

**INTERNATIONAL JOURNAL OF ENGINEERING SCIENCES & RESEARCH
TECHNOLOGY**

TECHNOLOGY IN BUSINESS – A MAGIC WAND IN BANKING SECTOR

Vedapradha. R*, Dr.Hariharan Ravi, Dr. Raja Jebasingh

Assistant Professor, Department of Commerce and Management, St.Joseph's College of Commerce,
Bangalore -25

Assistant Professor, Department of Commerce and Management, St.Joseph's College of Commerce,
Bangalore -25

Assistant Professor, Department of Commerce and Management, St.Joseph's College of Commerce,
Bangalore -25

DOI: 10.5281/zenodo.154238

ABSTRACT

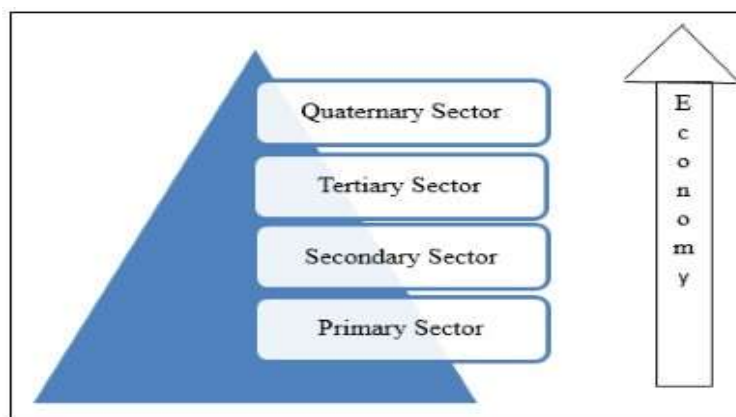
Technology is the integration of technical skills, methods, processes and knowledge which are applied in streamlining the business operations with respect to products and services which are embedded in the business with computers, devices, machines and factories. Technological innovations influences business efficiency, productivity, costs, relationship with clients, retention of market share, customer satisfaction and growth. It has greater impact on the economy in various sectors of business. The paper has attempted to interpret the impact of technology in recreating the banking operations with respect to decision making, marketing, business growth, building robust customer support system, customer relationship management, resource allocation, offering unique banking products with exorbitant facilities.

KEYWORDS: Technology, Innovation, Economy, Banking industry.

INTRODUCTION

Industrial sectors in an economy are classified into three major groups' namely primary sector, secondary sector and tertiary sector. However there is an addition to the conventional classification, named as Quaternary sector which is of recent origin. Primary sector is mainly concerned with the industries which are involved in extracting raw materials directly from the earth or sea.

CLASSIFICATION OF INDUSTRIAL SECTORS



Primary Sector

Primary sector of the economy operates with an objective of changing natural resources into primary products, which are considered as raw materials for the other industries. Some of the examples are agriculture, animal husbandry, mining, fishing, forestry, quarrying etc. Technology has created an incredible mark in these sectors. The primary focus of using technology in terms of robotic systems and application of Information systems is to ensure there is increase in productivity, efficiency, safety and environment friendly.

Agriculture has embraced technology in the form of robots, sensors, devices, machines to predict weather, humidity levels, temperature, aerial images for cloud seeding and also application of GPS technology. Forestry has the application of technology in the form of laser, tree based application of biotechnology for plantations, curbing forest fires etc. Mining applies advanced robotics, mobile internet technology for lean operations to test the availability of resources before mining. Aquaculture involves fishing which has greater market across the globe for the quality sea food. This applies technology for synthetic fibres, hydraulic equipment's, electronics for fish finding, satellite based technology for navigation and communication.

Process of industrial sectors



Secondary sector

The secondary sector of the economy involves in processes and manufacturing finished products from the raw materials obtained from the primary sector. The output of the primary sector is treated as the input to various other industries with the objective of domestic use, exports and sale. The economic activities which comprised in this sector are refining petroleum, turning metals into tools and automobiles, manufacturing various industrial and consumer products. The manufacturing industry has applied technology in the form of InfoTech, nanotechnology and biotechnology where robotics and CAD (Computer aided design) is used to view the 3D image of the product before actually being manufactured. It has resulted in improving efficiency, less turnaround time in completion of the process, reduction in wastage of resources.

Tertiary Sector

This sector of the economy has is the service industry providing services to the general public and business organisations. The activities which are associated involves trade, finance, real estate, private services, government, transportation and distribution, banking and insurance, entertainment, restaurants, media, clerical services, consultancy, tourism, healthcare and law. Technology plays a pivotal role in this sector in the form of applying different information systems used in the form information processing, storage and access with a view to provide improved services to the consumers like online ticket bookings, after sales services, Kiosks, mobile apps, artificial intelligence interactive systems for managerial decision making etc.

Quaternary Sector

This sector comprises of industries offering information services, such as computing, ICT (information and communication technologies), consultancy (advisory to business) and Research and development (scientific fields). This sector is more popular in western countries like UK and USA. It is slowly gearing up in India.

Banking Industry

Banks play a pivotal role in the economic development of an economy. It promotes capital formation, encourages investments, industrial growth, and promotes trade ensuring there is balanced development of all the regions in the country. These institutions influences implementation of monetary policies, economic activities. It transfers surplus capital from developed regions to under developed regions. It also creates framework for development of financial institutions, economic stability, economic growth and formation of interest rate structure.

Impact of technology

Information technology has been extensively used by the banking and other financial institutions across the globe. Some of the advanced technological trends applied in banking sector comprises as below.

Informationsystems

It consist of Management Information system (MIS) which integrates data collection, processing, storage and dissemination of information in the form of artificial intelligence interaction through Expert support system(ESS) and Decision support system(DSS) that facilitates managerial decisions with respect to credit risk appraisal, forecasting loan delinquencies, investment decisions, interest rate inflation,etc.

Networking

Networking through telecommunications has meticulous impact in ensuring there is connectivity in the form of LAN, WAN, ISDN, and NIAN etc. Data can be stored in the form of database for extensive customer support system, customer relationship management through RDBMS, DBMS etc.

Automated Teller machines (ATMs)

ATMs have been incredible in transforming the way in which the banks operate projecting as a touch point offering wide range of facilities to the users like cash withdrawals, cash deposits, fund transfer, payment of utility bills, online ticket reservations, updating of registered mobile numbers, and verification of balance in the count. The recent trend reflects that small value personal loans can be approved by banks through ATMs, where the customer can avail loan immediately even on a holiday trying to bank on retail space for growth.

Internet banking

The users can use Personal computers in operating their bank accounts to avail facilities like account balances, Electronic fund transfers within branches of same bank or inter-banks can be performed through National electronic fund transfer (NEFT), Real time gross settlements (RTGS), immediate payment services (IMPS) across the globe 24X7 breaking barriers of time and location.

Mobile banking

This form of banking allows the users to operate and access their accounts using their smartphones supported by android operating system through a registered mobile number post completion of verification process anywhere at any time.

Virtual banking

Multimedia technology has been really impressive in connecting banks to the door steps of customers. Customer Activated terminal (CAT) is a form kiosk with an interactive multimedia display unit typically consisting of computers, video disk player, card reader allowing users browse through the information according to their requirements. There are few plans in pipeline where banks would offer artificial intelligence interactive touch screen which allows customers to walk through virtual office, placing calls to staff members via video-conferencing.

Plastic cards

There would be a time in near future where general public would carry only plastic money which can erode currency notes completely. Smart cards are the pioneer stepping stone in this milestone which offers the facilities of shopping by swiping cards at point of sale at shopping outlets. These cards have processors in built microchips that can be magnetically read by the device at the retail outlets. There are debit cards and credit cards offered by the banks to their customers with option of point of sale payment and post a month respectively.

Electronic Data Interchange (EDI)

It refers to paperless financial transactions using a standard format of encryption to exchange the business transactions and information between two or more business firms. This enables the suppliers and customers to operate their bank accounts through corporate banking terminals from their business premises. It also facilitates transactions like transferring of funds, cash flow management, inventory management, letter of credit, bills of lading, purchase orders, invoice etc.

Image processing

This technology can prove to be a yardstick to the financial institutions in implementing paperless transactions through Magnetic ink character recognition (MICR) to read text, diagrams when cheques or documents are scanned for various banking operations. This facility is more robust when compared to conventional facsimile service.

Neural Network

This technology is an emerging trend in the field of information systems where it allows the software to learn from real situations and experiences to provide decisions to the higher level managers for critical decision making. Most of the banks are adopting this technology to detect credit card fraud, to track stock prices in the financial markets, forecast the trend in stock prices etc.

Big Data analysis

Banks are applying big data analysis to collect information about their customers like income, work profile, personal details, and credit worthiness to offer various banking products through ATMs like loan facility. The user has to accept the terms and conditions post verification through registered mobile number.

Cloud computing

Cloud computing has been boon to the digital space that provides electronic storage system which enables the resources, data that can be accessed, printed, copied etc. without the geographical and timeframe barriers. These are very economical and effective as it doesn't require the physical servers. This feature expands the services offered by banks to their customers.

CONCLUSION

Innovation is one of the strategies that allows a business firms to sustain in the industry in curbing the competition and creating an edge over other similar firms in the industry. The technology has proved to be a magic wand in churning the opportunity in favour of a challenging business environment. It maximises the productivity, effectiveness, connectivity, efficiency, global market which proves to be the differential factors in the industry leading to accurate business planning, strategic management, real time interaction and support to customers, optimum utilisation of resources, reduction in turnaround time of operations. There are emerging trends like virtual banking, cloud computing which are taking banking industry to a different level of successive operation.

REFERENCES

- [1] Arthur N Chester (2016). "Aligning technology with business strategy". Research technology management.
- [2] National institute of Food and agriculture
- [3] Christopher W. Glass and Stephen J Walsh (2007). "Fishing technology in the 21st Century: Integrating fishing and ecosystem conservation". ICES Journal of marine science.
- [4] Lauri Hetemaki and Gerardo Mery. "9 Implication of technological development to forestry". Global socio-economic changes.

- [5] Erik brynjolfsson and LorinM.Hitt (2000). "Beyond computation: Information technology, organisational transformation and business performance". Journal of economic perspective. Vol. 14. No 4.
- [6] Mohsen Attaran (2004). "Exploring the relationship between information technology and business process reengineering". Scientific Direct. Vol.41. Issue 5.

WEBSITE

1. www.tifac.org.in
2. www.ctg.albany.edu
3. www.gartner.com
4. www.siteinspire.com