



Proceedings of GLOGIFT 12
July 30 – August 1, 2012
University of Vienna, Austria
pp. 401-410

Strategic Flexibility in Service sector Technology (product) Based Integration Development of Multi Stakeholder STAR MODEL

GVR Sastry¹

Abstract

Background

Recognizing the fact that Tourism, Banking & Insurance Sectors has great employment generating potential hence, vital for the economic growth, integration would emphasize on the need for comprehensive technologies and the systematic processes of integrating Banking, Tourism & Insurance sectors (including Hospitality, Travel & Aviation).

Research Question: *Does Banking, Insurance and Tourism sector require close integration? What is the synergistic impact of this integration in macro-economic sense?*

The Government targets broad-based economic growth of 8.0 – 9.5 % per annum over the next five years. Past performance and regional experience suggest this is an ambitious target, not the least in the context of the international economic slowdown. In the longer term such growth rates may be achievable, but would require that the following challenges be addressed: developing a competitive and open market economy, improving labour productivity through improved health and education, and strengthening the capacity to deliver more sustainable benefits from the management of natural resources and the environment. Recent initiatives to attenuate policy, institutional, and infrastructure constraints to service sectors integration provide improved opportunities for investments in energy, transport, trade, tourism, and other services. In particular its high time to take next step forward to integrate the all the 3 core service sectors will be key element of the economic growth rate achievement.

Problems and Gap

The basic problems and gap that emerged from recent technology developments are:

- *No industry is unable to adopt the comprehensive technologies at present scenario*
- *Wide gap of between the technologies and existing Human resources in the country*
- *Due to unique developments and finding in the technologies sector it's quite possible that some sectors must be merged with other sectors due to infrastructural, technological developments are happening in India.*
- *Infrastructure and Technological developments must be matched with visionaries role and awareness must be there with the policy makers*
- *New models of public-private partnership*
- *Lack of Enterprise architecture, standards and policies addressing issues of security, privacy, etc.*

1. Research Scholar
Department of Management Studies, Indian Institute of Technology, Delhi
shastrig@gmail.com

GVR Sastry

- *Not taken advantage of Prototype approach.*
- *The issues of re-engineering and the management not made mandatory*
- *Exceptional change in the delivery channel system*
- *The use of information technology can overcome the limitations of size and remoteness but it requires flexible and skilled labour with good quality, reliable, infrastructure.*
- *Entry into the IT-services sector requires a clear and focused set of policies while seeking regional or multi-country approaches to address some key concerns.*
- *Inter-sub regional cooperation could also form the stepping -stones for expanding IT learning and market opportunities.*
- *Marketing the four countries requires a clear perspective of the product and its characteristics and there is urgency to seeking an entry into the IT-services sector.*

Objectives:

- *To analyse the past and present performance of Banking, Insurance and Tourism sector*
- *To carry out comparison with western economies and draw difference*
- *To examine growth potential of integration of Banking, Insurance with Tourism sector*
- *Comprehensive review of the technology platforms available for the all 3 sectors.*
- *Evolving Strategic Technology Management to integrate Tourism, Banking & Insurance sectors.*

Why Integration?

It is evident that the technology in all the kinds of frame and domains, platforms are change day by day rapidly. When there is a clear cut change and the technology front, it is clear that high domain of industry will also change or completely obsolete. Technology development is fully a processes and its go on , during the processes it may happen short term gain may be obtained few commercial domains, after that its completely impossible to even sustain.

If there is a rapid change then, technology has to be used with a single frame or a single unit where by difference business domains can be merged into one because the core aspect of using the technology for a long term, key concept of data servers. It is evident that all the service sector industries purely based on database servers and one of the elements customer data. We have made an illustrated matrix (technology, human resource integrated matrix. All the three core dimensions of the service sectors Banking, Tourism, Insurance.. Banking and Insurance have already largely, logically defined technology platforms. But whereas, the tourism, the technology are been used as and when needed by the enterprise/organisation requirements.

Country like India, tourism growth 6.5% impact on economy, but whereas, country is having similar GDP growth the rate is much higher. It is an evidence for a lack of Technology vision towards the development of the tourism industry overall. The next generation development taking place in competition with banking and insurance, the tourism was much behind because generously the root towards the domestic tourism was so weak on the awareness was almost zero. Country like India (where economy growth 8.5% to 9.5% GDP) is unable to make foundation for a greater tourism importance of a common man.

Issues

- i) *Infrastructural issues*
- ii) *Integration plan and execution*
- iii) *Integration Management approach*
- iv) *Conscious approach for India in particular*

Strategic Flexibility in Service sector Technology (product) Based Integration Development of Multi Stakeholder STAR MODEL

- v) *Continuous training & skill up gradation*
- vi) *Security issues*
- vii) *Confidentiality issues*
- viii) *Legal issues due to virtual transactions*
- ix) *Proper implementation programs & technology management*
- x) *True professionalism*

Methodology

- i) *Environmental Scanning*
- ii) *Focus on Group Study 3 sectors, Insurance, Banking & Tourism*
- iii) *Questionnaire Survey*
- iv) *Synthesis & Recommendations.*

Results

Integration of 3 services sectors under one umbrella will enhance the economic growth rate as well as the employment rate in India. The technology emphasise is not much in the tourism Industry where by the exact results are completely unaware, Integration is going to enhance and all the qualitative and quantitative factors in optimised manner.

Keywords: *Next Generation, Tourism, Banking, Insurance, Technology, Integration, Service Sectors, etc.*

Introduction

Recognizing the fact that Tourism industry has great employment generating potential hence, vital for the economic growth, conference would emphasize on the need for comprehensive technologies and the systematic processes of integrating Banking & Insurance sector with Tourism industry comprising Hospitality, Travel & Aviation.

Current state of affair, however, is far away from its true potential. This may be due to several limitations, such as:

1. The industry is unable to adopt the updated technologies.
2. Wide gap between the technologies and existing Human resources in the country.
3. Younger generation with advanced skills to be used for transformation but lack of necessary policies is a hindrance.
4. Technological developments are beyond the imagination and above the think tank of this Tourism industry.
5. Due to unique developments and findings in the technologies sector it is quite possible that some sectors must be merged with other sectors due to infrastructural, technological developments are happening at time in India.
6. Infrastructure and Technological developments must be matched with visionaries' role and awareness must be there with the policy makers.

This conference is designed to provide a platform towards the awareness of latest trends and practices that would push a rapid growth in the Tourism Sector.

Research Objectives are as under:

1. Development & adaptation of appropriate technologies in the Tourism sector.

2. Creating awareness towards the advance developments in the technology sector of the Tourism Industry.
3. Evolving strategic technology management to integrate Tourism, Banking & Insurance sectors.
4. Comprehensive review of the technology platforms available for the Tourism sector in relation to banking and insurance sectors.
5. To invite the Banking and Insurance sectors to incorporate their technologies & infrastructure for further strengthening of the Tourism sector.

Literature Review

Need of Integration: Service sector with Technology

The service sector has increased significantly in developed nations, and is also booming in emerging countries. In some cases, services account 60-80% of nations' GDP. However, service sector productivity has remained the same for decades, and the sector is only getting larger due to increased prosperity – simplistically speaking, the service sector hinders productivity, a paradox which should be solved in order that further development in the economic wealth and employment can be reached. Currently, economic development in developed nations relies on consumer spending, but its further positive effects are limited due to lack of constant productivity improvements. We have identified that innovative information technology solutions have the most potential to solve the productivity paradox in this sector.

Innovative information technology could involve, for example, real-time follow-up of capacity utilisation in maintenance services, providing online instructions for security workers at factories or using e-prescriptions in the healthcare sector or other e-type solutions for governmental services. In logistics and manufacturing services, areas of interest include real-time follow-up around the globe and automated (within required flexibility and adaptability) operations, among multi-customer information technology solutions. Retail sector studies could include unmanned cash registers, where customers take care of payments through use of mobile barcodes or RFID – these technologies empowered by larger information technology systems also enable the construction sector to improve its productivity.

Impact of Technological Change

- Radically alter ways in which service firms do business with customers (new services, more convenience), Behind the scenes (re-engineering , new value chains)
- Create relational databases about customer needs and behaviour, mine data banks for insights
- Leverage employee capabilities and enhance mobility
- Centralize customer service –faster and more responsive
- Develop national/ global delivery system
- Create new, internet based business models

Applying Information Technology

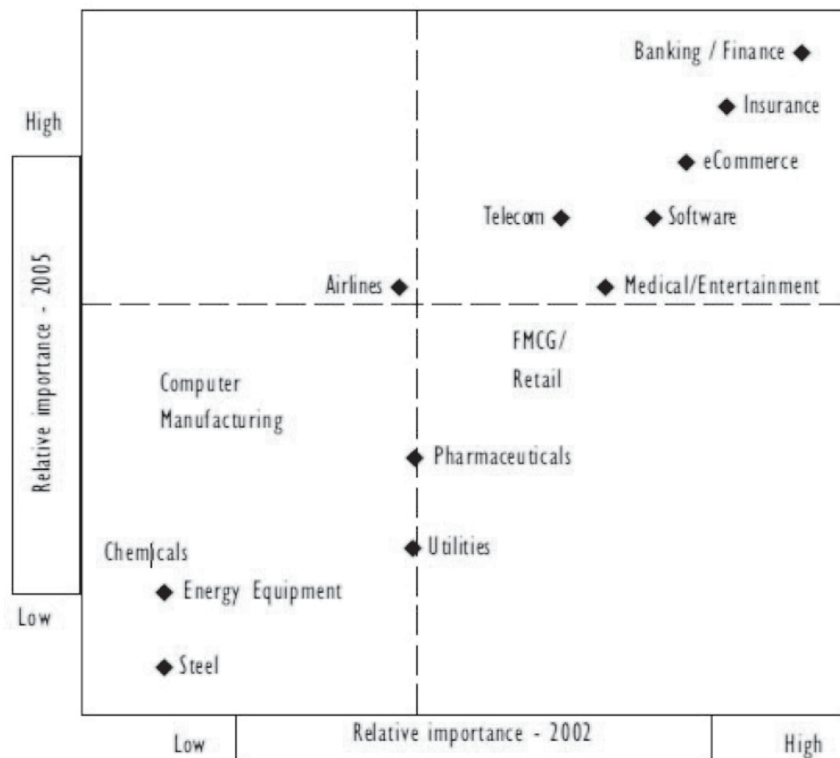
All services can benefit from IT, but mental stimulus processing and information processing services have most to gain

- Remote delivery of information based services “anytime, anywhere”
- New service feature through web sites, email, internet (information, reservations)
- More opportunities to self service

Strategic Flexibility in Service sector Technology (product) Based Integration Development of Multi Stakeholder STAR MODEL

- New types of services

Relative importance of various industries by revenues earned



Source: CII-KPMG study on IT enabled services in India.

Information Technology in Financial Services

- Financial services have been the major users of IT and communication technologies.
- IT expenditure by US banks has recorded a compounded annual growth rate of 8.4 per cent.
- The management information system (MIS), distributed computing devices, open systems, high-speed data networks (LAN MAN, WAN, ISDN, etc.), related database management services (RDBMS) have been important development milestones in IT with major impact on financial services.
- The development of optical fibre has greatly improved the communication speed, anticipated to touch 2 trillion bits per second eventually.
- Packet switching transmission method like asynchronous transfer mode achieving a speed up to 622 million bits per second has been the major breakthrough in communication technology.
- CD-ROMS with storage capacity of 1.6 GB of data have been instrumental in fast information retrieval and access.

- Use of multimedia for storage of text, graphics, video, sound, etc. has immensely benefited the information storage system.
- All these technologies are used extensively by the banking and financial services sector.

Automated Teller Machines

- ATMs, though operational in the country for quite some time, are expected to make a big head-way in India.
- It has been estimated that there are around 400,000 ATMs worldwide out of which 1,00,000 are located in Japan alone.
- ATMs are synonymous with credit cards; 578 million credit cards issued worldwide were involved in a transaction of US \$ 1092 billion by June, 1993. India is poised to become one of the world's largest credit card users by 2000 AD.
- The latest generation networked ATMs allow the user to perform up to 150 kinds of transactions ranging from simple cash withdrawals and deposits, to fund transfer to trading in stocks to buying mutual funds to something mundane like payment of electricity bills, booking air-tickets and making hotel reservations.

Virtual Bank

- Multimedia technology has been quite effective in bringing the banking services to the doorstep of its customers.
- The customer activated terminal (CAT) or Kiosk is an interactive multimedia display unit, housed in a small enclosure, typically consisting of a computer workstation, monitor, video disk player and a card reader.
- It allows the customers to browse through information and use the available banking services at their own speed.
- Some banks are thinking of establishing 'virtual' branches where a customer can walk through the door; explore services by touching parts of the screen and at any time call up a member of the bank staff by video conferencing.
- While the banks do not need to invest heavily in real estate for setting up such a branch, the customer gets the benefit of 'one-stop banking' at a convenient location.

Home Banking

Smart phones with screen built-in modems and programmable microprocessors let the customer access a variety of financial services from home

Electronic Data Interchange (EDI)

- EDI typically denotes paperless financial transactions across the locations.
- EDI is fast becoming the norm for inter-company transactions and also for procurement of bought out items from the suppliers.
- The companies can now operate their bank accounts through corporate banking terminals in their own offices which are linked to the bank computers.
- Companies can thus carry out transactions like transferring funds, managing its cash flow, opening letters of credit etc. without any paper work.
- Singapore has established trade-net to facilitate electronic submission of trade documents by traders to various Govt. agencies and the response of these agencies to the sender. It

Strategic Flexibility in Service sector Technology (product) Based Integration Development of Multi Stakeholder STAR MODEL

has reduced document processing time from one day to 15-30 minutes and the estimated saving are of the order of \$ 1 billion annually.

Expert System

- The financial services sector is increasingly using decision support systems (DSS) or expert systems for functions such as credit risk appraisal, forecasting loan delinquencies, investment decisions, etc.
- One of the most promising developments in this field is the use of 'neural network' approach to build an expert system which lets the software literally learn from example and experience.
- Several banks today are using neural network programs to detect credit card fraud. It is also being used by some leading investment banks to track stock price patterns and predict their movements.

Result and Discussion

Need and requirements of Integration of all 3 service sectors

Fast Changing Business Domains

Supervisors' job responsibilities are changing. As both individuals and members of an organization's managerial team, supervisors need to prepare themselves to adapt successfully to a rapidly changing business domains. This article presents a number of tips supervisors can use to deal with change, to the betterment of their organization and their own careers. As a supervisor, the primary measures you can take to adapt to change include:

- becoming aware of your situation
- understanding change
- building your skills and knowledge

Key features of Technology in Business Domain

The days when the Chief Information Officer (CIO) took implementation decisions and passed the responsibility down the line are passed. Today, the CIO is an individual who possesses business as well as technical skills, understands the new IT issues facing a business, and drives the IT changes from the top down. This is a clear indicator of the benefits businesses are enjoying through the implementation of technology. Today technology is an integral part of any business right from the purchase of computers and software to the implementation of network and security tools. This helps businesses to:

- Remain up-to-date
- Drive business forward
- Sustain and survive competition

Benefits of Technology in Communication

From hand-held computers to touch phones, technological advancements in the field of communication are endless. The means and the modes of communication are unlimited. Some of the benefits of technological advancements in the field of communication are:

Speed: time is no longer a constraint in communication

Clarity: With megapixel images and video, and high fidelity audio systems clarity in communication has become a never-before experience

Proximity: technological advancements have made the world a smaller place to live in

Dissemination: whether spreading information, broadcasting news, or sharing knowledge, technology has made it faster, easier, and smarter

Benefits of Technology in Education

Technological advancements in the field of education are fast evolving. Today, e-learning is a familiar and popular term. Some of the benefits of technology in this field are:

Personalized learning experience: Learners are able to take control and manage their own learning. They set their own goals, manage the process and content of learning, and communicate with peers.

Immediate response: Most e-learning programs provide immediate feedbacks on learner assessments. Similarly there are features such as chat, discussion boards, e-libraries, etc that allow clarifications at a faster pace than in traditional classrooms.

Self-paced: Learners can chart courses at their own pace. This ensures higher levels of motivation both in terms of completing the course as well as in performance.

Greater access: Technological advancements have opened education to learners with learning disabilities and in remote locations.

Benefits of Technology in Healthcare

The marriage between medicine and technology has reshaped healthcare and revolutionized the medical profession. Some of the major benefits are:

Secure environment: Technology allows physicians and patients to interact in a secure and comfortable environment to discuss sensitive issues.

Flexibility: Physicians can answer routine and less critical queries at a convenient time.

Cost- and time-saving: Physicians can follow-up, provide advice, and re-direct patients to resources on the Internet. This saves cost and time by reducing office visits.

Medical devices: Medical aids allow patients to continue recovery at home reducing their hospital stay.

Vulnerable population: Technology aids the very young, elderly, and patients with complex birth defects, chronic illnesses, and disabled children by alleviating their problems so that they can continue living in their homes.

Benefits of Technology in Society

Today technology pervades almost all aspects of our daily life from shopping, banking, making travel arrangements to university admissions. Some of the benefits are:

Convenience: Provides a great deal of convenience in expediting personal and business transactions be it shopping, banking, or simply paying bills.

Speed: From sending gifts to making payments everything gets a done with a few clicks.

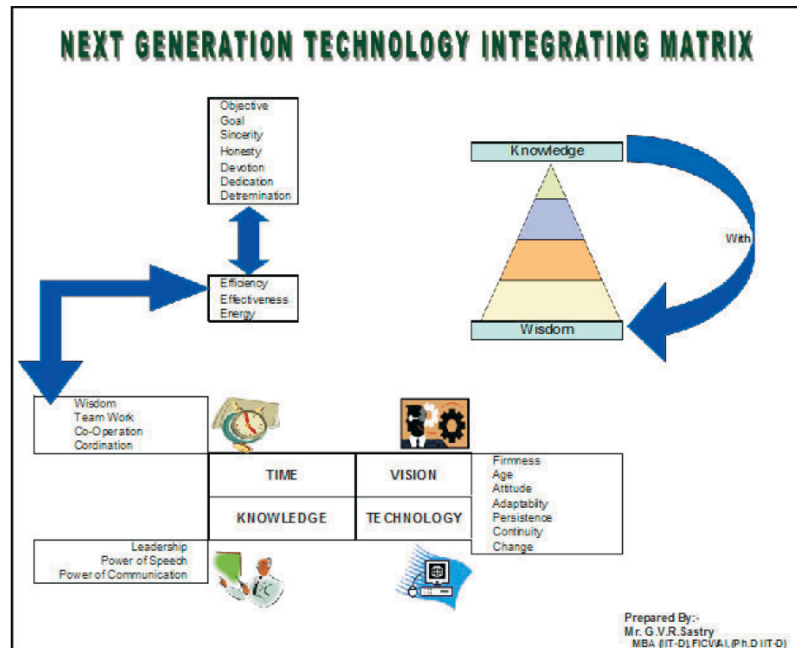
Communication: The world is a smaller place and technology allows everyone to keep in touch with their families and friends at a more affordable cost.

Accuracy: Technology has reduced errors in mundane and monotonous chores, saving time and cost.

Strategic Flexibility in Service sector Technology (product) Based Integration Development of Multi Stakeholder STAR MODEL

Development: Technology has brought about development in many fields such as medicine, government, business, education, etc.

Technology has evolved and transformed our lives and society. Overall, it has brought about tremendous growth and benefit to mankind.



Conclusion

In the developing countries like India presently both infrastructure and technology developments are taking place simultaneously, hence the service sector integration is inevitable and eminent. The technology changes in the services sector is quit unbelievable with regards to hard ware and software both components are changing in a speed where the end user not been able to make up mind and also his needs and demands are quite high. Hence integration of DATA PRODUCTS are now seems unavoidable. This entry into IT Service Sector, however, remains a tentative one as the need for a more integrated position within the economic value-chain of activity in the IT services sector is dependent on high quality infrastructure in terms of telecommunications, power, access to internet, connectivity levels, and also flexibility of the labour force. These other considerations have a pronounced role to play in the diversification of the economies of these countries.

A concerted effort to create a skilled and flexible labour force which is computer literate is urgently needed.

At the same time, public sector investments have to be increased to support infrastructure and institutional strengthening which, together, form the platform for promoting IT services. A major concern in all the countries is that of pricing of utilities and telecommunications services, including internet access. Regulatory reforms and new modes of pricing have to be considered in line with encouraging greater usage of information technology and its related services. This can also be accelerated by introducing fiscal incentives and creating a critical mass of skills through infusion of foreign talent in specific areas.

References and Source of Pictures

- United Nations ESCAP (Economic and Social Commission for Asia and the Pacific), <http://www.unescap.org/>
- Targeting Marketing. Harness the Power of Innovative Marketing Today. *Technology in Fast-Changing Environment*.
- Role of IT in Service Sector: Localization to globalization, a Journey. *Mr. Atul Rohankar*.
- Information Technology in Services Sector – A Vision for India. *Soumitra Biswas Technology Information, Forecasting and Assessment Council, Department of Science and Technology*
- Integrating India's Service Sector with the Global Economy - An Overview of the Services Sector, *Services Trade and Domestic Regulation in India, New Delhi*.
- Information Technology Enabled Services, *India Brand Equity Foundation (IBEF)*, <http://www.ibef.org>
- Benefits of Technology, <http://benefitof.net/benefits-of-technology/>