Entrance to Core Banking with Plug-in architecture

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Abstract

In current technology era, banking services are growing rapidly in the region. This is along with competition foreign banks in the high-value/high-profit corporate and high-net-worth retail customer segments. The current mode of delivering customer requests in the context of growing customer activity was not sustainable. The bank had to review its processes to receive customer service requests and effectively fulfill them. This had to be done consistent across all the branches of the bank. The bank had to position other delivery channels, such as the ATM, POS, mobile-banking and internet banking as well as call center in providing efficient customer services. This helps some of the current load on the branches being reduce. This paper presents a model, that keeps the original delivery channels along with new core banking process, and consequently provides an efficient management behavior with a shortage processing time.

Keywords: Core Banking, plug-in, delivery channel, channel management
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1. Introduction:

Core banking solution is networking of branches, which enables customers to operate their accounts, and avail banking services from any branch of the Bank on core banking network. Thus core banking is a step towards enhancing customer convenience through anywhere and anytime banking.

Core banking systems are the heart of a bank. All transactions move through core systems, which, at an absolute minimum, must remain running and responsive during business hours. Increasingly, these systems are running 24x7 to support delivery channels such as Internet banking, global operations, real time transactions via ATM, POS, phone, and debit card. The core banking also provides a global accounting foundation that allows your organization to evolve and capitalize on changing market requirements, while protecting your investment as well as reducing operating costs by offering customer-centric, real-time accounting across all distribution channels [1].

There are some significant features for Core Banking :

- Flexibility
- Manageability
- Scalability
- Availability
- Performance
- Security
- Reliability
- Modern & Stable Technology & Architecture
- Compliance with Banking & IT Standards

2. The achievements of IT in banking:

Information technology of the recent decade which is based on knowledge management, has influenced organizations with an inpredictable and unprecedent speed.This has led banking industry to give out more and more new products with a different way of presentation.

The concept of quality of services has got a new meaning and electronic banking services have dominated all banking regulations. among all the crucial changes in this regard, we can name the turning of paper money into electronic money and also tangible services to intangible ones. The characteristic of this age at the bigining of information technology achievements was new products based on IT, changing and retrieving formed information and every product or new service has a special information bank.

Companies have reached to such a peak that for the last few years, bank has been wondering about among all these companies and their various products, bank can be considered as the most important customer in away that the products of some of these companies even left harmful effects on banks' structures. The exchange of roles has worsened these problemes and the maturity of organizations has approached to a decline. At this level, environmental threats have widly transformed.

Generally speaking these were the achievements of IT in banking scope:

- Notice to temporary requirements
- Not provision of strategic plans
- Not appropriate technologies
- Not coordination of input data
- Not corporation of systems
- Provide of different un cooperated outputs in response to similar inputs
- So many changes in organization's structure
- Change of actions and management style in organization level
- Appearance of Irland-like systems

3. Next generation banking software:

With the increase of demands and electronic services growth, internet network and hardware facilities can no longer meet their new needs. High information transfer, volume

of sent information, network traffic, skill to use the services, intense changes of hardware and software have all increased software compatibility of centralized banking.

For this reason, in order to conquer the above mentioned problems and the possibility of matching them with less cost and high speed without changing previous software, the use of intermediary programs seem to be necessary. Therefore, the next banking generation of centralized banking is equipped with these programs.

Plug-ins are small software instructions which were used to show pictures in internet or read a context with a film and are in fact for decreasing the volume and dimension of the sending data and are also free of internet nodes and quite detectable.

This is a good reason for hackers, and of course encoding and sending hidden data through these software were also possible and with the centralized banking data carrying these kind of systems, the following abilities were provided for the previous software:

- Reduction in user's complication.
- Increasing the speed between different kinds of networks and software.
- Ease of upgrading software by growth of technology.
- Creation of connection between different operating systems.
- Commercial sufficiency and variety of reporting.

These programs are predominantly used for effective communication and possible hardware and software facility compatibility. In other words, these programs let us do any thing we wish.

4. The models of delivery channel & Core Banking relationships :

As figure 1 illustrates, currently most of the models are in the form of a set of siloed channels, duplication of products, services and business rules across delivery channels, and complex interfaces into Core systems [7]. If an application need to replace all the links must be changed. This is considered as a huge pitfall of the currently in use models [see figure 1].
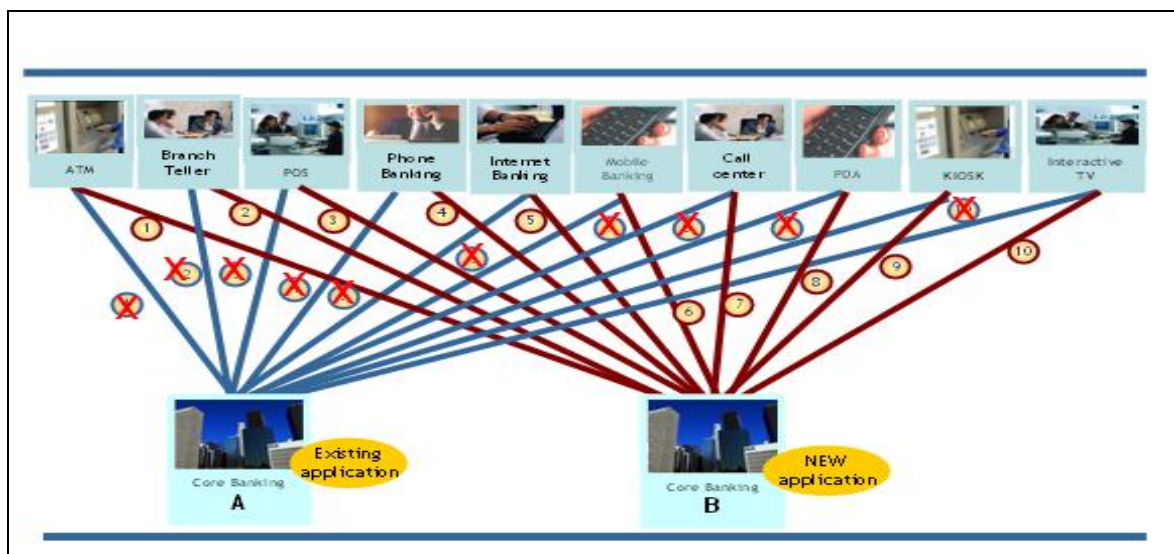

Figure 1. Relationship between Core Banking and delivery channel (The current scenario)

For a variety of reasons these designs have developed in a non-optimal way with:

- Duplicate or inconsistent customer information
- Uncoordinated channel deployments and integration
- Business logic replicated in multiple location

Moreover, many banks' Core Banking application, support channel access. Therefore upgrading to a new generation system has a high risk. However, the mentioned model suffers from a variety of problems such as[4]:

- Complexity of it's management
- High cost as often skills need to be located with each deployment
- More open to fraud/risk
- Problematic to report compliance and audit information centrally
- Extremely limited options to deliver consistent service and brand, for customers and staff

The Purpose model [figure 2]**:**

The new purposed model suggest that if a new application suppose to be added to the system, in contradiction with the previous models that many links must be changed, only one link is needed to be changed [figure 2].

With this model:
- Banks delivery options can be consolidated
- The required brand/services/options can be delivered from a single point very rapidly
- Costs are reduced as the need for multiple separate delivery systems are reduced
- Single point to maintain compliance/security and report form
- Easy to integrate in legacy applications and migrate transparently as required
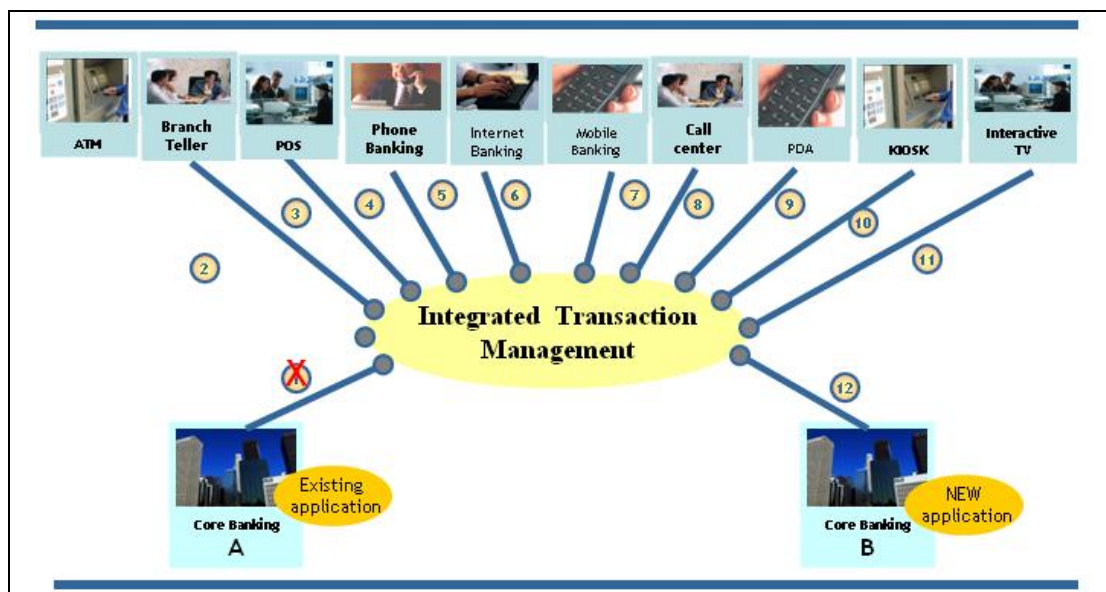

Figure 2. Relationship between Core Banking and delivery channel (The purpose model)

This model allows to do whatever is needed easily. The benefits of the purposed model (Integrated Transaction management) are:

- Upgrading software with plug-in.
- Tightening security by conditional restrictions.
- Increasing speed in transactions.
- Connection between other software and Core Banking.
- Connection between cable networks and wireless networking.
- Innovation in productions and services.

5. Conclusion:

While this paper described the various aspects of Core Banking, delivery channels and their relationship, it however highlighted the shortcomings of the currently available Core Banking. This paper suggests that a new delivery channel internal switch is needed to avoid unnecessary changes in the architecture of Core Banking & delivery channels. Having the new model enables to change the link much less than "link-change requirement" in previous situations.

Pioneer banks can easily choose new services and products undeniably, they will gain some reasonable benefits such as:

- Highly process oriented implementation methodology
- Very strong implementation record
- Supports highly flexible user definable fields
- Supports definition of customizable events
- One view of the customer across all products and channels
- Scalable from a few branches to large nationwide networks
- Seamless delivery of sophisticated products

6. The Future :

Now is up to the Bank to pick and choose what new services/products to be sold in your distribution network. It is an Enterprise Application Integrator that seamlessly links its heterogeneous business applications into one unified system so that processes and data can be shared throughout the company, and beyond. A building block to differentiate your bank [figure 3] .
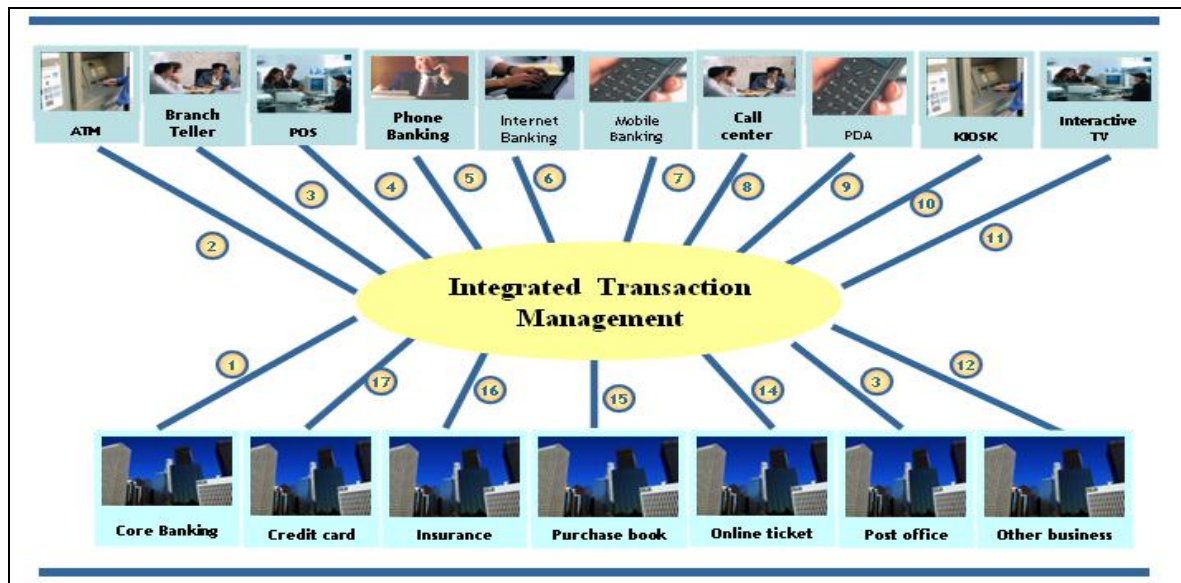
Figure 3 . Relation between Core Banking and delivery channel and other business (The Future)

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