Governance of IT in Indian Banks – An Immense Need

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ABSTRACT

Information technology has become an essential component of any financial organization in the present global scenario. Information Technology governance is a concept that has suddenly emerged and become an important issue in the information technology field. It has been observed by researcher banks in India are using IT based systems from last three decades for performing different banking functions but their implementation is done in a disorganized manner. Therefore implementation of IT is not as effective as it should be. In fact implementation is not everything all but its prefect governance is a must to get the optimum benefits of IT enabled modern technologies. For getting real fruits of IT, proper IT governance is required. This article tries to highlight importance of IT governance, obstacles in IT governance and implementation framework for IT governance in banks.

Introduction

Banking in India originated in the last decades of the 18th century. The oldest bank in existence in India is the State Bank of India, which originated in the Bank of Calcutta in June 1806. The Indian banking system comprises the following institutions:
1. Commercial banks
a. Public sector
b. Private sector
c. Foreign banks
d. Cooperative institutions
(i) Urban cooperative banks
(ii) State cooperative banks
(iii) District Central Cooperative banks

The Indian banks were finding it difficult to compete with the international banks in terms of the customer service without the use of the information technology and computers. The IT revolution had a great impact in the Indian banking system. The use of computers had led to introduction of online banking in India. The use of the computerization in banking sector of India has increased after the economic liberalization of 1991 as the country's banking sector has been exposed to the world's market. Today's business environment is very dynamic and undergoes rapid changes as a result of technological innovation, increased awareness and demands from customers. The banking industry of the 21st century operates in a complex and competitive environment characterized by these changing conditions and highly unpredictable economic climate. Information and Communication Technology is at the centre of this global change curve. The application of IT concepts and techniques has become a subject of fundamental importance to all banks. Because of these all reasons banks have implemented IT technologies but their implementation is being done in a disorganized manner. Therefore implementation of IT is not as effective as it should be. To get real fruits of IT, proper IT governance is required. IT governance is essential to mitigate IT related risks and avoid IT project failures.

Present Status of IT in Banking:

Tremendous improvement has taken place in the Indian banking sector because of the IT revolution. Most of the private and foreign banks have gone for 100 percent computerization. At a rapid fast, the government owned nationalized banks are also improving their number of computerized branches. With the help of computerization, the transaction takes place at a faster rate and the waiting time of a customer in a queue is getting minimized. E – Banking is emerging in the Indian banking sector. The banks provide the facility of internet banking, phone and mobile banking with the help of IT. All the branches of a bank are networked. The networking also takes place between two or more branches in order to provide easy accessibility for a customer. The cost incurred on infrastructure, furniture and employees has got decreased because of the application of IT.

IT Governance:

IT governance is the responsibility of the board of directors and executive management. It is an integral part of corporate governance and consists of the leadership, organizational structures and processes that ensure that the organization's IT sustains and extends the organization's strategies and objectives.

Weill and Ross define IT governance as "Specifying the decision rights and accountability framework to encourage desirable behavior in the use of IT."

Following figure shows where IT governance fit-

IT governance is a subset discipline of corporate governance focused on information technology (IT) systems and their performance and risk management. It is indicted that IT management is also involved in the governance process. However, a clear difference must be made between IT management and IT governance. IT management focuses on the daily effective and efficient supply of IT services and operations. IT governance, in turn, is much broader and concentrates on performing and transforming IT to meet present and future demands of the business and customers. IT Governance focuses specifically on information technology systems, their performance and risk management. The primary goals of IT Governance are to assure that the investments in IT generate business value, and to mitigate the risks that are associated with IT. This can be done by implementing an organizational structure with well-defined roles for the responsibility of information business processes, applications

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and IT infrastructure. While designing IT governance, it is important to recognize that it is depend upon a variety of internal and external factors. Therefore, selecting the right mechanism is a complex process and what works for one organization may not necessarily work for another, even if they work in the same sector.

Need of IT Governance:

At present banks are implementing IT applications in different areas but these banks are not getting real benefits due to improper governance of IT. Following are the obstacles observed in banks IT governance.

● Top management does not emphasize IT
● Shrinking the responsibility by the concerned authorities
● Poor strategic alignment
● Ineffective resource management
● IT staffing problem
● No review on IT performance
● Security & privacy incidents
● Lack of training.

Banking environment has become highly competitive today. To be able to survive and grow in the changing market environment banks are going for the latest technologies. IT has become a major enabler to almost all business transformation initiatives. How IT is being used will have a very important impact on whether the organization achieves its vision, mission or strategic goals. Information Technology has also provided banking industry with the ability to deal with the challenges the new economy creates. IT directly affects how managers decide, how they plan and what products and services are offered in the banking industry. It has continued to change the way banks and their corporate relationships are organized worldwide and the variety of innovative devices available to enhance the speed and quality of service delivery.

IT is now so fundamental and persistent within enterprises that governance needs to pay special attention to IT, reviewing how strongly the banks relies on IT and how critical IT is for the execution of the business strategy because IT is critical in supporting and enabling enterprise goals and IT is strategic to the business growth and innovation.

Business process transformation is very difficult without adequate IT governance. IT governance is essential to mitigate IT related risks and avoid project failure. Ineffective IT governance is likely to be a root cause of the negative results.

Following are three main reasons for importance of IT Governance -

a) Value – IT is typically an expensive asset in any type of organization.

b) Risk – Organizations are become dependent on IT.

c) Alignment - Overall strategy is very much dependent upon the IT strategy.

Areas of IT Implementation in Banks:

The software packages for banking applications in India had their beginnings in the middle of 80s, when the banks started computerizing the branches in a limited manner. The early 90s saw the reducing hardware prices and advent of cheap and inexpensive but high powered PC's and services and banks went in for what was called Total Branch Automation (TBA) packages. In the middle and late 90s there was revolution in communication technologies like internet, mobile/cell phones etc. Technology has continuously played important role in the working of banking institutions and the services provided by them like safekeeping of public money, transfer of money, issuing drafts, exploring investment opportunities and lending drafts, exploring investment being provided. IT is increasingly

moving from a back office function to a prime assistant in increasing the value of a bank over time.

Following are areas of IT implementation in banks –

a) Deposits and Advances
b) Investments
c) Services offered to customers
– Credit cards/ Debit cards
– ATM
– E-Cheques
– EFT (Electronic Funds Transfer)
– DeMAT Accounts
– Mobile Banking
– Telephone Banking
– Internet Banking
– EDI (Electronic Data Interchange)
– Bill Payment
– Smart Money Order
– Online Payment of Excise & Service Tax
d) Human Resource Management
– Manpower planning, recruitment & placement
– Attendance & compensation management
– Personnel information system
– Training & development
e) Financial Accounting

IT Governance Framework for Banks

Fundamentally, IT governance is concerned with two things: Value delivery of IT to the business and mitigation of IT risks. The first is driven by strategic alignment of IT with the business. The second is driven by embedding accountability into the bank. Both need to be supported by adequate resources and measured to ensure that the results are obtained. This leads to the five main focus areas for IT governance. Two of them are outcomes: value delivery and risk management. Three of them are drivers: strategic alignment, resource management and performance measurement.

Each bank operates in and environment that is influenced by

● Stakeholders (stakeholders are customers, business organizations, shareholders, insurance companies, RBI, other apex financial institutions)
● The community
● Policies, Rules and Regulations of RBI and applicable laws.
● Banking practices

Focus Areas for IT Governance in Banks:

One of the well-known international frameworks in achieving effective control over IT and related risks is the "Control Objectives for Information Technology" (COBIT) that is issued by ITGI. The framework provides five focus areas for IT Governance and shown as below.
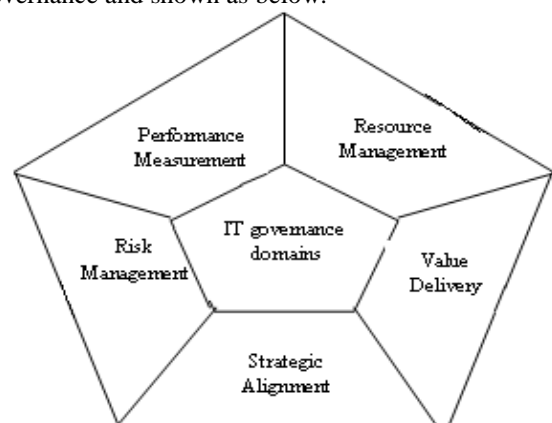
● IT strategic alignment
● Value delivery

- IT resource management
- IT risk management
- Performance measurement

a) IT strategic alignment

Strategic alignment deals with the key question–whether a bank's technology investment is aligned to its strategic business objectives, enabling the formation of capabilities necessary to deliver business value. IT strategy provides banks the opportunity to:

- Reduce costs and improve administrative efficiency
- Increase managerial effectiveness
- Add value to products and services
- Assist in competitive positioning

While formulating an IT strategy, a bank must consider:

- Operating cost of current IT: whether this provides sufficient value to the business
- Business objectives and competitive environment
- Current and future technologies: costs, risks and benefits
- Capability of the IT organization and technology to deliver current and future levels of service and its implication on the bank (degree of change and investment)

As IT gets more critical for a bank's survival in addition to enabling growth, IT Strategy Committees need to broaden their scope beyond offering advice on strategy, to other areas like IT risks, value and performance.

Challenges in IT Strategy:

- Ensuring business and IT goals cascade throughout the bank into roles, responsibilities and actions
- Ensuring an effective communication and engagement between business and IT management
- Identifying barriers to strategic alignment
- Evaluating effectiveness of alignment of IT and strategic business initiatives
- Monitoring and assessing current and future technology improvements

With Respect to IT Strategic Alignment, Banks need to ensure the following:

i) Major IT development projects need to be aligned with business strategy

ii) Banks should have up-to-date business strategy that sets out a clear direction for IT that is in accordance with the business objectives

iii) IT investments need to be suitably balanced between maintaining the infrastructure that support the bank's "as is" operations, and the infrastructure that transforms the operations and enables the business to grow and compete in new areas

iv) IT budget reflects priorities established by the IT-related investment programmes and includes ongoing costs of maintaining the infrastructure

v) Board's IT Strategy Committee reviews and advises the management about IT-related investments

vi) IT Steering Committee (or equivalent) composed of executives from business and IT management has responsibility to: determining prioritization of IT-related investment, track status of projects, resolve resource conflict, monitor service levels and service improvements

vii) Performance of IT management is monitored

b) Value delivery

The basic principles of IT value delivery are on time and within budget delivery of IT projects, with appropriate quality, which achieves benefits that were promised. For effective IT value delivery to be achieved, both actual costs and Return on Investment (ROI) need to be managed.

The bank should set expectations relative to IT deliverables:

- Fit for purpose and meeting business requirements
- Flexibility to adopt future requirements
- Throughput and response times
- Ease of use and security
- Integrity, accuracy and confidentiality of information

Alignment of technology to business provides value by delivering infrastructure that enable the bank to grow by improving customer satisfaction, assuring customer retention, breaking into new markets, increasing overall revenue and driving competitive strategies.

With respect to "value delivery", banks need to ensure that:

i) IT enabled investment programmes and other IT assets and services are managed to determine that they deliver the greatest possible value in supporting the bank's strategy and objectives

ii) Effective IT controls are place to minimize IT related risks, increase efficiency, use resources optimally and increase the effectiveness of IT processes

iii) IT function must supports Management Information System in respect of decision making by management

iv) Project management and quality assurance steps should be implemented to ensure systems are delivered on time, to cost and with the necessary level of functionality

v) IT internal control failures and weaknesses and their actual and potential impact need to be evaluated and management takes suitable actions in respect of such control failures or weaknesses

vi) Project-level steering committees needs to be created for taking responsibility for execution of the project plan, achievement of outcomes and project completion. The various responsibilities include reviewing progress against the project plan, reviewing and approving changes to project resource allocation, time lines, objectives, costs, keeping the project scope under control

vii) Independent assurance on the achievement of IT objectives and the control of IT risks is conducted regularly

viii) IT Steering Committee or any of its sub committees involving the CIO and senior business managers prioritize IT initiatives and assign ownership for IT-enabled business opportunities

ix) Periodical review of all non-performing or irrelevant IT projects in the bank, if any, and taking suitable actions

c) IT Resource Management

A key to successful IT performance is optimal investment, use and allocation of IT resources: people, applications, technology, facilities and data, in servicing the bank's needs. Additionally, the biggest challenge has been to know where and how to outsource, and then to know how to manage the outsourced services in a way that delivers the values promised at an acceptable price.

IT assets are complex to manage and continually change due to the nature of technology and changing business requirements. Effective management of hardware life-cycles, software licenses, service contracts and permanent and contracted human resources is a critical success factor. It is critical not only for optimizing the IT cost base, but also for managing changes, minimizing service incidents and assuring a reliable service quality.

For IT resource management, banks should consider the following:

i) That the Board is aware of IT resources and infrastructure to meet strategic business objectives

ii) Policies and procedures for information systems monitoring facilitate, consistent and effective reporting and review of logging, monitoring and reporting of system events

iii) Information on IT investments is available to the Board and Senior Management

iv) Responsibilities, relationships, authorities and performance criteria of project team members and stakeholders are stated

v) Requirement for trained resources, with the requisite skill sets for the IT function, is understood and assessed. A periodic assessment of the training requirements for human resources is made to ensure that sufficient, competent and capable human resources are available

IT Risk Management

Effective risk management begins with identifying high-level risk exposures. Dependent on the type of risk, project and its significance to the business, Board and Senior Management may choose to take up any of the three actions:

● Mitigate—Implement controls (e.g. acquire and deploy security technology to protect the IT infrastructure)

● Transfer—Share risk with partners or transfer to insurance coverage

● Accept—Formally acknowledge that the risk exists and monitor it

At a basic level, risk should at least be analyzed, even if there is no immediate action to be taken, the awareness of risk will influence strategic decisions. An IT control framework defines stakeholders and relevant controls for effective Enterprise Risk Management. The "risk register", usually in form of a table, is a tool that assists in risk management. It is also called a "risk log". It usually is used when planning for the future that includes project, organizational, or financial plans. Risk management uses risk registers to identify, analyze and manage risks in a clear and concise manner. Risk register contains information on each identified risk and planned responses are recorded in the event the risk materializes, as well as a summary of what actions should be taken before hand to reduce the impact. Risks are ranked in order of likelihood, or of their impact and record the analysis and evaluation of risks that have been identified. The register or the log may be created for a new project or investment.

In respect to IT risk management, banks should consider the following:

i. IT management needs to assess IT risks and suitably mitigate them

ii. Bank-wide risk management policy, in which operational risk policy includes IT-related risks, is in place. The Risk Management Committee periodically reviews and updates the same (at least annually)

iii**.** Bank's risk management processes for its e-banking activities are integrated into its overall risk management approach

iv. All risks related to suppliers are considered.

v. Operational risk inherent in all material products, activities, processes and systems, are assessed and relevant controls are implemented and monitored

vi. Information security policy is in place and requirements indicated in the chapter on information security are considered

vii. Comprehensive and centralized change control system is implemented at levels (project or application), so that changes are appropriately reviewed and approved

viii. For managing project risks, a consistent and formally-defined programme and project management approach needs to be applied to IT projects that enable stakeholder participation and monitoring of project risks and progress.

ix. Inter-dependencies between risk elements are considered in the risk assessment process

Performance Measurement

IT performance management aims at:

● Identifying and quantifying IT costs and benefits

● Overcoming limitations of traditional quantifiable performance measures (financial terms) such as ROI, Net Present Value (NPV), Internal Rate of Return (IRR) and payback method

● Overcoming limitations of measuring "unquantifiable" values

In respect to the IT performance management, the considerations for a bank are the following:

● That information on IT projects that have an impact on the bank's risk profile and strategy are reported to appropriate levels of management and undergo appropriate strategic and cost and reward analysis on a periodic basis

● Processes for making return versus risk balance may be considered and supported with standard templates or tools

● Tools such as IT balanced scorecard is considered for implementation, with approval from key stakeholders, to measure performance along dimensions: financial, customer satisfaction, process effectiveness, future capability and assess IT management performance based on metrics such as scheduled uptime, service levels, transaction throughput and response times and application availability

● The bank may also consider assessing the maturity level, set a target as per the IT Governance maturity model, design an action plan and subsequently implement it to reach the target maturity level

● Periodic assessment of IT budget deviations

● Periodic review and update of IS Policies and guidelines

Conclusion

Banking organizations initiated computerization in the middle of 80s. However, most of the areas covered under computerization are at operational level. This has resulted in poor information management, which ultimately resulted in poor and irrelevant decisions at the top level leading to ineffective governance. IT governance is a very critical process; it needs to be implemented with right spirit with high level of commitment from top management and stakeholders of banks.

Adopting IT governance framework bank will create the foundation for improved business efficiency, decision making and resulting into good governance. Therefore proposed IT governance will enable banking sector for achieving greater heights both horizontally and vertically.

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