of banking intermediation in executing payments, and that the most effective type of payments are non-cash bank electronic payments (in terms of time and low payment cost as well as the possibility of full automation of the payment handling service at every stage of the payment cycle). In fact, they constitute the common element joining the two fields discussed here, i.e. the payment system and the economy, and their development should be of the greatest concern to the State Bank of Pakistan and Pakistani commercial and development banks.

We may adopt a simplified assumption that money payments effected with the intermediation of banks consist basically of three stages:

- 1) stage one: placement of the payment order by the payer with their bank,
- 2) stage two: transfer of funds resulting from the payment order between the payer's bank and the bank of the beneficiary, typically via the State Bank, with the possible use of clearing intermediaries, of whom the clearing house serves as the best example,
- 3) stage three: crediting of the beneficiary's account by their bank with the funds received from the payer's bank, and subsequent notification of the beneficiary.

From this perspective, depending on the form of transfer of payment order used at each of the stages, three primary periods of the development of the payment system may be distinguished:

- period one, which may be called the 'paper period' — at each of the stages payment orders and information are transmitted almost exclusively on paper media,
- period two (intermediate) — at the first and third stage, payment orders and information are generally transmitted on paper but the stage of interbank transfer of payment orders is partly or fully electronic,

- period three, which we would have called the ‘developed or electronic period’ — mainly the electronic form of placement and transfer of payment orders as well as transfer of information is used at all the three stages.

In the abovementioned period two, only interbank transfers are effected electronically, due to the fact that the framework for the e-economy is limited at present: limited access to and relatively high prices for electronic services, somewhat un-favorable legal regulations (the banking transfers are regulated mainly by civil legal agreements, and not by statutory law). This framework restricts the use of electronics to communication between banks and financial institutions. Without the general access of natural persons and business entities to various services and products based on electronic media and electronic processing, we cannot speak of the transition of a given national payment system to period three, i.e. a fully mature and effective payment system.

Considering the broad understanding of the term ‘payment system’ assumed above, and the active participation of both public and private entities in this field, every one of which has or may have its own vision and development strategy, there is no single strategy for the development of the payment system in Pakistan. No authority should replace the authorities of those entities and unilaterally determine or impose strategic directions of activities of those entities in this area.

The State Bank of Pakistan does not endeavor to do so either, although it is aware of its statutory function within the scope of organization of payments and settlement and supervision of payment systems. Neither can such examples be found in other countries, perhaps with few exceptions.

NIFT did not happen until 2002/2003, since it was a great success of the Pakistani banks and the Clearing House to convert a typically paper-based clearing house 12-13 years ago into a fully electronic clearing house handling all cleared payment instruments electronically. As of 2002 both primary payment systems in Pakistan perform clearing exclusively in the electronic format.

Against the background of the three periods in the development of the payment system mentioned, the above stages suggest that the Pakistan payment system only reached period two of development from NIFT existence on – i.e. the period when there is electronic exchange of payment orders between banks, however payment orders are still transferred mainly paper based between bank customers and banks. Naturally many banks offer their customers e-banking services, providing online access to the bank account is available and the possibility exists of make payments online (IBFT via 1-LINK ATMs etc.). The number of accounts with access via electronic channels has also been growing month after month. However, this is still a minority, which —according to the abovementioned classification of periods in the development of the payment system — locates the Pakistan payment system in second period of its development.

Instead of speaking about the defects of the Pakistan payment system, let me speak of its weaknesses, since weaknesses are easier to overcome than defects – and I hope, we will sooner or later overcome them. Such weaknesses include first and foremost various aspects of the non-cash circulation in Pakistan, its scarce use being one and the most important of them, whilst within the framework of non-cash circulation — a relatively low use of electronic payment channels by bank customers.

I would like to present five selected - and in my opinion the most important - categories that characterize non-cash circulation in Pakistan¹. The categories are: the number of accounts, the number of transfer orders, the number of direct debits, the number of payment cards and the number of card payments. However, with a relatively good infrastructure of the payment system, non-cash circulation and the use of all non-cash payment instruments by customers of Pakistani commercial banks is underdeveloped. Without going into detail, I would like to stress that, the causes of this state of affairs (besides reasons of economic, legal and psychological nature) include the relatively restricted (both in physical and economic terms) access of population to the Internet, ATMs, POS compared to other developed countries², which results in a lower use of e-banking as one of the least costly channels of access to the account and effecting payments.

Having presented a diagnosis of the current scheme of the payment system in Pakistan, let me point to the four basic challenges that the Pakistan payment system is to face in the forthcoming years:

- 1) Successful and all inclusive (DFIs, NBFIs, MFBs) deployment of the RTGS system,
- 2) Developing and implementing a legal directive on payment services in the internal market, which is needs to be elaborated, into Pakistani law,
- 3) Preparation of the Pakistani banks and associated infrastructure-providing entities for the global standards.

In the end, summarizing the objective of the national payment system is to provide public payment services at the highest possible level, taking into account in particular cost-effective public access to various modern payment instruments as well as the effectiveness, competitiveness and security of clearing domestic payments systems, considering the necessary adjustment of the Pakistani payment infrastructure.

In my opinion, the achievement of the adopted strategic objective requires many activities in various areas connected with the functioning of the payment system in its broad terms.

Other activities include:

- 1) Increasing significantly the scope of non-cash circulation, primarily through extending the base of entities using both banking services in general, and e-banking and m-banking³ as the basic channel of effecting non-cash payments,
 - o Offering incentives to make mass payments via bank accounts
 - o Removal of legal impediments to effect non-cash payments
 - o Promotional and educational activities within the scope of non-cash circulation.
- 2) Facilitating access to a wide range of payment instruments and services. Something to think about in terms of SAARC based collaboration (including linking of regional switches ala EU zone) This will require banks, among others, to offer pan-SAARC payment instruments at prices identical to those in the case of similar domestic solutions, and also to prepare for handling cross-border payment orders (routed to and received from the regional system), i.e. both credit orders and the pan-SAARC direct debit.

¹ Should try to get statistics fro SAARC countries as well. In compliance with the principles of comparison, the non-cash circulation categories should reported per capita in a particular country. Data for these charts can perhaps be raised from the SBP archives, publications or from economists following fiscal and monetary trends in Pakistan, containing statistical data concerning payment systems and securities settlement systems in Pakistan

² comparison with India and Brazil may be prudent

³ needs to be discussed in its entirety on another occasion

- 3) Activities related to the payment cards market. Activities related to the payment card market should be considered in three respects: with respect to card issuers, clearing agents and holders of the payment instrument discussed. With reference to card issuers, I think there is a necessity to meet the following as not marketing gimmicks but postulates:
- The immediate mandatory introduction of chip cards, which is primarily justified with the concerns about the security of payment card users as well as is in line with the solutions proposed within the framework of global standards (the EMV standard);
 - The further lowering of the interchange fee, which, on the one hand, may contribute to a temporary fall of bank earnings on this account; on the other hand, however, it may lead to an increase in non-cash circulation and in the interest of acceptants in this method of settlement, which may in turn entail an increase in revenue in the long term due to the scale of turnover.

SUMMARY / CONSIDERATIONS

Formation of a National Payments Council (NPC).

NPC needs to be set up to define and implement at-least the following standards as preconditions for the use of payments and settlement system by the State Bank of Pakistan (Both Payments as well as Securities)

Standard 1: Legal soundness and elaboration of the Payments Systems and EFT ACT 2005

Standard 2: Settlement in SBP money.

Standard 3: No undue custody risk.

Standard 4: Regulation and/or control by competent authorities.

Standard 5: Transparency of risks and conditions for participation in a system.

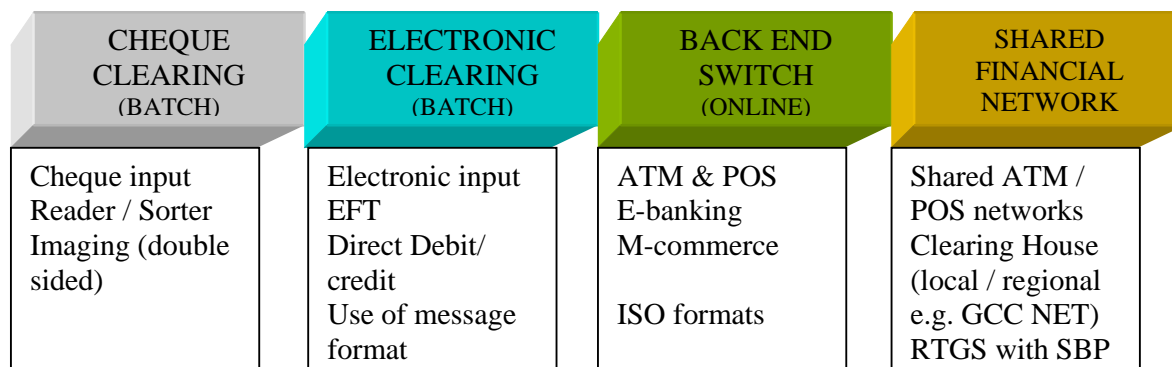
Standard 6: Risk management procedures.

Standard 7: Intraday finality of settlement.

Standard 8: Operating hours and days.

Standard 9: Operational reliability of technical systems and availability of adequate backup facilities.

OTHER NATIONAL PAYMENT SYSTEMS UPDATE



- **Automated Cheque Clearing**
 - Pakistan can be considered in a partially mature and declining market in most countries due to the increasing use of card based transaction
 - Enabling an electronic equivalent item to replace original paper item
- **Bulk Electronic Clearing**
 - Dual use of paper truncation and electronic message service.
 - More complicated item RTGS system due to several regional clearing sites.
- **Batch-End Switch**
 - This reduces the cost of establishing and maintaining the necessary data communication in network.
 - The technology needs to comply with all relevant standards, security provisions and service performance demands of users
- **Shared Financial Network**
 - Enabling dedicated well managed network connections available at relatively low cost.- but should be reduced much more to provide inclusive financial access.
 - To realize network traffic benefits, the operator of the network must have invest more in communications infrastructure including redundancies of ISP, lines, VSAT, fiber etc. etc.

SWIFT and PRISM

SWIFT provides financial network services through a single worldwide data network, the production and maintenance of SWIFT terminals.

Financial institution may or may not use SWIFT to develop market infrastructure for clearing and settlement in payments, securities and foreign exchange.

Due to the political lobbying of banks and their ability to reach agreement on any local network or network supplier, SBP decided to adopt the SWIFT network for Real Time Gross Settlement. Turnkey Solution is awarded by SBP to CMA, Small Systems, Sweden

The possibility to form a Closed User Group (CUG) to exchange messages only between members of group has been established including DFI and NBFIs. Migration is still under process.

A CUG consist of sending & receiving instruction and the State Bank of Pakistan.

The membership and business rules of a closed group are owned and administered by the State Bank of Pakistan.

PRISM Project – Pakistan Real-time Inter-Bank Settlement Mechanism, Update

Operate on a PRISM private network and using SWIFT for payment message exchange

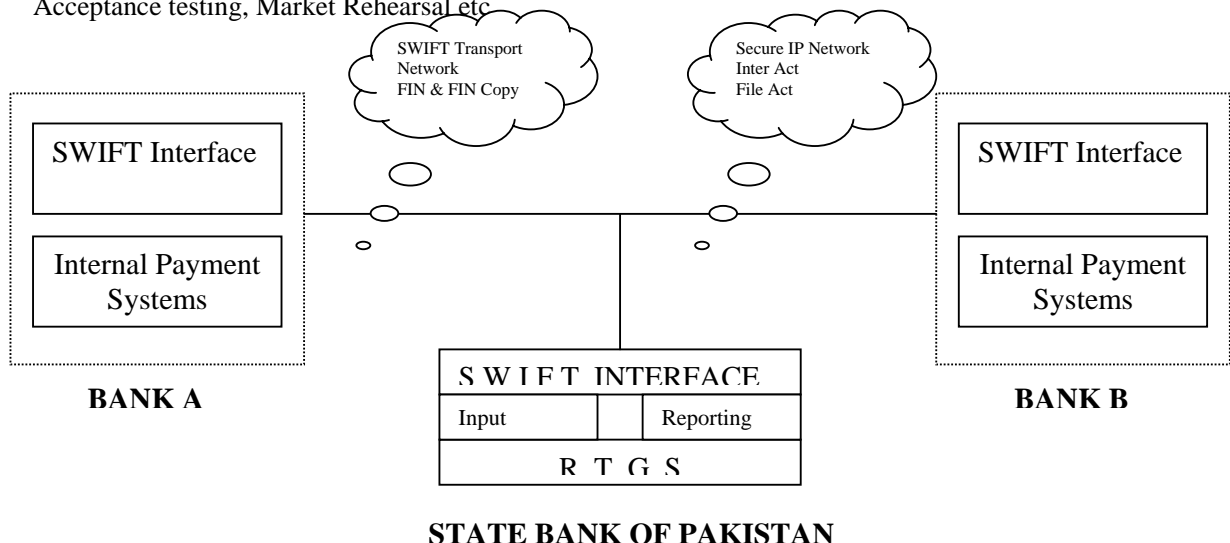
System is fully capable to handle;

- Customer and Interbank payment transfers
- Reverse Transfers
- Direct Debits
- Net Transactions (from NIFT and ATM Switch)
- REPO
- OMO, Maturity and Discount Window Operations
- Forex Operations etc

Centralized Netting for clearing on country basis as against decentralized at all cities
Implementation progress has been slow

Members at this stage are in the process of setting up the required connectivity (DXX and ISDN BRI with PTCL) and SWIFT up gradation

This will be followed by Connectivity testing, PRIM workplace installation, Users training, Acceptance testing, Market Rehearsal etc



- RTGS System can use two types of message exchange network.
 - SWIFT Transport Network: Transaction input exchange
 - Where accuracy, security and archiving are essential
 - Payments and acknowledgements
 - Secure IP Network: Operational information exchange
 - Where speed and through-put is essential
 - Real time balance inquiries, system monitoring information & queue management